

**The London School of Economics and Political Science**

# **Understanding Peripheral Work Connectivity – Power and Contested Spaces in Digital Workplaces**

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## **Declaration**

I certify that the thesis I have presented for examination for the PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it). The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without my prior written consent. I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

I declare that my thesis consists of 89,164 words excluding references and appendices.

## Abstract

We live in an increasingly digital world, fully equipped with smart mobile devices that allow us to connect to anyone, anytime. Such possibilities have wide reaching consequences particularly for the world of work. They challenge traditional boundaries between work and private life, fundamentally alter how we conduct work and have major implications on organizational power relations. And despite increasing scholarly interest in the phenomenon of connectivity, the study of connectivity particularly in relation to work, remains at a nascent state and the concept of connectivity under-conceptualized.

In this thesis I set out to develop our understanding of connectivity further by theoretically advancing and empirically exploring exactly these issues in one large multinational organization – TechComp. To what extent does connectivity with work, *work connectivity*, and more precisely the connectivity with one's work at the periphery of the workday, -week and -place, what I call *peripheral work connectivity* (PWC), exist at TechComp and what role does PWC play in relation to power negotiations? These are the questions I seek to answer, by means of a mixed methods case study, drawing on a large web-based survey (N=19,564), ethnographic work and in-depth interviews (N=87), all conducted between March 2014 and August 2015.

These multiple sources of data have allowed me to gain a thorough understanding of the extent of PWC at TechComp, highlighting that PWC is much more wide-spread across a diverse mix of job roles than previous research that primarily focused on high status professionals has led us to believe.

Moreover, I argue that peripheral work connectivity is more than a driver of changing norms of availability. Drawing on Foucault's concept of disciplinary power, undergirded by a sociomaterial understanding of the world, I show that PWC is a platform where power relations become rendered visible and contested. Peripheral work connectivity thus becomes a space of possibility. At the same time though, I argue that PWC is also a disciplinary agent, a mechanism that leads TechComp employees to self-discipline in an attempt to meet others' and their own expectations. Peripheral work connectivity is hence a platform and an agent, the reason for and an actor in power negotiations at TechComp.

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## **1. Chapter 1 - Connectivity at Work: Introduction & Literature Review**

We are currently experiencing a boom of research on digital technologies. Particularly in workplaces, new information and communication technologies (ICTs) have become a hot topic for scholars of technology, management and the social sciences alike. ICTs afford spatial and temporal flexibility (Duxbury & Smart, 2011) and thus enable fundamental changes to the way we organize and work. Yet these changes bring about new challenges, such as blurring boundaries between work and private life (Wajcman & Rose, 2011) and work intensification and extension (Chesley, 2014; Chesley & Johnson, 2015). What's more, the use of ICTs seems to fundamentally reconfigure power relations in the workplace, by granting employees feelings of greater autonomy while shifting norms of availability for professionals (Mazmanian et al., 2013) and simultaneously increasing the possibility for better and continuous monitoring (McGovern, 2007).

In such discussions, especially the phenomenon of 'constant connectivity' is receiving a lot of attention, despite the absence of a clear definition of the concept of connectivity. The possibility to be constantly connected to work, family, friends, or anyone else, enabled by mobile ICTs, has often been used to describe any kind of situation when individuals use ICTs. However, connectivity is a complex sociomaterial phenomenon with different dimensions and requires a better conceptualization in order to be able to thoroughly investigate its effects.

Grounded in the literature of the sociology of work and technology as well as organization studies, this thesis sets out to explore one of the most crucial and highly contested dimensions of connectivity: Connectivity with one's workplace or what I call *work connectivity*. More precisely, I am investigating *peripheral work connectivity* (PWC), which describes work connectivity in places and hours that have traditionally been viewed as separate from work, that is, primarily the home and all non-standard work hours e.g. early mornings and late evenings. It is at the periphery of the workday where boundaries get blurred and power relations such as when and when not to work are renegotiated.

In this context and conducting a mixed methods case study in one large multinational organization, that I will call TechComp, I will explore the following questions and sub-questions:

1. What factors shape peripheral work connectivity?
2. How does peripheral work connectivity reconfigure power relations in the workplace?
  - a. How does peripheral work connectivity reconfigure gender relations at TechComp?
  - b. How does peripheral work connectivity reconfigure power relations in global teams at TechComp?

The contribution of this research is then to investigate what role connectivity plays in the negotiation of power at work, going beyond other studies' finding that connectivity changes norms of availability (see Mazmanian et al. 2013; Besseyre et al., 2012; Middleton, 2007). In addition, I will contribute to our understanding of the phenomenon by 1) conceptually advancing our understanding of connectivity, going beyond Kolb's (2008) definition of the term and 2) by empirically advancing our understanding of peripheral work connectivity through an in-depth case study of a large organization.

Grounded in my research, I will argue that peripheral work connectivity is a new space where organizational (i.e. norms, management, policy), structural (i.e. gender relations, cultural backgrounds etc.), individual (i.e. work practices and preferences) and material agents (re)negotiate power. More precisely, peripheral work connectivity enables power (re)negotiations by providing a platform where a variety of power relations are rendered visible and hence become contested. Yet, at the same time, peripheral work connectivity has agency in these negotiations by functioning as a disciplinary mechanism that influences people's choices. In other words, *peripheral work connectivity is both reason for and agent in power negotiations at work.*

To situate the above research questions in the academic literature, the remainder of this chapter will be structured as follows: I will start out briefly reviewing the broader debate around the changing nature of work, digging deeper into the phenomenon of blurring boundaries between work and private life, which is a key theme that will reappear throughout this thesis and that has, to date, been subject to great attention in the study of ICT. Next I will review the existing literature on technology use at work, and ICT use in particular, highlighting the need for a sociomaterial research lens, followed by a review of research on connectivity.

I will then set out the theoretical framework of this thesis by thoroughly conceptualizing the term connectivity, drawing a distinction between the broader term "connectivity" and the more narrow term "work connectivity". Additionally, I will define peripheral work connectivity, a dimension of work connectivity that refers to work connectivity at the periphery of traditional work hours and locations. Finally I will turn to the issue of power, and power in workplaces in particular, relating it to the concepts of Sociomateriality and connectivity. I will conclude this chapter by summarizing again the overarching research questions and key argument of this thesis as well as providing an overview of how this thesis is structured.

### **1.1. The Changing Nature of Work – Blurring Boundaries**

One key trend in the westernized corporate workplaces of today is that of blurring boundaries between work and private life. Already in the 1990s Arlie Hochschild (1990) found that work

increasingly intruded people's homes and that more and more time was spent working both from home and in one's workplace, despite ever better technology enabling a "high speed society" and the possibility to get more done, in less time (Rosa, 2003; Wajcman, 2008). This development did not halt but rather intensified over the last 20 years with a culture of long hours becoming the new desired norm and being constantly busy with work being the "new badge of honor" (Gershuny, 2005). Holders of such "extreme jobs", as Hewlett and Buck Luce (2006) commented, have become the new celebrated heroes of our time.

However, at the same time, traditional work norms of visibility and presence in the workplace and rigid adherence to clocktime have not fully disappeared, meaning that many employees now shoulder escalating workloads. They still have to be present in the workplace during "normal" work hours but also bring work home in the evening and on weekends (Moen et al., 2013), increasingly extending work into the periphery of the traditional workday and week.

Here, occupational identification and occupational norms play an important role and greatly shape expectations of long hours and commitment. For instance, in the software industry, especially among developers, there tends to be a strong identification with one's work and often such identification is accompanied by norms of long work hours (Hyman & Baldry, 2011). In addition, such norms can come with managerial strategies to manage the boundaries of their employees by ensuring that work has priority (Perlow, 1998). Further investigations have also shown that people rationalize such long work hours differently. They either refer to high workloads, norms and expectations, their desire for career advancement, concern for their professional credibility, or commitment to and enjoyment of their job (Sturges, 2013; Middleton, 2007).

Such developments have sparked investigations into questions such as whether this reduces work-life balance (Higgins & Duxbury, 2005) and what effects the increased blurriness of work and private life may have (Chesley, 2005; Wajcman et al., 2008).

The discussion of blurring boundaries then often builds on boundary theory (see Ashforth et al., 2000; Fonner & Stache, 2012) that assumes that people's lives are made up of different domains, primarily the domain of work and the home, accompanied by a great number of diverse and sometimes conflicting roles. Individuals create boundaries around these roles but at the same time constantly transition between them during the day, depending on how flexible and permeable ones boundaries are and people use creative strategies to manage their boundaries. Going back to the discussion of blurring boundaries between work and private life, new communication technologies have been a vital enabler of such blurriness by increasing the possibility for role permeability (Duxbury et al., 2014).

Critiques of boundary theory have argued that the segregation between work and home is not something natural and incontestably desirable, but a social construct (Kossek et al., 2006). Clear segregation between domains is actually not how it has always been, but a fairly recent phenomenon that evolved in the West in parallel with industrialization (Edwards & Wajcman, 2005; Abbott et al., 2005). Furthermore, the generally negative tone of blurring boundaries has been criticized (Greenhaus & Powell, 2006).

However, while I acknowledge the social construction of such boundaries in the West and the diversity of life contexts in which this theory may not apply, I still consider boundary theory as a useful conceptual tool, whose terms come in handy when describing the power negotiations surrounding work connectivity. Consequently, throughout this thesis I will repeatedly draw on this kind of terminology.

### **1.1.1. Intensification and Extension**

In the discussions of the blurring boundaries between work and private life, the issues of work intensification and work extension have also occupied key roles in the debate. As we have heard earlier, a growing number of studies are finding that workloads are escalating for many work groups (e.g. Moen et al., 2013; Chesley & Johnson, 2015). Especially in the group of professional workers in knowledge intensive work roles – work that is interdependent hence requires active exchanges with others coupled with a fairly large degree of autonomy over how to conduct one's work (Benson & Brown, 2007) – this manifests itself through increased expectations to work after official hours and away from one's official workplace. Facilitated by new ICTs, enabling connectivity with work around the clock, work is no longer bound by time and space (Duxbury & Smart, 2011).

Already in the 90s research into work intensification and extension has found that general pressure to work harder, arising from e.g. downsizing, has resulted in greater intensification of work during the workday by increasing one's efforts (Green, 2004) and by reducing breaks (Hochschild, 1990), as well as in an extension of work hours (Green & McIntosh, 2001; Green, 2001). More recent studies have also found that work is getting ever more intense, as people increasingly expense more efforts. Often this is due to greater spatial and temporal autonomy over their work, which motivates employees to work more intensively (Kelliher & Anderson, 2010; Boxall & Macky, 2014). Other researchers have found, however, that ICT enabled work intensification is also linked to greater levels of work strain (Chesley, 2014) and unreasonable workloads can offset wellbeing benefits gained through greater spatial and temporal autonomy (Boxall and Macky, 2014).



When looked at work extension, studies are finding that the ICT enabled newly gained spatial and temporal autonomy with work is quickly compromised by work increasingly intruding into private life, also leading to greater work strain (Chesley & Johnson, 2015). Yet, expectations of availability and long work hours are more and more taken for granted, normalized and seen as unavoidable by employees, especially in knowledge intensive workplaces (Moen et al., 2013; Mazmanian et al., 2013).

As expectations of availability and connectivity become the new norm (Middleton, 2007), job security could quickly be on the line for the employees that refuse to comply with these new expectations and they present varying degrees of difficulty to different people, who have diverse sets of strategies to deal with new expectations and ever greater levels of boundary permeability (Duxbury et al., 2014).

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While the above has shown that a growing body of literature exists, investigating the issue of blurring boundaries and work intensification and extension related to the use of new ICT, little is still known about the actual extent of such new norms. So, is ICT-enabled constant work connectivity really as widely spread as these studies claim, also in job types that don't fall into the category of "extreme" such as banking and consulting and what factors drive work connectivity at the periphery of the workday?

In addition, we don't know much about how such expectations and their fulfillment actually reconfigure power relations in the workplace, going beyond the negotiation of availability for work. Yet it is these negotiations of power that shape the employee-employer relationship (Clegg et al., 2006) and with it the changes that occur at work. These power negotiations are therefore pressing issues that need further attention. In such investigations of power it is then crucial to thoroughly account for the role of ICTs, because they enable the possibility for 'constant connectivity' with work in the first place and are often overlooked in workplace studies.

To date, most research has mainly concentrated on the group of individuals who are most likely to be heavily affected by work connectivity due to the accessibility of mobile ICT and professional norms of availability: Information and knowledge intensive professional workers (Duxbury et al., 2014) and most often bankers and management consultants (Perlow, 2012; Besseyre et al., 2012). However, while such studies have been very important in helping us to understand the effects of work connectivity at the extreme end of the spectrum, little is known about different job types and the extent of work connectivity within these. This study will

therefore broaden the scope in terms of job types included in this research, merely limiting it to white collar employees who have a TechComp email address and regular computer access for their work.

Looking at work connectivity and power among a broad range of workers at TechComp leads us to a final delineation of scope: In order to advance our understanding of the phenomenon of work connectivity, we need to investigate the crucial dimension of peripheral work connectivity by trying to comprehend what effects this form of connectivity can have in contexts, where it is most likely to already play a significant role, namely in the contested space between work and private life. It is here, where we need to explore firstly the extent of work connectivity and its drivers and secondly what role it plays in reconfiguring power relations, going beyond an analysis of availability norms. Starting to fill these gaps is what I aim to accomplish in this thesis.

## **1.2. Current Research on ICT at Work**

Technology plays a key role in the analysis of the changing nature of work; however, it is usually not addressed sufficiently in workplace studies (Orlikowski & Scott, 2008; Zammuto et al., 2007). While many scholars of work and organization do not consider technology at all (see Orlikowski, 2010), the few that do incorporate technology in their analysis often fall prey to technological determinism by stating that technologies drive the intensification of work (Green, 2004), bring work into the home (Duxbury & Smart, 2011) or cause increased work strain due to greater surveillance levels (McGovern et al., 2007). In all of these accounts, the role of technology is seen as the driver of change but remains underexplored in relation to the changing nature of work. Such studies typically neither sufficiently account for material nor for social aspects in the study of changes at work and fail to recognize that they are inextricably linked and mutually shape each other.

The concept of Sociomateriality, a research lens derived from Science and Technology Studies (STS), offers a useful perspective that does exactly this. And, it is increasingly used successfully by scholars of work and technology (e.g. Barley et al. 2011, Scott & Orlikowski, 2014).

Inspired by STS developments of the social construction (Pinch & Bijker, 1984), the social shaping of technology (MacKenzie & Wajcman, 1999) and Actor-Network Theory (Latour, 2005), Sociomateriality shares the idea that “people and things only exist in relation to each other” (Orlikowski & Scott, 2008: 455). For Orlikowski, Sociomateriality suggests that “materiality is integral to organizing, positing that the social and the material are *constitutively entangled* in everyday life. A position of constitutive entanglement does not privilege either humans or technology” (Orlikowski, 2007: 1437). The social and the material can therefore not

be separated and need to be analyzed together as they only exist in relation to each other, not as independent entities.

What Sociomateriality offers in addition to being a critique of determinism, is the focus on daily life situations. Most attention is paid to daily practices that are emergent, enacted and relational (Suchman, 2007; Orlikowski, 2010; Orlikowski & Scott, 2014; Scott & Orlikowski, 2014) and that are as much material as they are social (Leonardi et al., 2012). In fact, Sociomateriality being a “relational ontology” operates under the assumption that “relations are more fundamental than entities” (Scott & Orlikowski, 2014: 877-878) and these relations exist “in and through enactment...located in action and performed in practice” (Scott & Orlikowski, 2014: 878).

It is this focus on relations and practices, however, that renders visible how sociomaterial relations are constituted and how they may shape and reconstitute social structures such as inequalities (Halford & Savage, 2010).

Despite these theoretical advancements in understanding the world as sociomaterial and as performative, our daily language does not allow us very well to reflect the entanglement of the social and the material and instead favors the idea of a world made up of separate and independent entities, possibly because it appears more orderly than a world of entanglement in practice. Nonetheless and following other researchers (e.g. Scott & Orlikowski, 2014), for analytical reasons it may be useful to use distinctions and draw boundaries as to be able to describe phenomena, albeit without essentializing these boundaries in a deterministic way.

Based on the above discussion, for the purpose of this project, the term Sociomateriality will be defined and used as follows: *Sociomateriality is a research lens that proposes the “constitutive entanglement of the social and the material in everyday organizational life” (Orlikowski, 2007: 1438). Both human and material agencies only exist in relation to each other and the view of both as separate entities is analytical only.*

While Sociomateriality will not be used as the main theoretical lens applied in the analysis, it is an ontological understanding of the world that will undergird all of my analysis as to avoid a neglect of either the social or the material agents (e.g. technology) in the analysis of work connectivity.

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The earlier discussed neglect of technology in relation to workplace changes becomes particularly problematic in light of rapid advances that have taken place over the last 20 years,

particularly in ICT and social technologies that have contributed to dramatically changing work practices.

Social technologies include all traditional and emerging ICT that are used for interaction with other people (hence social) and which help us “acquire and share knowledge” (Jarrahi & Sawyer, 2013: 113). Examples of such technologies are landline or mobile phones, emails, and more recently social media platforms (e.g. Facebook, Google+, LinkedIn).

Over recent years, a body of literature has emerged that does look at various social technologies at work such as mobile email (Barley et al., 2011), Blackberries (Middleton, 2007; Mazmanian, 2013) and social media (Bucher et al., 2013). These studies are generally particularly concerned with adoption, use and consequences of new technologies, greatly deepening our understanding of these specific technologies.

For instance, Barley and colleagues (2011) analyzed the use and consequences of email. Based on their mixed methods study of American knowledge workers, they suggested the idea of email as a source and symbol of stress due to its asynchronous nature, differentiating it from other forms of communication at work. So for example, new tasks may be communicated through a phone call but as soon as the call ended there is no direct reminder left of the new work task. Email inboxes, on the other hand, are often used as to-do-lists. They therefore function as constant reminder of unfinished tasks and our own shortcomings of not getting work done. These constant reminders may then create feelings of overload, eventually leading to email being perceived as a stressor.

Bucher and colleagues (2013) also study consequences of ICT use with a particular focus on stress, which they identify as resulting from a feeling of overload by looking at social media platforms. Their explanation for such negative sentiments is the lack of media literacy of many users. They argue that if workers’ understanding of the use and purpose of such platforms could be increased, the associated stress levels could be reduced.

One example of adoption and use is a longitudinal, qualitative study by Lene Pettersen (2014) on Enterprise Social Media (i.e. a social media platform confined to the boundaries of an organization) in a French-based but globally operating consultancy. Over the course of 3 years Pettersen tracked the launch and adoption of a social media platform at the respective company, using both ethnographic and formal interviewing techniques, in order to understand how institutional practices of work affect the adoption and use of Enterprise Social Media. She found that while social media outside of work offers a lot of rewards for individuals, explaining the social media boom of recent years, the institutionalized work practices and reward

structures at the case study company do not support the use of Enterprise Social Media. This leads to employees being reluctant to use the new tool and many consider it as a waste of time that keeps them from their real work. What this study further revealed is that the success of social technologies is a complex sociomaterial process, influenced by individual decisions, institutional forces as well as technological affordances.

While these contributions are important to understand specific technologies, their uses and their effects at work, starting to compensate for many years of neglect, these studies are usually limited to one particular technology only. However, a holistic approach is necessary, which analyzes the entire repertoire of social technologies at work, which are available to different groups of employees. Such analyses are needed, if we aim to understand connectivity as the overarching phenomenon, shaped by who uses what technology when and why and what this means for the experience of work and communication. In addition, to further our understanding, we now need to go beyond the analysis of use and individual effects. Rather, we need to ask deeper questions about how technology use relates to broader changes at work, including issues of changing norms, expectations and power relations.

Noelle Chesley (2014) attempts a more holistic analysis of a repertoire of social technologies by exploring their effects on work intensification. Using data representative of the US workforce in 2008, she finds that social technologies are clearly linked to increased strain at work through mechanisms of speeding up work, increased multitasking and interruptions. However, while stressing the importance of the social aspects of work such as norms and expectations, her survey-based research design cannot sufficiently account for these by only looking at statistical evidence, rather than qualitative insights gained from the individuals using such technologies.

Again, a rounded analysis of workplaces is needed, incorporating the perspectives of employees, managers and the organization as a whole, in order to more fully understand the effects of social technologies and connectivity in particular. It appears that connectivity can take different facets in an increasingly global and diverse work environment, as more and more employees are expected to be constantly connected to their work at any time, from anywhere. These developments require better understanding and make such investigations ever more important. If we limit our research to statistical evidence though, we may find it difficult to avoid technological determinism, as underlying social aspects are not explored sufficiently.

Using a qualitative research design, Jarrahi and Sawyer (2013) offer a great example for understanding the sociomaterial dimensions of ICT at work, by showing how a set of social

technologies is used for sharing knowledge among knowledge workers. Having interviewed 54 consultants from 17 different companies, they clearly considered the perspective of the people using technologies. By looking at both more traditional technologies such as the telephone and email and at very recent technologies such as instant messaging and social media, they were able to identify five key knowledge practices supported by a set of different technologies that the studied employees drew on in order to share knowledge.

However, their study does also not address deeper and simultaneously broader questions of norms, expectations and ultimately power at work. Furthermore, by limiting studies to the effects of certain features of technologies, the overarching phenomenon, namely that of connectivity, is not sufficiently considered even though it binds these different studies together. Yet it is connectivity that enables messages such as emails and blog posts to be created and consumed; and it is connectivity that facilitates the growth of a digital network of people that can be used for knowledge sharing or that leads to a feeling of being overloaded.

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So, instead of merely blaming the technology for driving so called ‘constant connectivity’, we need a more nuanced discussion of when and why people stay or do not stay connected to work and how this affects existing work practices and structures. Here, we need to focus on workers in knowledge intensive jobs, jobs that require a large amount of cooperation and communication, as these employees appear to be most affected by work connectivity. Yet we also do need to go beyond this assumption and investigate statistically what the extent of work connectivity is amongst a wider range of job types and roles. Such a broader approach will allow us to gain a better understanding of work connectivity overall, not limiting ourselves to a number of high status workers. Moreover, we need to ask questions that go beyond an exploration of use and individual consequences. This becomes especially relevant when considering that “we have reached a new edge of the frontier where more and more people can be more connected than ever before in history” (Kolb et al., 2012: 271). Finally, we need a holistic, sociomaterial analysis that accounts for both technology and the social world and that acknowledges the diversity of social technologies that are available to people in today’s work environment.

### **1.2.1. Current Research on Connectivity**

So, as we have heard, merely looking at singular technologies is not getting to the core of the changes that are taking place through the introduction of these technologies. The availability of technologies is so diverse and transient – especially in the realms of work – that studies of these technologies can become outdated quickly, possibly making their contributions obsolete.

A better approach is to look at the overarching theme of connectivity that binds these technologies together, no matter what exact technology is used. Yet, as to avoid a too vague use of the term, it is then particularly important to talk about *work connectivity* when discussing connectivity with work, rather than using connectivity more generally that could also refer to connectivity between two people who are connected due to entirely private reasons. While a review of the literature revealed that there is a growing body of studies that investigate work connectivity, unfortunately, to date, these studies have not made such differentiation, leaving the concept of connectivity under-developed and vague.

In general, the current literature on work connectivity can be divided into two groups. Firstly, there is a body of literature mainly focusing on how work connectivity blurs boundaries and shifts norms of availability. These studies usually consider the reasons and consequences of peripheral work connectivity, that is, work connectivity at the periphery of the workday, or in other words out of traditional work hours and away from the main office (see e.g. Mazmanian, 2013; Mazmanian et al. 2013, MacCormick et al., 2012; Middleton, 2007; Middleton & Cukier, 2006; Kolb et al., 2012; Besseyre des Horts et al., 2012). Secondly, there is a smaller set of studies that looks at 'constant connectivity' with work during the official workday and its consequences, hence non-peripheral work connectivity (Wajcman & Rose, 2011; Rose, 2013; González et al., 2004). In this realm, a particular focus lies on interruptions at work through constant message inflow during the workday.

However, as mentioned earlier, none of these studies thoroughly conceptualize the term connectivity, nor make any further differentiation, due to which it is often difficult to untangle what sort of connectivity the scholars are looking at, especially in the first group of studies. Nonetheless, these connectivity studies do provide some important insights that I will quickly review below.

### **1.2.2. Peripheral Work Connectivity**

For instance, by looking at Blackberries, Mazmanian (2013) offers an insightful account on the different aspects that shape peripheral work connectivity, highlighting that issues of hierarchy and power are entangled in the use of connectivity-enabling ICTs such as smartphones. Drawing on frames of reference, she identified four dimensions of employees' frames, which shape connectivity: Identity (i.e. normative behavior within occupational group), materiality (i.e. portability of devices), vulnerability (i.e. how important is connectivity to job security), and visibility (i.e. how visible is one's work through perpetual connectivity). This study made a great contribution by revealing that power relations are implicated in the level of connectivity with work and hence the availability that employees display.

A similar study was conducted by Matusik and Mikel (2011). Calling smartphones a connectivity technology, they qualitatively studied the use of 54 smartphone users, effectively, although implicitly, investigating peripheral work connectivity. Unlike Mazmanian (2013) who focused on what shapes connectivity, Matusik and Mikel (2011) studied the use of and reaction to such devices and the associated expectations of responsiveness and availability.

They identified three categories of users who all interpreted this connectivity technology differently. The first group called 'enthusiastic' mainly stressed the immense benefits they gained from their use of smartphones, allowing them to be responsive and to always be able to monitor what is going on, effectively mitigating uncertainties. The second group they classified as 'balanced'. Members of this category appreciated both the benefits of being able to respond quickly and staying in the loop, but also acknowledged the potential downsides of this technology both personally and work-related. Finally, they identified the last group as 'trade-offs' as this group, similar to the balanced group, reflected on both benefits and downsides, yet only one-sidedly as they only saw personal costs and work-related benefits.

As both the balanced and the trade-off groups have shown, there are two sides to the story both in private and in work life. A striking finding of their study was then that influencers external to the organization also play a crucial role in how people use, react to and interpret connectivity. This showed that while connectivity often focuses on the workplace, our research endeavors also need to take into account non-work aspects such as family situations and other personal circumstances.

While having accounted for the challenge of incorporating individuals' experiences and perceptions, as well as acknowledging the general overarching theme of connectivity, these two studies are again limited to one technology in isolation and it is important to revisit the issue of work connectivity in relation to the entire repertoire of social technologies at work.

Similarly, MacCormick and colleagues (2012) conducted a study with two rounds of interviews with 21 senior managers from the Australian offices of two international banks. The first round of interviews took place shortly after Blackberries had become popular among high status professionals and was complemented by two focus groups. The second round of interviews took place 5 years later with the same participants to investigate what had changed in terms of smartphone use and perceptions of connectivity. Building on the work of Kolb et al. (2008; 2012), they focused on the level of engagement with work and its relation to connectivity, defining engagement as the extent of one's mental, emotional and physical investment in one's work and disengagement as being either under- or over-engaged.



In their first round of interviews they identified 3 smartphone user types in relation to connectivity and engagement: The first type was that of hypo-connectors who rejected connectivity as to retain control over their availability. This group tended to disengage from work through disconnecting, possibly leading to exclusion from certain interactions at work. Secondly, they identified hyper-connectors who represent the other extreme end of the spectrum by being constantly connected to work. In this case their excessive work-engagement led to a different form of disengagement from work, over-engagement, as their periods for rest and reflexivity turned out to be too short. Finally, they described the group of the so-called dynamic connectors, who moved between states of hypo and hyper connectivity, leading to a functional form of engagement by optimizing both rest periods and high levels of responsiveness when needed.

However, when interviewing the same bankers 5 years onwards, it became clear that a high degree of connectivity was even more widespread then, often leading to feelings of overload and addiction. What's more, this high degree of connectivity had finally also become socially accepted in the private sphere of life and interestingly people increasingly saw themselves as playing an active role in causing such high connectivity levels and the associated side-effects.

This study clearly adds to our understanding of connectivity by showing how different states of connectivity lead to different outcomes and how norms change over time. However, it also only considers connectivity enabled through smartphones, in this case Blackberries. In a world where people have an abundance of possibilities to connect via different hardware solutions such as smartphones, tablets or laptops or various software tools such as email, instant messaging, or social networking sites, it is insufficient to focus only on one social technology. While the smartphone is one of the key technologies enabling connectivity, we need to look at other hardware and the multitude of software available that all facilitate connectivity.

Furthermore, these studies have mostly been limited to the Anglo-Saxon world and to senior managers in high pressured industries such as banking (e.g. MacCormick et al., 2012). Yet, in order to deepen our understanding of work connectivity, it is essential to extend our research efforts to different industries and job roles and to consider additional variables such as country, team composition and gender.

### **1.2.3. Non-Peripheral Work Connectivity**

Finally, while also looking at an Anglo-Saxon context, Wajcman & Rose (2011) go beyond an analysis of only one mobile technology. They show what effects connectivity can have during the workday, hence looking at non-peripheral work connectivity. In particular, they looked at interruptions caused through 'constant connectivity' facilitated inflow of messages during the

workday. In their attempt to re-theorize interruptions from an STS perspective, their study analyzed in-depth the cases of 18 knowledge workers and their interaction with social technologies through work shadowing, surveys and interviews. This analysis revealed that most communication at work today is now mediated via technologies and that people deal with interruptions through different technologies by drawing on a hierarchy of devices. For instance, phone calls through a mobile phone are seen as most urgent and written communications such as emails are perceived as less important. Furthermore, they conclude that while interruptions are increasingly caused by mediated forms of communication, this fragmentation of work may be considered as part of work rather than interrupting it. This study has demonstrated that there is a need to study work connectivity beyond the issue of blurring boundaries and changing availability norms, which has to date received the majority of scholarly attention.

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In sum, what all of the above studies have demonstrated so far, is that work connectivity enacts very different outcomes, depending on its relation to different groups of people. Moreover, we have seen that people have differing interpretations and strategies to deal with work connectivity. In addition, it appears that norms of work connectivity and with it availability for work are changing, as well as the perception of what constitutes work itself. Yet, only few scholars have gone beyond the study of technology use and direct individual effects (e.g. Wajcman & Rose, 2011; Mazmanian et al., 2013) and even fewer have attempted to thoroughly conceptualize the term connectivity (e.g. Kolb, 2008). More research is therefore needed to not only investigate individual consequences of connectivity further but to also look at what connectivity is and what role it plays more broadly in relation to power negotiations in the workplace.

In this study I therefore aim to contribute to our understanding of connectivity by firstly thoroughly conceptualizing it, drawing distinctions between connectivity and its sub-dimensions. Secondly, I aim to contribute by empirically investigating one of these dimension, namely peripheral work connectivity, by means of a large case study that allows for the study of work connectivity in multiple, diverse work contexts. Such wide reaching access enables me to build on existing work by comparing previous findings to the multiple work contexts of the studied organization and it allows me to conceptually and empirically advance our understanding of connectivity.

### 1.3. Theoretical Framework

#### 1.3.1. Connectivity – What is it?

To address these challenges, we first need to define better what we mean by the term connectivity. Acknowledging the growing popularity of connectivity as a metaphor for workplace interactions, Darl Kolb (2008) has started to conceptualize what connectivity means in today's workplace by identifying four attributes that characterize it.

First of all, connectivity means latent potentiality. By referring to the origins of connectivity stemming from the word connective, he demonstrates that connectivity can mean past, present and future connections, whereas connectedness only refers to the past as it characterizes an established connection. Connectivity, on the other hand, provides us with the potential to connect without inferring that a connection has to be or has already been established. So for instance, when we talk to somebody on the phone, the connection already exists, therefore we are connected. Possessing a smartphone and carrying it with us, however, provides us with the possibility to connect, e.g. by checking incoming emails, without the actual connection taking place.

Kolb identifies the second attribute as actor agency. He explains this by suggesting that there is always some human agency involved in choosing to connect. Connective links may be available between two technological devices, thus exerting technological agency by functioning independent of a human being, but humans have to actively choose to use them. As not all technological possibilities for establishing connections are realized, the connective potential of technologies is seldom fully exploited. So when going back to the smartphone example, it is clear that – *if we wanted to* – we could constantly stay connected to work by continuously checking our email inbox as soon as a new email arrives. However, often it happens that emails are not instantly checked and replied to, especially if the push feature of the mobile device is disabled. It is then the human actor who chooses to update his or her inbox in order to connect to work for some time. Consequently, it is clear that some connections are not immediately realized, or sometimes not at all, as would be the case during holidays when the work phone may be turned off.

The third attribute is 'temporal intermittency' and it is linked to the previous one. While researchers often refer to the phrase 'constant connectivity' (e.g. Wajcman & Rose, 2011), when talking about the extent of connectivity in today's world, this connectivity may break down temporarily due to technical faults or human agency, rendering the term 'constant connectivity' inadequate (Kolb et al., 2012). In fact, it is highly unlikely that people are

constantly connected as there will always be a time, when one logs off, be it voluntarily (e.g. while on holiday) or not (e.g. no internet connection, or low battery).

Finally, he attributes 'unknowable pervasiveness' to connectivity. Here, he suggests that we can never know all possible links and connections and we don't know how much others know about us. With this lack of knowledge some negative side effects of connectivity surface, such as uncertainty. When going back to the smartphone example, the problem of surveillance emerges. When carrying a connected device with us, we constantly generate data such as where we are. These data could, for instance, provide employers with a perfect map of where and how their employees move, including their private lives, if they carry their work device with them. This raises important ethical questions and data protection issues and should be seriously considered in the study of connectivity.

Yet I would argue that there is an additional dimension of this final attribute that goes beyond surveillance and that has gone unnoticed by Kolb. Pervasiveness of connectivity – and with it the potential to access information – adds further uncertainty to the context of work, as employees feel they are missing out on important information during times of being disconnected. To mitigate this feeling, employees may then choose to be connected as often as possible leading to earlier mentioned work extension.

While these four attributes are a great starting point for theorizing connectivity, one problem with this conceptualization is the absence of the technological aspects shaping connectivity. Kolb acknowledges human agency as a key attribute of connectivity, but fails to give equal attention to technological agency. While discussing, for instance, temporal intermittence that can be caused by technical faults, he does not explicitly theorize the material – or rather sociomaterial agency – involved in this. It is of key importance though to recognize the role of technology in shaping outcomes, such as email checking behavior.

As previous research has shown, people often check their email inboxes as soon as new emails arrive due to notifications popping up (MacCormick et al., 2012; Middleton, 2007; Loeschner, nd). Such notifications have been compared to Pavlovian stimuli that trigger a reaction and they thus represent a form of sociomaterial agency, as these once programmed notifications become active independent of renewed human intervention and trigger a human response. Furthermore, people have developed their own strategies of dealing with this agency. For instance, in a case study of consultants using Blackberries for work, Loeschner (nd) found that these workers flipped the Blackberry over to avoid seeing the red blinking signal, notifying them of incoming emails. It is thus clear that while human agency makes up an important part of connectivity for instance through disabling certain technological features, it is the

entanglement of technology and human agency that leads to certain outcomes. A fifth attribute of connectivity should therefore be added, namely that of technological agency in the sense of affording, constraining and triggering human actions and thus enacting and producing sociomaterial relations. As will be reiterated throughout this thesis, it is of key importance to always consider both material and human dimensions together as a sociomaterial relation in order to understand the phenomenon of connectivity more fully.

Finally, I would add another sixth key attribute that is needed to conceptualize connectivity fully, namely the domain within which it operates, more precisely its *cross-domain nature*. Connectivity can exist between domains or within domains. For instance, teleworkers connect to their workplace while working from their home office. They therefore establish a connection between two domains, that is, home and work. This connectivity between domains becomes especially consequential, if a connection is established with work during non-work hours, or with the home while officially working. These forms of connectivity contrast connectivity within one domain e.g. the domain of work where workers connect from their workplace to their colleagues for work related reasons.

Having conceptualized connectivity, Kolb (2008) then concludes that connectivity is made up of both connects and disconnects between two technological devices, representing a duality. He emphasizes that connectivity is taking place between two technological devices to highlight that these devices can establish a connection without immediate human agency, e.g. by downloading new emails from a server automatically due to having been programmed in that way. Nonetheless, human agency is then necessary to fully establish a connection by actively viewing these new emails.

Building on the work of Kolb and the proposed extensions to the concept of connectivity, for the purpose of this paper the term will therefore be defined as follows: *Connectivity is a duality of connects and disconnects between two technological devices that involves human and technological agency, is latent yet pervasive, and that offers the potential to connect between or within domains.*

#### **1.3.1.1. Work Connectivity**

The above discussion of the different attributes of this construct shows how vast the phenomenon of connectivity is affecting all spheres of our lives and to date nobody has distinguished between the different dimensions of connectivity that operate in and across different spheres of our lives. Yet, as outlined in the introduction, the focus of this thesis will be on work and therefore *work connectivity* will be studied in-depth, while acknowledging that there are also other spheres where connectivity plays an active role. As will be shown in the

analysis later, a clear demarcation of work connectivity cannot always be maintained due to blurring boundaries between traditional domains. Nonetheless, for analytical reasons, it is important to draw distinctions between the different dimensions of connectivity.

For the purpose of this thesis, here work connectivity will be defined as: *The degree of connectivity an individual has with his or her workplace.*

Work connectivity can be differentiated further by means of space and time, leading to two different forms of work connectivity, *peripheral work connectivity* and *non-peripheral work connectivity*.

Peripheral work connectivity refers to work that is both spatially and temporally peripheral to traditional places and hours of work and is hence, defined as *connectivity with work, while away from the main workplace (spatially peripheral), during all non-standard work hours, i.e. early mornings, late evenings, weekends, holidays and annual leaves (temporally peripheral).*

*Non-peripheral work connectivity generally refers to the situation when people are connected to work while in their main workplace and during their main work hours.*

In this sense, non-peripheral work is the situation where space and time of being connected align with traditional work practices. Finally, non-peripheral work connectivity has another variant in which employees are spatially distant from their organization's premises, but are not temporally peripheral to their main work hours. This kind of non-peripheral work includes telework/telecommuting and mobile forms of work.

Furthermore, it is important to highlight that there is a difference between experienced work connectivity, that is, one's own perception of it, and actual connectivity, i.e. the actual number of hours per day one is actively connected to work. For methodological reasons (i.e. main method of data collection is self-reporting of informants), in this thesis I will focus on experienced work connectivity.

Finally, it is crucial to add that in contrast to connectivity more broadly, the degree of work connectivity can be imposed either directly through work orders and organizational rules, indirectly through norms and expectations or it can be self-chosen e.g. through personal preferences.

As discussed, connectivity exists in all spheres of our lives and to date researchers have often focused on connectivity as part of life in general (see e.g. Turkle, 2008; Agger, 2011). However, there are many paradoxes that come with connectivity such as simultaneous feelings of empowerment and enslavement through the possibility to constantly connect from anywhere,

anytime (Jarvenpaa & Lang, 2005) and these are often predominantly relevant for work, making the study of work connectivity highly relevant.

An increasing number of studies have demonstrated that work connectivity can be especially consequential, both in a positive and negative sense, when it takes place during unconventional work hours, that is, at the periphery of a traditional Western 20<sup>th</sup> century workday (Jarvenpaa & Lang, 2005; Duxbury & Smart, 2011; Boswell & Olson-Buchanan, 2007). For these reasons, the scope of this research will be narrowed down further, mainly exploring one particular and arguably the most consequential aspect of work connectivity in the context of blurring boundaries – *peripheral work connectivity*.

Despite such definition of scope, it is imperative that I mention again that work connectivity is a complex phenomenon and peripheral and non-peripheral work connectivity cannot always be easily distinguished. This differentiation is therefore an analytical one, but I acknowledge the importance of work connectivity in its entirety due to which aspects of non-peripheral work connectivity will also surface from time to time throughout this thesis.

#### **1.3.1.2. States of Connectivity**

However, what is clear from the discussed paradoxes and consequences such as work extension and strain that come with work connectivity, is that there are varying ‘states of connectivity’ with varying effects on people and work in particular (Kolb et al., 2008; 2012). The question we should ask is then how much work connectivity is desirable and useful.

Kolb and colleagues (2008, 2012) describe states of connectivity in form of a continuum between hypo (under) and hyper (over) connectivity with a balanced mid-point they call ‘requisite connectivity’. This mid-point describes the threshold connectivity that one needs to achieve in order to operate effectively and efficiently; yet they also conclude that beyond a certain point too much connectivity may lead to “distractions, ineffectiveness and burnout” (Kolb et al., 2012: 269).

People’s state of connectivity varies and the continuum captures well this fluid nature of connectivity. Nonetheless, the model does not differentiate between connectivity as a broad term and work connectivity as a dimension of connectivity, despite being clearly focused on and developed for the context of work. By focusing explicitly on work connectivity and peripheral work connectivity in particular, I try to conceptually overcome this problem, while still making use of the connectivity continuum.

### **1.3.2. Understanding Power Relations**

Having discussed work connectivity, it is clear that it is heavily implicated in the shaping of power relations at work by enabling traditional boundaries to get blurred and by reconfiguring what it means to work in today's workplaces. For these reasons, in addition to the discussion of connectivity itself, it is of key importance to set out a theoretical framework for the question of power and relate it to the proposed theoretical concepts of Sociomateriality and connectivity. This is what this next section aims to accomplish.

Power is a strong word that is frequently used in our day to day life. It is especially common in the context of work and in relation to technologies. We may talk of powerful entrepreneurs such as Mark Zuckerberg of Facebook, Steve Jobs of Apple or Richard Branson of Virgin who are often celebrated as heroes of our time, as they have the power to bring about radical innovation (Silverman, 2015; Jones, 2010; Economist, 1998). In the same vein we speak of radical technologies such as the internet or artificial intelligence that have the power to transform our lives completely (Ahmed, 2016). In both of these cases power is viewed as a possession with deterministic effects, be it social or technological determinism, both of which we have heard about previously. Yet, the question what power is or means is not investigated further; neither in our day-to-day language nor in many scholarly attempts at addressing issues related to power.

As Fortunati (2014) argues, even mid-way theories such as sociomaterial approaches in the tradition of Science and Technology Studies tend to have this problem. They aim to avoid determinism by proposing that both social and material elements together interact to form networks of operation, but don't conceptualize power explicitly even though they implicitly talk about it. In an attempt to avoid both social and technological determinism, they propose that social and material forces have agency and thus, one could say, are equally powerful.

In the studies of ICT at work and connectivity that I have discussed earlier, scholars investigate the effects of the use of new technologies such as smartphones (e.g. Mazmanian et al., 2013) and social media (e.g. Pettersen, 2014), but there is a glaring absence of the question of power relations in such studies; if power is acknowledged, it is not conceptualized sufficiently (e.g. Leonardi et al., 2012).

Yet, it is clear from such studies that new technologies, which facilitate 'constant connectivity', do have some effects and may reconfigure power relations. Understanding how work connectivity contributes to a reconfiguration of power relations at work is therefore the aim of this thesis and its main contribution. It is my key objective to sensitize scholars of ICTs and work towards the issue of power relations that are inevitably raised, yet widely insufficiently



acknowledged, when new technologies are introduced to work contexts. In order to do so I will argue and empirically demonstrate that work connectivity, particularly in its peripheral dimension, provides a space, or a platform, where power relations become negotiated as well as being an agent in such negotiations through its function as disciplinary mechanism. I will argue that work connectivity does more than shifting norms of availability. Rather, it is the reason why power relations such as gender identity, inclusion and hierarchy become negotiated with outcomes not yet determined.

In order to avoid the common pitfall of utilizing power as a word without sufficiently conceptualizing it, in the next section I will lay out the theoretical framework of power that will underpin the analysis of power and connectivity at TechComp.

#### **1.3.2.1. Power Perspectives: The Power Over vs. Power to Debate**

While power has become a common word in our day to day language that we all use without necessarily thinking about it, historically, many attempts have been made at thoroughly conceptualizing it. However, most often such conceptualizations have been singularly focused on “power over” somebody or something, suggesting that power is always and inevitably the domination of one actor over another actor. Yet, as Foucault (1982) and other’s (Clegg et al., 2006) have argued, power can also be productive and positive, and can hence also mean the power to do something. It is these two notions of power, the “power over” and the “power to” perspectives that have shaped the discourse around power.

Starting with Max Weber who defined power as “jede Chance, innerhalb einer sozialen Beziehung den eigenen Willen auch gegen Widerstreben durchzusetzen, gleichviel worauf diese Chance beruht” (Weber, 1921/1964) or in English “the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests” (Uphoff, 1989: 299), we can see that such a conceptualization portrays power as something fundamentally negative (Lemke, 2001). Power is viewed as an open conflict, reduced to will and obedience despite resistance.

Actor A imposes his, her or its will on actor B, even though actor B may try to resist. Yet, as Uphoff (1989) stresses, the word probability in Weber’s definition shows that there is always some sort of uncertainty involved. Power is the probability of achieving one’s will despite resistance, rather than a thing one can have. This then means that power is not fixed and can hence not be a property to be possessed; instead it is something relational that arises from actor A’s relation to actor B. Yet, the key aspects here remain will and obedience (Lemke, 2001).

Despite this clear conceptual advancement that power is not a fixed property but relational, the definition remains at the level of “power over” somebody and neglects the fact that actors can also have the “power to” do something and it is not of interest to Weber how this power came about (Lemke, 2001).

Lukes (2005) has succeeded in going beyond the discussion of “power over” by proposing another very influential definition of power, conceptualized in the form of 3 dimensions. The first dimension equalizes power with influence. A exercises influence over B by getting B to do something A wants and that B wouldn’t have done otherwise. The analysis remains at a level of actual and observable decision making behavior in overt conflict of preferences or interests. As Lukes put it (2005: 19), “Conflict, according to that view, is assumed to be crucial in providing an experimental test of power attributions.” And he concludes that the “one-dimensional, view of power involves a focus on behavior in the making of decisions on issues over which there is an observable conflict of (subjective) interests.”

When applying this one-dimensional perspective of power to the situation at TechComp, this could mean that a manager may reject an employee’s concrete request to benefit from working from home one day per week, because he or she wants all employees to be visibly present in the office.

The two dimensional view goes beyond the conceptualization of power as decision making in the instance of actual and overt conflict. While in the first dimension, there is concrete decision making involved, such as a manager rejecting a request made by an employee, in the second dimension power can also be conceptualized as non-decision making and non-behavior. In this case conflict is covert, though it exists, but actors involved don’t get to the point where a decision would have to be made. For Lukes (2005: 24-25) this view of power “involves a qualified critique of the behavioral focus of the first view and it allows for consideration of the ways in which decisions are prevented from being taken on potential issues over which there is an observable conflict of (subjective) interests.” He considers this two dimensional view as a major advancement over the former, as it also takes into account non-decisions as well as how certain issues are kept out of active debate.

So in the case of the TechComp employee who wanted to utilize home office one day per week, this would mean that he or she wouldn’t even have asked to work from home, as it was clear to him or her that the manager would reject their request anyhow. While there is a conflict of preferences here (i.e. employee wants to work from home one day per week, but manager highly values presenteeism), no actual debate ensues between the two involved parties as one party remains in non-behavior, leading to non-decision.

Finally, Lukes puts forward a three dimensional view of power which he calls radical, as he aims to break away from the behaviorism of the earlier discussed views of power. In this view, he acknowledges that there are circumstances and societal forces that shape values and beliefs and that make individuals comply with these values without resistance, as they start to believe in the ideas and values proposed. As he puts it (2005: 27): "Indeed, is it not the supreme exercise of power to get another or others to have the desires you want them to have that is, to secure their compliance by controlling their thoughts and desires?" The key to this third dimension of power here is through control over information, as well as processes of socialization.

Both the one and two dimensional views assume that power only manifests itself in conflict, be it overt or covert, but "this is to ignore the crucial point that the most effective and insidious use of power is to prevent such conflict from arising in the first place" (Lukes, 2005: 27). So, in addition to overt and covert conflict, there is latent conflict, which exists due to actors not knowing what their real interests are.

Going back to the TechComp example, this would then mean that the employee would not even think of asking for a home office day, due to the cultural values and his or her ascription to these that consider office presenteeism as the only acceptable form of work, although working from home may be more comfortable, may save time, may allow for a better management of dual responsibilities and may even be more productive.

Only such a three dimensional view of power, he argues, can allow a thorough and serious sociological analysis, going beyond the behavioral focus. While, there is a lot of merit in this "radical" view of power by bringing in social values and norms, Lukes' notion of "real interest" has been widely criticized (Knights & Willmott, 1989; Edwards, 2006). In particular, critics raise the problem that interests are complex and may shift as both the powerful and those without power together constitute ideologies, which shape and reshape interests (Edwards, 2006) and cannot be uncovered without isolating the individual from society (Knights & Willmott, 1989).

Furthermore, Lukes limited himself to a "power over" perspective and did not acknowledge the positive and productive side of power, captured in "power to (Edwards, 2006). Edwards therefore proposes to extend Lukes' conceptualization of power by adding the notions of frames of reference and discourse.

Frames of reference, he argues, "inscribe power in structural forms" (2006: 575) but are "open to challenges as wider structural conditions change". These wider structural conditions can

then be changed through discourse and the powerless can leave their state of powerlessness by actively shaping the discourse.

In the case of the TechComp employee, this could mean that the employee has not considered asking for a home office day as it had not occurred to him or her that this was a potential possibility. When a new employee arrives in the team though, who previously enjoyed the benefits of home office, the frame of reference of this team changes as the new colleague actively requests this policy to be made available to the team and more and more colleagues want to try it out for themselves.

A further very influential perspective on the “power to” side is that of Foucault. It is this perspective on power that will be used to constitute the theoretical underpinning of this thesis, due to its relevance and usefulness for organizational research (Burrell, 1988; McKinlay & Starkey, 1998, Clegg et al., 2006) and close relation to sociomaterial research lenses (Wajcman, 2000), which I will explain in more detail later. In general, and in contrast to previous power perspectives, Foucault’s approach to power is exploratory, he is interested in how power relations are shaped and he is most concerned with the experiences of individuals (Foucault, 1980a; 1980c; 1982). Such an approach is particularly well suited to this thesis’ endeavor of understanding how power relations in the workplace are shaped.

Foucault’s work on power radically deviates from the earlier explicated “power over” conceptualization in a variety of ways. First of all, he fully rejected the idea of power being something to be possessed: “Power is not something that is acquired, seized, or shared, something that one holds on to or allows to slip away” (Foucault, 1978: 94). Instead, Foucault viewed power as relational and his description of the meaning and consequences of such a relational view is far-reaching. If power only exists in social relations, it is dispersed and ubiquitously spread throughout society. Power is not centralized in certain institutions or people but manifests itself through daily practices in all spheres of our lives: “[It] is invested in, transmitted by and reproduced through all human beings in their day-to-day existence” (Burrell, 1988: 227). Due to this relational and dispersed nature, one cannot simply destroy an existing power system by fighting against one specific dynamic of it; one change in the dispersed relations does not overthrow existing power dynamics (Burrell, 1988; Gutting, 2006). However, because power is relational and dispersed, individuals have agency in these relations; they play an active role in shaping them.

A good example to illustrate this is the ongoing struggle women face in the workplace. One aspect of the power dynamics in the workplace has been changed – women are now legally allowed to enter the labor market and even encouraged to do so; yet the existing power

relations that include traditional male networks and mentor-mentee relationships, the pressure of mobility and availability, the division of labor in the home etc. have not been changed enough to make the workplace a level playing field for both men and women. Yet, individual women now have more opportunities than before and can become an active agent in determining future gender relations in the workplace.

In addition to this relational and dispersed quality of power, in *Discipline and Punish* Foucault (1977) distinguished between two modes of domination: the traditional and the disciplinary form. The former was practiced until the 18<sup>th</sup> century and entailed dominance through the utilization of violence against the physical body. The disciplinary form, which replaced the traditional form from the 19<sup>th</sup> century onwards, does no longer utilize physical violence but has a very different mode of operation. It operates at the level of thought and mind. It aims to discipline and train, with “docile bodies” as the final end and thus it wants to reconfigure people’s functioning. In the words of Rouse’s reading of Foucault: “Discipline and training can reconstruct it [the subject] to produce new gestures, actions, habits, and skills, and ultimately new kinds of people” (Rouse, 2006: 98).

Foucault (1977) identified three major mechanisms of discipline, which he illustrated using the example of a prison. The first one is the constant surveillance of the inmates utilizing the metaphor of Jeremy Bentham’s Panopticon, the surveillance tower within the prison. It acts as a constant reminder that one is, or rather could be, watched without the inmates being able to verify whether they are actually watched or not.

The second is the normalization process going on, which establishes – through scaling, measuring and quantifying – what constitutes normality.

The third is the constant examination of subjects which measures individuals according to their deviance from the norm. The disciplining objective is then to get the subject to act in a way that makes them fit into the established norms and standards.

While Foucault utilized the prison as a metaphor to illustrate power in its most total form, he drew comparisons to other institutions such as hospitals and schools, which have also adopted disciplinary power as a mode of domination, albeit in a less encompassing form. Yet, it is this metaphor, which has fueled critique (Giddens, 1984). Only few people live in such total institutions such as a prison and even if individuals may attend schools or work in organizations, the disciplinary power is, if at all, only partially active, as people leave such institutions e.g. to go home. As Burrell (1988) pointed out however, Giddens in this critique failed to see that our world is made up of different kinds of organizations in which and

between which we constantly move and hence we are constantly involved and implicated in disciplinary power relations. So a child may go home after school but then it is subjected to and involved in the disciplinary power of the parents or friends and themselves.

Such interaction between actors is then the reason why power is never fixed, but dynamic and it is "produced from one moment to the next" (Foucault, 1978: 93), entailing struggle and resistance. This struggle though can lead to productivity and creativity, making power something positive and granting the actors over which power is exercised greater agency in determining outcomes than the "power over" debate generally admits (Knights & Willmott, 1989; Clegg et al., 2006). Power is "'more a question of ongoing and active structuring of the possible field of action of the others – a process that is always open to resistance, transformation and renegotiation'" (Clegg et al., 2006: 240). As Foucault (1982: 340) put it himself, power is an "action upon an action, on possible or actual future or present actions." And, at the same time such struggle and resistance produces the *raison d'être* of power, as resistance demonstrates the need for discipline (Burrell, 1988).

It is here where Foucault's juxtaposition of power/knowledge plays an important role. It is knowledge about social practices and behaviors that leads to power and it is power that constitutes knowledge by gaining access to certain kinds of knowledge or determining what constitutes as truth. So, in short, power and knowledge are co-constitutive and mutually shape each other: "It is not possible for power to be exercised without knowledge, it is impossible for knowledge not to engender power" (Foucault, 1980b: 51-52). Yet it is this knowledge about social practices that can also lead to resistance, e.g. when employees respond to an imposing manager by engaging in empty labor (Paulsen, 2013), that is, being present at work without being productive, without their management noticing. These employees may have come up with complex strategies to hide their lack of productivity of which their managers may have no idea.

In modern highly connected and digital workplaces another very important aspect of power/knowledge becomes relevant: The Panopticon. With permanent surveillance becoming more and more widely spread and feasible, even across distributed workplaces, management gains access to new knowledge that had previously been exclusively held by employees.

The truck driving industry is a very good example of this (Levy, 2015). In an intensive observational study of truck drivers in the US, Levy found that a previously very autonomous and independent occupation, such as truck driving, had become a heavily regulated and closely monitored job through so called fleet management systems. Such new software allowed management to gather biophysical and local knowledge that had previously been exclusive

“road knowledge” held by the truckers, traditionally granting them a large degree of decisional autonomy. Now, however, as management knew at all times where their drivers were located, how road conditions were and even how long the truckers had been rolling without taking a break, it was common that such decisional autonomy was taken away or at least heavily contested. Furthermore truckers’ performance was constantly measured and compared against benchmarks, creating pressure to become ever better, illustrating the normalizing and examination processes Foucault pointed out.

Such mechanisms of disciplinary power are not limited to blue collar work though. They are very much visible across all kinds of work and status levels (Burrell, 1988). In knowledge intensive professions though, they take on a more covert form by replacing overt controls such as direct monitoring in the trucking industry with cultural and normative values that are attached to work as a professional (McKinlay & Starkey, 1998). As McKinlay and Starkey (1998) pointed out further: "For knowledge professionals, there is a more or less explicit trade-off between the self-subordination inherent in normative control and the job security and personal development opportunities open to them in knowledge-intensive organizations." Their own behavior and fulfillment of cultural and normative values is what constitutes their identity as professionals.

It is what Foucault called (1988) “techniques of the self” that lead to individuals disciplining themselves through self-control and self-surveillance and it is such techniques which are most relevant in knowledge intensive workplaces. As Deetz (1998: 164) pointed out: Such “self-management is management of the inner world along normative lines through the use of self and professional knowledge...Strategized subordination happens as members actively subordinate themselves to obtain money, security, meaning, or identity."

This project is however never finished, as there is always uncertainty in that there is room for more self-optimization and control, leading to constant self-discipline in order to get closer to the never attainable end. Yet this discipline is not solely inflicted upon the subject from the outside, it is internal and becomes part of the individual’s subjectivity. So, in contrast to Weber, Foucault was interested in the “how” of power, not solely the effects of it. He considered the technologies of power and the self to be entangled and co-constitutive of power relations, going beyond the ideas of will and coercion, consent and obedience (Lemke, 2001).

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To sum up, power has historically often been discussed either as “power over” or “power to”, while the former conceptualization was more likely to view power as something that could be reduced to will and obedience and as something fundamentally negative (e.g. Lukes, 2005), while the latter aimed to show the positive side of power, arguing that power is relational, dispersed, creative and productive (e.g. Foucault, 1977). Foucault viewed modern society to be shaped by disciplinary power that operates across all spheres of life and across all status levels. The key to power lies in the knowledge/power relationship. Knowledge and power are mutually shaping and (re)constitutive.

The three most important mechanisms of this disciplinary power are (1) surveillance (i.e. Panopticon), or the perception of it, (2) normalization, and (3) examination, all of which depend on and create knowledge of social practices. The goal of disciplinary power is to get people to self-discipline and self-control. And it is these techniques of the self that make Foucault’s conceptualization of power so relevant and applicable to the study of modern often knowledge intensive workplaces, where employees derive their identity from working independently and autonomously while constantly controlling themselves. It is then a focus on such daily work practices that is best suited to understanding power dynamics in the workplace.

#### **1.3.2.2. Power & Technology**

Material agents and technological agents in particular, play important roles in the discussion of power. This is already exemplified by Foucault’s most important metaphor for disciplinary power – the prison tower, a material agent, although built by human beings, now functioning as Panopticon. A further example of this particular connection between power and materiality is Judy Wajcman’s (1991; 2000; 2010) and others’ thesis that gender relations – one of the most important power relations in society – and technology mutually shape each other. The role of materiality, and technology in particular, has then also great relevance for understanding power dynamics in the workplace. Above conceptualization of power as relational, dispersed and dynamic, as well as its focus on daily practices then lends itself well to the sociomaterial lens taken in this research project.

As I outlined earlier, a sociomaterial approach acknowledges both the material and the social dimensions of phenomena, which are entangled in practice, shaping technology use at work and its effects (Orlikowski, 2010; 2007; Orlikowski & Scott, 2008; Scott & Orlikowski, 2014). Sociomateriality then works well to analyze power dynamics in organizations due to its practice based and relational focus. As Clegg et al. (2006) pointed out, following Foucault’s conceptualization of power as a dynamic of social relations, it constantly reconstitutes itself



and there is ongoing negotiation between all actors involved. This reflects well the sociomaterial proposition that technologies are performed in practice and their use and effects are constantly shaped by sociomaterial agencies. Bringing this to the context of work, due to the fundamental role technologies play in today's workplaces (Bloomfield & Hayes, 2009), it is particularly important to acknowledge sociomaterial agency in the shaping of power relations at work with both intended and unintended effects.

Bloomfield and Hayes (2009) demonstrate this in their study of e-government in the North of England, where they found that technology implementation is a fundamentally political endeavor and it is power dynamics that determine what sort of work becomes automated and what doesn't. Furthermore, they point out that the modernization efforts of introducing e-government technology was not merely intended to get people to change their work practices through the use of new technologies. Rather, by getting people to internalize the focus on the citizen/customer, the managers in the studied organizations wanted to achieve that employees would also change their mind regarding what the purpose of their work was and what it was constituted of: "Staff would not merely carry out tasks in different ways because of managerial instruction or coercion but, rather, it was hoped that they would come to see their work in a different way" (Bloomfield & Hayes, 2009: 477).

In sum, this study showed that technologies are designed to afford certain possibilities for action, in this case a standardization of responses to citizen requests. How technologies are then finally implemented and used remained a political debate. In Bloomfield and Hayes' study not all routine requests were standardized, due to a high status group of employees rejecting this possibility, highlighting the role of power relations in negotiating technology use. Finally, when we look at this study through the lens of Foucault's notion of disciplinary power, rather than having people simply change their work routines, the intent of e-government was to normalize a new understanding of work – the citizen/customer focus. The aim was to get people to change their interpretations of their work in its entirety, so that they would self-control.

### **1.3.2.3. Power & Connectivity**

Having discussed what role power can play in negotiating technology use, it is only a small step to see how power and connectivity relate to each other. Let us take a look again at earlier introduced definition of connectivity: *It is a duality of connects and disconnects between two technological devices that involves human and technological agency, is latent yet pervasive, and that offers the potential to connect between or within domains.*

In this definition we can see that connectivity, just like Foucault's conceptualization of power, is very much a relational concept made up of sociomaterial agents. Power can also only exist in relation to actor agency and usually this actor agency is sociomaterial. This means that connectivity is constituted by the entanglement of sociomaterial agency: the people using connectivity technologies, the norms surrounding their use and the affordances of the technologies themselves. And, it is within these relations that power dynamics ensue.

Yet, the key attributes that connect disciplinary power and connectivity most strongly are (1) latent potentiality, (2) unknown pervasiveness and (3) cross-domain nature. Latent potentiality means that new technologies afford 'constant connectivity'; there is always the potential to connect, even though connectivity may not actually be continuous. However, this potential to connect has facilitated the development of new norms of connectivity, especially in the workplace, leading to peripheral work connectivity. People are now expected and are expecting to be available and responsive 24/7, hence across all domains of their lives, as it is technologically possible to be always on.

If individuals choose not to adhere to these new expectations, they are deviating from the norm due to which many discipline themselves and connect as often as possible. Of course they could choose otherwise, highlighting again the "power to" (disconnect) aspect, and there are still people who do so, but the norms are shifting and a new disciplinary reign of constant work connectivity, extending into the periphery of the workday, is gaining ground. Yet, it is here where the boundaries between work and non-work, exclusion and inclusion, private roles and work roles and many other binaries become contested, enabled by connectivity's latent potentiality and cross-domain nature. Connectivity thus provides a *new space* where power relations are rendered visible and become renegotiated.

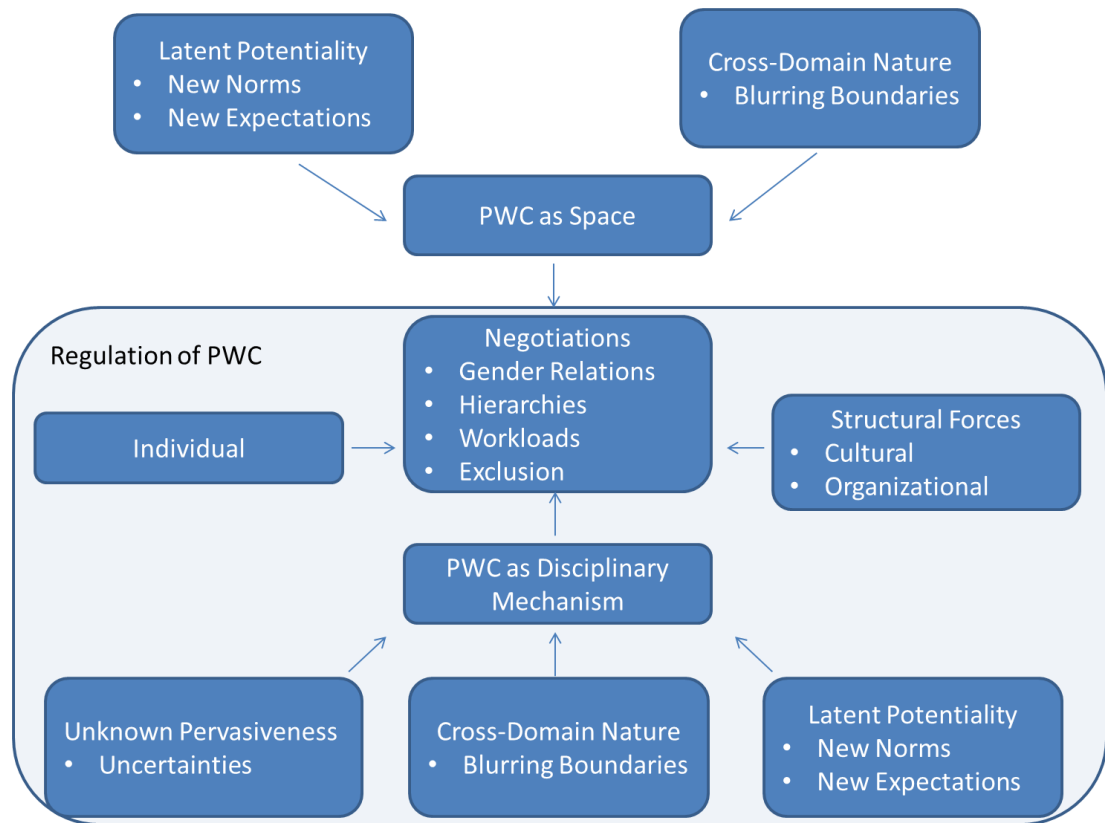
The second attribute, unknown pervasiveness, is very much connected to latent potentiality but has a stronger connection with the surveillance and Panopticon part of disciplinary power. Unknown pervasiveness is a very strong but invisible form of the Panopticon, as the potential for connectivity is so ubiquitous now, that people can never be sure how much others know about them and their "shortcoming" of not being responsive and available 24/7. At the same time people may worry about what they have missed while being disconnected. So, a great level of uncertainty ensues that is twofold: 1. Uncertainty due to others knowing more about us than we think or want, 2. Uncertainty due to the fear of missing important information, hence not being able to fulfill our own expectations.

This uncertainty disciplines due to which people choose to connect very frequently in order to reduce it. Such connectivity may not always be a reaction to a received message and it may not

always lead to a concrete act such as sending an email or instant message. Yet, the outcome of self-discipline is the act of connecting itself – fueled by the technological affordances of latent potentiality and unknown pervasiveness. In this sense connectivity is a new state of self-disciplining consciousness, a mechanism for self-control. People are increasingly conscious of new norms of responsiveness and availability, which lead to high levels of connectivity in order to pass the examination of other people and, most importantly, of oneself. Connectivity has become part of individuals' subjectivity. They are not merely submitting to norms and expectations of others; they do this to get closer to the unattainable end of finishing the project of the self, which is however never finished.

Such norms of connectivity have developed across all domains of life as new ICTs have become widely spread, yet especially in the context of work, *work connectivity*, and even more so *peripheral work connectivity* have become very strong disciplining mechanisms. Operating across the domains of work and private life, self-disciplining connectivity is a constant companion, no matter whether you are at home, out shopping or on holiday. Peripheral work connectivity is thus not only a space where power becomes renegotiated but an *active agent* in these negotiations, through its disciplinary power.

Connectivity thus provides a platform where negotiations take place as well as a mechanism that shapes these negotiations in a certain way (see figure 1 below). Yet, as we will also see in the empirical chapters to come, connectivity is not the only active agent in such negotiations; rather individuals themselves have agency through their regulation of their peripheral work connectivity accompanied by individual strategies. Nonetheless, structural forces including organizational policies, ICT availability and cultural contexts are furthermore implicated in shaping outcomes.



**Figure 1 – Chapter 1**

It is this argument of peripheral work connectivity being both a space for and an agent in power negotiations that will constitute the overall thesis of this doctoral dissertation and which will underpin the empirical research presented in the rest of this thesis.

#### **1.4. Conclusion and Thesis Outline**

So far I have highlighted current trends in the way we work and I have spelled out what role new information and communication technologies play in this. While the study of individual technologies such as email has helped us understand the use of these particular technologies better, I have also emphasized that it is the overarching phenomenon of work connectivity, and more precisely, peripheral work connectivity, that needs to be investigated instead. This is of key importance in order to gain a holistic understanding of how our work environment is currently transforming. I have furthermore discussed the emerging literature on work connectivity. Here I have shown that studies are finding that work connectivity is a complex phenomenon, influenced by multiple individual, organizational, technological and societal variables that all appear to mutually shape each other. Finally, I have related work connectivity to power, showing how the sociomaterial construct of work connectivity provides a new space to contest power relations, while having a stake in such negotiations through its disciplinary functioning.

Yet I have also highlighted that the study of work connectivity is only just developing and we need a more rounded analysis in order to understand it in more depth, in particular in relation to how it reconfigures power dynamics. For such an analysis of work connectivity, it is essential to make sure that both the social and the material aspects of the phenomenon are adequately accounted for, that multiple social technologies facilitating work connectivity are studied together, that different contexts of work connectivity are incorporated and that both quantitative and qualitative data are collected in order to draw a more complete picture.

For this reason this thesis sets out to explore peripheral work connectivity, one dimension of work connectivity, in the context of a large multinational corporation, which I will call TechComp. This organization offers richness in its ICT and communication landscape, allowing the deployment of multiple means of data collection, including large scale surveys, interviews and ethnographic work. In addition, it is made up of a diverse workforce spread across close to 100 countries worldwide and grouped in more than 20 job categories spanning Sales, Engineering, Marketing, HR and many others. This variety affords the much needed diversity of work contexts and makes this company the ideal case study for understanding the peripheral dimension of work connectivity.

The objectives of this thesis are then to firstly identify how people connect and the extent of peripheral work connectivity (PWC) at TechComp; secondly what factors shape peripheral work connectivity in the company; and thirdly and most importantly, lay bare what role peripheral work connectivity plays in the negotiation of power relations at TechComp.

The first two objectives will be addressed by mapping connectivity at the studied organization, using data collected from a large survey with close to 20,000 responses from a random sample of employees of 9 selected Western and non-Western countries (see methodology chapter for more details). For this purpose a linear regression model will be presented, from which a clear profile of the typical most highly connected employee emerges that raises important questions of hierarchy, status and power.

During this exploratory analysis, the important subthemes of gender and global team work surfaced that will be addressed in relation to connectivity in individual chapters in order to address the third objective. These investigations revealed that peripheral work connectivity is in fact more than a driver of changing norms of availability at work. It is also a platform where gender identity and roles become performed and renegotiated (chapter 5), as well as a space where global team dynamics of hierarchy, exclusion and work conditions become contested (chapter 6).

I will conclude this thesis in chapter 7 by weaving together the empirical parts of chapters 4-6 to substantiate the earlier made argument that peripheral work connectivity is both, 1) a space or a platform where power negotiations at work take place as well as 2) an agent in these negotiations.

## 1.5. References

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## **2. Chapter 2 - Methodology**

In the previous chapter I have spelled out what we already know about the phenomenon of work connectivity and I have highlighted the need for a thorough conceptualization of the term as well as an analysis of its extent and implications. In this chapter I will now turn to the methodological considerations that have guided me throughout this thesis and I will outline and justify the approach I have used, starting with the philosophical stance I have chosen, continuing with a discussion of mixed methods case studies as a research design, followed by an overview of the general research process, which entails a reflection on ethics. Finally, I will turn to the different methods used, explaining both processes and analyses.

## **2.1. Philosophical Stance and Lens**

The war of paradigms has been an ongoing dispute in the philosophy of science throughout the 20<sup>th</sup> century, where the often marginalized positions of qualitative often constructivist research sought to rage against the domineering positivist, essentializing and usually quantitative scientific position (Bellotti, 2015; Bryman, 2008). With the rise of mixed methods, a combination of both quantitative and qualitative methods, researchers have increasingly tried to build bridges between these opposing stances, although the war is still lingering (Bryman, 2008).

A philosophical position often underpinning mixed methods research is that of critical realism (Bellotti, 2015), which – from an ontological perspective – also aims at building bridges by presenting a third way of its own (Danermark, 2002). As Danermark states, critical realism is a meta-theory that aims to depart from an “either-or” stance towards a “both-and” stance, in relation to a variety of issues. These include the ontological question of what constitutes truth, epistemological considerations such as whether to use inductive or deductive reasoning, as well as methodological issues of combining mixed methods.

Critical realists support the idea that there is a reality out there but they reject the proposition that this one truth can be neutrally observed. Instead, they view the world as “stratified, differentiated, structured and changing” and that “our knowledge about this reality is always fallible” (Danermark, 2002: 10). For this reason they focus on mechanisms and processes which can lead to events, rather than actual events as traditionally studied in positivist research. According to Danermark a critical realist approach is then particularly well suited to exploratory studies (Danermark; 2002: 204): “We cannot predict occurrences or anticipate situations; reality is too complex for that. But we can provide insight into the mechanisms and tendencies that make things happen in society.” For this reason, I view taking on a critical realist position as particularly useful in order to investigate the exploratory research questions that guide this thesis.



As described in chapter 1 the research objective of this thesis is to advance our understanding of connectivity by conceptually and empirically advancing the concept of work connectivity, and more precisely one aspect of work connectivity, that is, peripheral work connectivity. I aim to investigate the role of power in the context of peripheral work connectivity and more precisely how it shapes power relations in the workplace. In line with a critical realist ontology, I focus on the ‘how’, hence the mechanisms and processes, which lead to certain power configurations, which in return represent a social reality open to change. In this regard, a critical realist position is well aligned with the earlier outlined conceptualization of disciplinary power as relational (Foucault, 1977).

Furthermore, as outlined in chapter 1, I draw on Sociomateriality as a research lens, which acknowledges the entanglement of the material and the social, thus avoiding the problem of determinism. Sociomateriality also focuses on the ‘how’, on mechanisms and processes. Only such a focus allows for sociomaterial configurations to become adequately accounted for and untangled.

## **2.2. Research Design**

### **2.2.1. Case Study Approach**

In order to address the research questions that underpin this project, I considered a case study approach as most appropriate, as the phenomenon investigated cannot be considered in isolation of its context (May, 2011) and the boundaries between the phenomenon and its context are not demarcated clearly (Yin, 2014). Additionally, as Dubé & Paré (2003: 598) pointed out, case study research allows uncovering “the complex and ubiquitous interactions among organizations, technologies, and people”. From a philosophical perspective, case studies are furthermore well suited to bridge the gap between competing scientific paradigms such as positivism and constructivism and scientific reasoning such as deductive and inductive (May, 2011), as they allow for the deployment of multiple means of data collection, including both quantitative and qualitative data. They are hence well suited to the philosophical underpinning of this research project.

Bryman (1989: 144) further highlighted that case study research is particularly well suited to investigating phenomena in organizations that are “not well documented and which are not amenable to investigation through fleeting contact with organizations”. ICT and power relations are fundamental elements of the phenomenon of work connectivity in organizational settings and to date they have not been sufficiently investigated together. In addition, the dynamic of how power becomes reconfigured through sociomaterial agency has to be studied in the context where such processes take place.

Furthermore, according to Yin (2014) case study research strategies are especially useful when there are multiple variables of interest. As work connectivity is a complex phenomenon, encompassing many aspects such as individual work practices, the availability of technology, organizational institutions, national culture, and regulatory frameworks, a case study research design seemed fit to capture the phenomenon and at least some of its context, all of which could not be grasped by what Bryman called “fleeting contact”. Moreover, there is a need for more case study research when addressing questions around the integration of ICT at work (Eppler & Mengis, 2004; Barley et al., 2011).

### **2.2.2. Case Study Selection**

Many cookbooks on best practices in case study research exist and they explain well how one should go about selecting cases for one’s research (e.g. Yin, 2014). And while selecting an interesting case in which the phenomenon of interest can be studied is of key importance, it is also fundamental to ensure that sufficient access can be gained to people, documents, and observations (Yin, 2014). For many researchers, especially early career researchers, the problem of access is often the biggest hurdle they have to overcome. Pan and Tan (2011), therefore recommend following a pragmatic approach when selecting the case organization to study the chosen phenomenon.

I followed their advice and negotiated access to a large multinational organization that I had collaborated with for my master thesis. Having had previous contact with the organization and having managed to establish a trusting relationship with various employees, allowed me to identify the company representatives most likely to show interest in the phenomenon I wanted to study. After the initial contact had been established and mutual interests had been identified, the process of negotiating large scale access to the entire company started. These negotiations were greatly supported by my main organizational contact, a senior manager from the headquarters’ Human Resources department, who shared my curiosity for understanding the phenomenon of work connectivity and considered it very relevant for the company as a whole.

This process took almost a year to complete, with the result that I was granted large scale access to the entire company via an external researcher contract. This access involved being equipped with a company laptop that allowed me to access the organization’s intranet, to obtain a company email address, to gain access to the company’s internal communication platforms as well as permanent access to the headquarters’ offices and any other office worldwide, if a visit was required. Furthermore, although technically being an external

researcher, in practice in many situations I was treated as an employee by the Human Resource department and I was invited to departmental events and celebrations.

In addition to the unique access I was given, the company represented an ideal platform to study the phenomenon of connectivity. As we will see in much greater detail in chapter 3, the organization is a large multinational technology company with hundreds of thousands of employees worldwide. It is currently experiencing major transformations in its organizational structure due to various changes in the management board and a new company strategy. Having long adhered to traditional ways of communication, the new management team is looking to bring their communication practices to the digital era in order to retain competitiveness and increase openness and transparency.

With this aim came a change in company policy regarding social media platforms, i.e. TechComp employees are now allowed to access e.g. Facebook at work, when such websites had previously been blocked and private use rights of company laptops can be granted. Additionally, the company has launched an internal, global social media platform that aims at connecting employees worldwide.

These examples show that this corporation is currently experiencing tremendous changes and these changes pose many questions to management in their quest to develop global communication and work policies. In addition, and answering to a call for more comparative research on the changing nature of work and the use of technology at work (Barley & Kunda, 2001), the multinational and multi-sector nature of the organization's structure allows mapping connectivity across multiple countries, levels of employment and occupational groups. It is for these reasons that this company offers an ideal platform to study the use and effects of work connectivity.

Finally, one point of critique for case study research has often been the lack of representativeness of a single case and multiple case studies have been assessed more favorably due to their comparative approach, which becomes possible when studying more than one organization (Yin, 2014; Bryman, 1989). Yet, while these concerns are valid, there is sufficient reason to study one organization in-depth, as a lot can be learned about a complex phenomenon by immersing oneself in the setting to an extent not possible when multiple organizations are studied (Bryman, 1989).

Furthermore, as Yin (2014) pointed out, single cases can be very useful when they reflect a typical case. The studied company is a large multinational organization with a long tradition of conducting business globally. Alike many other traditional multinational corporations, the

company is facing pressure to modernize in order to stay competitive in times where new global forces such as Google or Facebook are tapping into an ever wider spectrum of business areas by the day.

In this context, the case organization most likely reflects the struggles of many other traditional companies. While each company has a differing company culture, there are many similarities between such large corporations due to which TechComp can be seen as a good representative of its kind. Furthermore, the large scale access, I have been able to negotiate, enables me to study the company as a whole and not just a small subgroup of it.

### **2.2.3. Mixed Methods**

Due to the nature of case study research trying to draw an as complete picture as possible of the studied organization and its context, data will be collected using mixed methods. This is a fundamental aspect of case study research, as it allows multiple sources of evidence to converge into a coherent argument (Yin, 2014). This reliance on multiple sources of data entails the gathering of both quantitative and qualitative data, which further strengthens the rigor of the research due to data triangulation (Runeson & Höst, 2009; Miles & Huberman, 1994; Edmondson & McManus, 2007). At the same time it ensures that diverse perspectives are taken into account by going beyond statistical analyses of people's use and experience of ICT and integrating their interpretations and narratives into the analysis.

Additionally, as Miles and Huberman (1994: 41) have pointed out, mixed methods provide the researcher with much richer detail of the studied case than a single method approach could. They can "initiate new lines of thinking" and can help "uncover paradoxes". And, as Law and Urry (2004) as well as Bryman (1989) have pointed out, there is no single reality out there that can be captured by one method and therefore multiple methods are required to investigate these multiple realities.

In this research project I therefore made use of the great access available to me by gathering data from the review of internal and public company documents, by making use of one large web-based questionnaire, by utilizing the provided access to company communication channels such as the internal social media platform to carry out ethnographic work online, and by conducting in-depth semi-structured interviews, complemented by many informal conversations and regular observations in multiple company sites.

### **2.2.4. General Research Process**

Data were collected between March 2014 and August 2015 and this collection was concentrated on three main headquarter sites in Europe. During this time I regularly visited

the field. These visits averaged to once a week for the first half of the research period, dropping down to once every months for the second half, while being complemented by weekly attendances of various online meetings. Each time I was physically at one of the company sites, I spent approximately 4-5 hours in the field. During these visits I attended meetings, conducted official interviews, developed research tools, reviewed company documentation, prepared progress reports for the company and informally chatted with colleagues.

Each field day was summarized and recorded in an excel database, labeled with date, place and key observations. In addition, as recommended by Miles and Huberman (1994), I assigned initial codes to each field summary as to simplify the review and data organization process later on, please see an example excerpt below (figure 2). Furthermore, I kept a memo document in which I recorded ideas or thoughts I had during the fieldwork period.

The company was going through a major restructuring process at the end of my first year researching the company, due to which my main internal contact changed with the consequence that I was now reporting to another manager and becoming a member of a new team. Yet due to personal interest, my initial contact stayed involved to a great extent so that nothing changed with regard to my research objectives or my work routine within the organization. However, my new direct contact had little time available to get involved to the same extent as my previous contact had done, limiting the reach and weakening the financial basis of my project compared to the previous situation. Nonetheless, I had already been able to establish a broad network of key informants, allowing me to continue my research fairly unaffected from the change of team.

| Collection Date | Site     | People involved | Type                  | Summary  | Comments  | Private/ work paradox & flexibility | Info overload | Corporate Culture/ leadership culture |
|-----------------|----------|-----------------|-----------------------|--|---|-------------------------------------|---------------|---------------------------------------|
| 24.07.2014      | XXXXXXXX | XXXXXXXX        | Informal Conversation | <p>We talked about gender and the leadership culture at TechComp and the problem that TechComp does not take care of employees who are sent abroad. Very old fashioned idea that the partner (housewife) will automatically follow the delegate (traditionally male). When this happened to her, she was in a similar position to that of her husband and was completely left alone by TechComp. She had to quit her existing job at TechComp and was reemployed in China only after she had taken action herself. TechComp did not help her find a job in China. She was then employed under local conditions in China, obviously a lot worse than European conditions. Also there was no guarantee that she would find a job when coming back. It had all worked out in the end, but it was a very risky thing to do and she felt really disappointed that a large company like TechComp wasn't willing to help better. There needs to be a rethinking. Today couples usually both work and one doesn't automatically follow the other abroad because they are at home. Apparently there are attempts to improve this situation but it is not enough what is done at the moment. It leaves a really negative aftertaste after having gone through sth like this. We also talked about the ESM and she told me that is a member but rarely goes online and she has her settings on so that she receives notifications of posts in groups but some posts are shared in many groups leading to the same message being sent various times, causing email overload. However, if she hadn't turned these notifications on she would never go online as she would simply forget about it. It is interesting that she uses facebook privately and checks it every day (even though she describes herself as never posting anything herself) but the ESM is not on her mind enough. We also talked about her job as coach and trainer for executives within TechComp as part of the TCLE (TechComp leadership excellence) group and she mentioned the "Kaminabende" again (an evening where senior execs meet with young talent etc.) and that the execs are often very approachable and are happy when they can have an open conversation with other people, as often top execs are very lonely. She also told me that she is not surprised that I have had so many issues with getting things approved within TechComp. Running against a wall is common.</p>   | Very valuable insights on the TechComp leadership culture, gender issues and SSN and email overload problems. |                                     | x             | x                                     |
| 02.10.2014      | XXXXXXXX | XXXXXXXX        | Informal Conversation | <p>Informant A told me about his new role and that they didn't know anything until last minute and don't even know anything now. He doesn't know where he will sit and nobody had told him before that his team was cut out and that he was no longer a team lead. This made him feel very insignificant and made him wonder whether what he does at TechComp has made any difference. He feels his career is cut off now. And he realized that his network doesn't matter at all as the new process was organized without him having any impact on it. Networking is important, but networking alone is not everything. It is all about networking with the right people. He feels that he has not networked with the right people.</p> <p>In general he feels that the communication of the new structures was very poor as it was pushed through too quickly and only few people knew early what would happen to them, but this unequal treatment of those knowing and those not knowing was the really frustrating bit.</p> <p>We then discussed in general the expectation employees have to deal with nowadays. For instance the degree of mobility is really high for employees now and a colleague was scolded by her mentor that she was considering buying a house now at such an early stage in her career. People can't settle down anymore and while such mobility has always been expected from employees in high positions, it is now expected from almost everybody and founding a family becomes impossible. This makes it all very hard for young people, especially women.</p> <p>We then talked a little bit about the HQ and that there is the rumor that one female board member and the CEO have an affair, because she was greatly promoted by the CEO which led to this impression. We then had a discussion about gender bias related to this and that nobody would have assumed anything like that if she had been a man. He agreed but still maintained that she has many responsibilities now even though her structure is very weak at the moment and everybody is supposed to make her look good and that's the prime objective. Everything that's done has to make her seem very good and successful.</p> <p>Finally we talked about the situation at TechComp and the problem that nobody gets employed anymore and that Talent Acquisition is pointless as there is no jobs anyways. This means that many people are available in a very good talent pool of students and so on (from programs) but only few can actually get a job at TechComp eventually. This makes their work at Talent Acquisition very hard.</p> | informal meeting, outside in the sun  |                                     |               | x                                     |

Figure 2 – Chapter 2

#### **2.2.4.1. Research Ethics**

As Miles and Huberman (1994: 288) pointed out: “Any [...] researcher who is not asleep ponders moral and ethical questions.” Ethical considerations also played an important role throughout this research project for two reasons: 1. As part of researching an organization, human subjects played an important role in these investigations; 2. this research project was mainly funded by the studied organization.

The study of human subjects is strictly regulated by the university and therefore rigorous processes are in place. For this reason, after having reviewed the university’s ethics policy and prior to starting fieldwork, at the beginning of April 2014 I completed both the university’s Research Ethics Checklist and the more detailed Research Ethics Review Questionnaire. This documentation was reviewed by my supervisor and the PhD director of the Sociology Department at the London School of Economics. After this review my proposed research project was considered unproblematic and therefore did not need to be submitted to the university’s Research Ethics Committee.

During fieldwork I used various methods to collect data and prior to data collection I sought informed consent from informants where possible (e.g. for questionnaires and all interviews). Participation in the surveys and in the interviews was completely voluntary and I was the only one with access to the raw, not yet anonymized data at all times.

In addition, I followed Wax’s (1982) recommendation of ensuring reciprocity throughout by offering informants formal as well as informal insights into my research outcomes and by helping out with my own knowledge and skills where possible, for instance online on the company social media platform by providing answers to questions people posted. A more detailed discussion of ethical considerations for specific ethnographic methods I used such as online ethnography can be found in the respective sections in the appendix for chapter 2. In addition, all data collected was stored in an encrypted hard drive, which could only be accessed by me.

As discussed earlier, company management had shown great interest in the outcome of the project due to which I had been able to negotiate the extent of access. However, with this privilege comes the challenge of making sure that the research is driven by the underlying research aims and not merely organizational objectives. This is particularly important considering the financial support the organization provided both for the research process itself and my time. Here, I identified four potential issues: 1. Company management may urge me to supply them with sensitive data from employees, 2. the company may deny me the right to use the data for publication, 3. the company may try to force me in a specific research

direction not aligning with my academic objectives, 4. the company may request a modified interpretation of the data to suit company objectives.

To address the first concern an agreement was signed by both parties stating that the data will be treated confidentially at all times (i.e. this allows me to reject management requests to supply e.g. interviewee names to management). Additionally, and to address the second concern, it was made clear in the agreement that I have unlimited use rights for academic publications beyond the project's completion, even though the company owns the anonymized data, collected during this research project. To address the third and fourth concern, the agreement furthermore stated that I was not employed by the company but an independent researcher merely supported financially during this project due to shared interests. Finally, I had agreed with my organizational contact that I would supply the company with management reports throughout this research project in order to account for their specific interests, thus avoiding the trap of letting them drive my research objectives and interpretations.

Despite such precautions, the situation arose where organizational stakeholders wanted to modify the wording of research outcomes. While such rewording requests only affected the company internal reports of my research and not my thesis, in these situations I had limited influence over what was communicated to employees. Nonetheless I tried to make sure that the key message was still included in the final communication outputs and at least senior management received my original interpretations.

In summary, the ethics processes of both the organization and the university ensured that confidentiality was upheld for both the employees and the organization as a whole at all times and the signed agreement ensured that both the company's interests and mine were protected.

#### **2.2.4.2. Role of the Researcher**

As mentioned earlier researching human subjects is always a reciprocal relationship, as it involves some form of social interaction (Wade, 1984). This social interaction, however, requires that the researcher takes on multiple roles such as the actual role of a researcher, but also roles as a listener, a collaborator or even a counselor. These roles constantly change throughout a research project and can then sometimes conflict (Wade, 1984; Birch & Miller, 2002; Ryen, 2004), leaving the researcher struggling with the decision what role to take.

In the context of my research project, and my very specific role as financially supported researcher within TechComp, I was also confronted with multiple roles, loyalties and demands.



On the one hand, I was the external researcher, who studied the case organization and its employees, but I was also the colleague who got invited to summer parties and training events. Then I was the direct team member who closely collaborated with some people on certain projects and finally I was the PhD student with academic objectives, obligations and commitments. Especially during times when I actively collaborated with internal employees on specific projects, I was torn between my academic work and helping my dear “colleagues” out by actively pushing our project with more of my own time than would have been required by my external contract. However, as participant observer I justified these efforts with the fact that every day in the field resulted in more data for my academic objectives, with my concern for reciprocity and with my wish of wanting to give back.

Yet, this agenda of constant data collection also confronted me with ethical considerations around the question to what extent my colleagues were aware that I was collecting data, while collaborating with them. To ensure transparency I reminded all of the people I worked with and spoke to during fieldwork that I was a researcher collecting data in their company. This was also done officially by sending out a short bio to all employees from the HR department, who I directly worked with.

Nonetheless, the longer a social interaction lasted, the more blurred the lines became between me being an external researcher and being slowly viewed as internal colleague. This tension reflects a long existing methodological and epistemological conflict between being a distant observer and an engaged participant; traditionally, it was expected of researchers to choose one of these two positions (Dreyer, 1998).

Over the last decades, however, social science researchers have learned to acknowledge that these two extreme positions are in fact complimentary. As Dreyer (1998) pointed out further, we need to avoid alienation and distancing from the subjects studied, while remaining reflective of our own role in the research process. In particular it is important to always be aware of the assumptions and reference frames that I, as a researcher and “member of a lifeworld” (Dreyer, 1998: 16), bring to the research process as to avoid that “the research account is [...] a disembodied 'view from nowhere'” (Gillies & Alldred, 2002: 41). In addition, and influenced by feminist methodologies that stress that knowledge is situated and hence multiple (Haraway, 1988), I needed to constantly remind myself of the different social groups I belonged too (e.g. gender, class, nationality, etc.), which informed how I asked questions and interpreted results (Plankey-Videla, 2012).

For this reason I forced myself to reflect on my initial motivation to conduct this research that was mainly driven by my own often negative experiences of working in the private sector and

being confronted with 'constant connectivity' on a daily basis. I consciously tried to look beyond my intrinsic urge to help people better cope with the negative consequences of 'constant connectivity'. By opening up to different experiences of connectivity at work, I learned that my own mainly negative experiences played out very differently for many other people. Yet, I constantly needed to force myself not to push people into a certain direction when discussing connectivity with them by allowing them to speak of their experiences rather than telling them what I expected.

It was often the case, however, that employees asked me about my opinion and what the latest research had to say about the discussed issues. In such situations I was again confronted with the problem of being a conversation partner and a researcher at the same time. However, following Wade (1984), who considers it important to relax concerns around forcing expertise on research participants, in order to be responsive and to ensure reciprocity, in such circumstances I did share my knowledge of the literature and/or my opinion. Usually, this openness resulted in new and interesting conversations, where people either agreed with the literature or didn't and often offered alternative interpretations.

This process of engagement and interaction further ensured that I offered employees of the studied organization the opportunity to participate in the research process to the extent they desired. In addition, following Birch and Miller (2002: 94) I tried to incorporate such "processes of participation", as "an active research relationship [...] involves the exchange of ideas and understanding, and is a shared enterprise". I did this by constantly feeding back any new findings to informants within the organization, as to ensure bespoke reciprocity and I also offered them to join me in interpreting these findings.

So for instance, I discussed the results of my studies with my direct team members as well as with other colleagues who showed interest in the project. Yet, it is equally important to acknowledge that the degree of desired participation may vary from person to person, can change over the course of a research project and needs to be constantly renegotiated (Birch & Miller, 2002; Miller & Bell, 2002). So, nobody was coerced into joining in on the debate around the outcomes of my research but was merely invited to participate.

Furthermore and in relation to such open discussion of the findings, Gillies and Alldred (2002) stress that it is important to recognize that research projects are not neutral and always leave some kind of impact on the people or the organization studied. For this reason, I always sought approval from my key informant within the organization before making any results public internally, as to avoid any negative implications for employees involved in the research. Having said this, I was aware that in the moment that not all findings were made public, I excluded a

large majority of stakeholders (i.e. the majority of employees in the company, except for senior managers who I reported to) from learning about the research they had contributed to. This, however, was necessary to avoid serious problems with company regulations and the workers council.

In addition, my research within the organization had political implications that went beyond the research process itself. These were rendered visible for example by a social media improvement project that was rolled out shortly after I had presented the results of a social media questionnaire I had conducted to the responsible IT department. Furthermore, my study on gender was utilized by the diversity team of one country, where I had interviewed women, as a base for discussion what initiatives should be looked into next and my overall research results were planned to be turned into a short video that was due to be presented to the company's HR senior leadership team at an annual internal HR leadership conference.

## **2.3. Methods**

### **2.3.1. Company Documentation**

In case study research, documentary data should play an important role primarily to "corroborate and augment evidence from other sources" (Yin, 2014: 107). This is particularly relevant for case studies where an organization is studied. It helps the researcher to get familiar with the organization under investigation and can be very useful in preparing for field visits and interviews.

Due to the type of access I had negotiated with the company, I was able to access the company internal intranet as well as other documentation platforms such as Microsoft Sharepoint that stored thousands of documents and internal news articles typically only available to employees. At the beginning of the fieldwork, I reviewed general documents that are usually required for new employees to read in order to better understand the company goals and objectives, the culture, and important behavioral guidelines such as, for instance, general business conduct guidelines and data protection and information security policies. In addition, I systematically reviewed reports and presentations about specific topics of interest (e.g. social media guidelines, company structure, and diversity initiatives), utilizing the company internal search engine.

Furthermore, on a regular basis I read company news articles that informed about changes to the management structure, told stories about different company projects or international sites, or interviewed employees or managers about current topics of interest. These articles, though mostly portraying the organization in a very positive light, were very useful to get a

feeling for the company culture, how they saw themselves and how they wanted to be seen by their employees. Finally, I was able to watch a variety of company internal videos (e.g. image or training videos, management communications, etc.), while being connected to the company network, further helping me to better understand the organization and how it viewed itself.

Every time I read an article or watched a video, I stored the documents in an encrypted drive for later analysis. Additionally, I always summarized the content and recorded it in an excel database, giving it a title, publication date and publisher, while indicating what topic it covered. As the research progressed more themes emerged and I continued to add topic labels to the database. This database was essential for me to later navigate through the large amount of data collected. I then analyzed the documents through a review of relevant documents topic by topic (i.e. filtered by using the excel database). Following guidelines on qualitative thematic analysis (Braun & Clarke, 2006), the review of these documents was an iterative cycle in which I replaced the initially assigned labels with more fitting labels as the analysis continued.

### **2.3.2. Online Ethnographic Work**

Another important method to collect data for this research project was online participant observation of social interaction on the company internal social media platform. Here I collected data using both elements of simple observation, where I only “lurked” on the platform by reading without participating and participant observation, where I made myself visible to other users through comments, likes and my own posts.

With the advent of the internet and social media in particular, it is more and more common to also conduct research online via online observation on social media platforms such as forums or social networking sites (SNS). This kind of research has a unique advantage over traditional field observations, as it allows to directly witness social interactions in their natural environment without being intrusive (Gleibs, 2014), effectively becoming a “covered participatory ethnography” (James & Busher, 2009). While in traditional observations in the field, the researcher can be perceived as a disturbance, possibly distorting the flow of usual behavior, in an online environment, where the observation of one’s activity is not directly visible such distortion does generally not occur.

In addition, the virtual environment reveals insights from people that would usually not make themselves heard in an offline context due to them being less outspoken then. And finally while the environment of social interaction in communities such as an organization is of crucial importance to understanding it, increasingly, so argue James and Busher (2009), these communities exist across spatial and temporal boundaries in an offline and an online environment.

#### **2.3.2.1. Role of Researcher and Process**

While initially mainly passively observing the interaction on the platform, I quickly started to integrate elements of participant observation by actively making myself visible to other users through commenting, liking and posting content, joining in on the co-production of knowledge online. In the first 9 months of data collection, I would typically spend one to two hours on an average day on the platform reading posts etc. and I would normally aim to make at least one contribution a week myself.

After several months, this led to more and more employees accepting me as a knowledgeable contributor, starting to follow me on the platform, inviting me to groups and challenges (i.e. a “challenge” is a feature of the platform where users can invite other users to help solve a proposed problem) and mentioning me in posts. This new role led me to discover more and more interesting threads on the platform and allowed me to gain deep insights on the company culture, what topics currently bothered or moved employees, and it revealed many interesting cultural differences between the different nationalities using this social media platform.

Every time I found an interesting conversation or post online I bookmarked the thread and would monitor it for a few days or weeks, depending on its popularity, until the discussion had ceased. I would then summarize the content (retaining interesting quotations) from the thread and record it in an excel database, labeling it with topic, date, number of comments and likes. In this database I recorded no names to ensure anonymity of the employees. Similar to the process described for document analysis, I used an iterative process to analyze the data by repeatedly going through it, replacing or refining assigned labels as I went along. Here, I also used NVivo for analysis.

In addition, I subscribed to the available online reporting service for this social media platform that provided me with weekly digest emails on the number of people that had joined the community, number of messages that had been posted and number of groups that had been created. These numbers I also recorded in excel, allowing me to monitor the adoption of and activity on this social media platform.

#### **2.3.3. Offline Ethnographic Work**

In the space where individuals and organizations exist on and offline, various methods capturing both worlds need to be employed. For this reason, on top of online observations, I carried out offline ethnographic work through visits to the field, forming another crucial part of this case study research project.

According to Yin (2014) collecting data via observation is one of the key methods in a case study, as the data collection should take place in the case's natural setting, where opportunities for observation can arise, which can complement other methods with additional circumstantial evidence. Here one needs to distinguish between direct observation and participant observation. Direct observations can be made formally through observation of e.g. meetings or they can be made informally during field visits, where other evidence is collected, e.g. interview data. Participant observation takes place when the researcher forms part of the environment as a participant in the daily activities. Due to the nature of the access I had negotiated, I was able to collect data through both direct observations and participant observation.

#### **2.3.3.1. Direct Observation**

During the fieldwork period I had the opportunity to visit multiple sites of the organization, allowing me to observe the different building and office conditions within the organization. Offices varied greatly depending on the main purpose of the site, e.g. sites where the actual manufacturing took place were very different from those where only office work was conducted. More specifically, I paid attention to the layout of the offices, the availability of free coffee/tea and water and/or fruit, recreational facilities and their use, what technologies were most commonly used by employees at these sites (e.g. smartphones, laptops, desktop PCs etc.) and the security and monitoring facilities e.g. whether employees had to clock in and how openly accessible buildings were.

Yin (2014) recommends supporting observations through photographs. However, due to TechComp's security regulations photographs cannot be taken within the company premises. For this reason I recorded all observations in an excel database at the end of each day in the field in order to make sure that nothing I considered important would get lost. Furthermore, the disturbance caused by the researcher when observing in the field, has often been named as an additional problem of direct observation (Herrera, 1999). This problem was mitigated by the fact that I was introduced to the company as doctoral researcher who worked on a certain project that was also relevant for the company. This justified my presence in the company and employees quickly accepted me as one of their colleagues.

#### **2.3.3.2. Offline Participant Observation**

In addition, my role as researcher within TechComp, with a large degree of internal access, allowed me to conduct research as full participant observer by collaborating with various different people for multiple projects that were related to my research. For this reason, I was able to attend many meetings, closely cooperated with employees doing work for the same

projects and got invited to internal events such as departmental fieldtrips, workshops or trainings.

While participant observation allows the researcher to gain rich insights into the case studied (Becker & Geer, 1957), there are also some issues that come with this method. So for instance, the researcher's role as participant may require too much time so that not enough time is left for taking notes (Yin, 2014). This was a problem I was challenged with on multiple occasions. I tried to address this issue by making quick memos, setting reminders in my outlook calendar and by using commuting times to and from the company sites for notes taking. In addition, collaboration with colleagues often took place using digital media with memory capacity such as email or instant messaging through which important information was automatically stored for my personal record.

Another issue of this method that was identified by Yin (2014) is that participant observers often become supporters of the groups they study, frequently referred to as 'going native' (Bryman, 2012; Delmont, 2004; Goffman, 2014). This may impact on their ability to interpret the data. While I was aware of the potential bias introduced to my analysis and interpretation due to my role as participant observer, my work routine that combined weekly field visits with work from home for the rest of the week allowed me to stay distant to TechComp, although enjoying the benefits of feeling like a member of the company when on site.

#### **2.3.4. Survey**

In addition, to above textual and ethnographic methods, I also conducted one major quantitative survey in order to investigate the existing levels of work connectivity at TechComp and their drivers. Surveys are particularly well suited to such analysis as they allow for collection of data from large samples. In addition, they permit a generalizable discovery of attitudes and beliefs as well as general characteristics of participants (May, 2011). This can then be used to link such characteristics to attitudes allowing for classifications (May, 2011). Furthermore, it is one of the most frequently used and well-established research methods in the social sciences, having allowed generations of scholars to develop well established and rigorous processes (Rossi et al., 2013; Bryman, 2012).

The survey mode was a web-based company internal tool that employees were familiar with due to a regular large scale company satisfaction survey that was carried out using this tool and many other smaller questionnaires that were often sent out to employees. Additionally, this tool had undergone various data protection and approval processes by the global workers council ensuring that anonymity of employees was guaranteed and that nobody could be tracked back via their answers. Due to some sensitive questions being asked, this was of key

importance to ensure that employees trusted the tool by which the questionnaire was conducted and did not have to fear to be negatively affected in their job because of answers they had given in the questionnaire. Additionally, with the survey mode being an anonymous web-based self-administered questionnaire, sensitive questions were more likely to be answered truthfully (Joinson et al., 2008).

The questionnaire was carried out in order to map connectivity in the studied company. The aim was to identify the existing levels of work connectivity (i.e. the extent of it) within the organization and to relate these levels to demographic aspects, work related factors such as work type, norms of responsiveness and level of media literacy within the company, as well as to psychosocial constructs such as work autonomy, work stress and work identification. The sample frame for the questionnaire consisted of all employees with email addresses from 9 countries (UK, Denmark, Russia, USA, Brazil, China, India, Saudi Arabia, and United Arab Emirates). Contact details for employees from these 9 countries were obtained from the corporate directory service and a random sample of 57,000 employees out of 150,000 possible participants was drawn (for details see table 1).

|              | Proportion of invited participants<br>in final sample | Proportion of invited<br>employees per country |
|--------------|---|--|
| UK           | 12.4%   | 40.7%  |
| USA          | 40.2%   | 40.1%  |
| Denmark      | 5.8%  | 40.3%  |
| China        | 19.2%   | 41.6%  |
| India        | 13.1%   | 41.0%  |
| Brazil       | 4.1%  | 40.0%  |
| Russia       | 2.5%  | 40.7%  |
| Saudi Arabia | 1.3%  | 40.7%  |
| UAE          | 1.5%  | 40.9%  |

**Table 1 – Chapter 2**

The questionnaire was conducted together with the Human Resources department and an invitation email was sent out to the randomly selected employees by the global head of Human Resources Employer Branding in the middle of October 2014. The questionnaire remained open for 4 weeks and a reminder was sent out one week after the questionnaire had started. In addition, the country specific news centers published short reminders on the local intranet pages. These efforts resulted in a final number of 19,564 responses, equaling a response rate of 34% (please see response rates by country below).



| Country      | Response Rate |
|--------------|---------------|
| Brazil       | 51.4%         |
| Denmark      | 40.0%         |
| China        | 38.4%         |
| UAE          | 36.0%         |
| UK           | 35.3%         |
| USA          | 33.1%         |
| India        | 32.0%         |
| Russia       | 31.6%         |
| Saudi Arabia | 27.6%         |

**Table 2 – Chapter 2**

According to Baruch and Holtom (2008), who identified an average of 35.7% with a standard deviation of 18.8, this response rate is typical for organizational research. Additionally, participants had the opportunity to contact me with their concerns or with feedback during the period for which the questionnaire remained open and I always responded within one day. I received a total of 198 emails, which mainly enquired about the i-Pad, which could be won upon completion of the survey, reported problems with completing the questionnaire or provided me with positive feedback regarding the topic of the survey.

After discussing the expected English language skills with representatives of the Human Resources department, the questionnaire was made available in four languages (English, Russian, Portuguese, and Chinese). The remaining non-native English speaking countries for which no translation was made available (India, Saudi Arabia, United Arab Emirates, and Denmark) were asked to take the questionnaire in English, due to the high level of English language skills that was common in these countries. The questionnaire was translated by a company internal professional translation service.

In sum, the survey responses seemed to reflect very well official company statistics of employee demographics at TechComp. 73% of participants were men, 32% belonged to the Baby Boomer generation, 26% to Generation X and the rest to Generation Y (42%). 74% of participants had no managerial responsibility, 22% were in middle management roles and 3.5% were senior managers. Engineers (20%), Sales (10%), IT (8%) and employees from manufacturing departments (7%) were the biggest employee groups who had participated, reflecting the core business of the company. Finally, 90% of participants were permanent and 10% were temps.

#### **2.3.4.1. Instrument & Analysis**

The instrument for the questionnaire consisted of 8 sections. The first section was made up of 9 simple questions asking about the demographic background of the participants such as age, education level, marital status, level of employment, tenure at TechComp, contract nature etc. The next section aimed at mapping the extent and form of connectivity at the studied company. In 9 questions participants were first asked to describe how they connected to work (e.g. what hardware or software they used and how frequently they used each, whether they had access to a smartphone for work or not, etc.). The aim of this set of questions was to understand how people connected to work, going beyond the analysis of a single technology as a proxy for connectivity. Next, in 12 questions respondents were asked about the extent of their connectivity during and after official work hours. Again, in an attempt to go beyond the analysis of only a single technology, connectivity was equated with connecting through any work related device (see questionnaire in appendix for chapter 2). Here 6 items from Kolb and Collin's (2012) connectivity scale were included that measured hypo and hyper connectivity (3 items for each).

The next section measured work autonomy, following the idea of Breugh (1999, 1985), who differentiated between different dimensions of work autonomy (i.e. task discretion, temporal, and work criteria autonomy). In order to measure task discretion 3 items were adopted from the British Skills and Employment Survey 2012 (GFK, 2013; Felstead et al., 2013). An additional item was added measuring freedom over how to communicate at work. To measure work criteria autonomy (i.e. influence on criteria by which one is evaluated) an additional item was adopted from the British Skills and Employment Survey. To measure autonomy's temporal dimension one item was adopted from the 2010 round of the European Social Survey (ESS, 2010) that measured autonomy over when to work and two items were added that measured the degree of influence over when to connect to work after regular hours and when to turn off mobile company devices. Finally, one additional dimension was included that so far has been neglected by existing instruments on work autonomy: spatial autonomy. Here participants were asked how much influence they have on deciding where to work (e.g. from home, main office, or in a third space). All items were measured on a 5-point Likert scale where 1 equaled 'none at all' and 5 equaled 'a great deal'.

The next section focused on norms of responsiveness and consisted of 4 questions asking about managerial, collegial and family expectations of responsiveness while at work, before and after the workday (e.g. 'How often do you feel you need to respond quickly (within 1 hour) to work related digital messages during the workday?' measured on a 5-point Likert scale where 1 equaled 'never' and 5 equaled 'always') and participants' responsiveness expectations

of others in return (e.g. 'In general, what do you consider good practice when replying to digital messages from colleagues', measured on a 7-point Likert scale where 1 equaled 'not replying' and 7 equaled 'replying as soon as message arrives').

Following Barley et al. (2011), in the next section work overload and coping were measured in 9 items (5 for burnout and 4 for coping) as indicators of work stress using a 5-point Likert Scale, where 1 equaled 'never' and 5 equaled 'always'. Overload is very commonly used to assess one's perceived stress level and coping is often used in order to measure one's ability to handle stress (Barley et al., 2011). The items measuring overload were adopted from Maslach and Jackson's (1981) widely used and well validated burnout inventory. Barley et al.'s (2011) adaptation of a previously developed coping scale was used to measure respondent's ability to handle stress.

In the next section the perceived level of media literacy of colleagues, managers and oneself was measured by asking participants to rate on a 5-point Likert scale (1 equaled 'not well at all', 5 'equaled extremely well') how well the respective person/group chose the appropriate communication channel for a particular situation when communicating at work.

Finally, the last section measured organizational, occupational and team identification adopting 8 items from 3 respective scales developed by van Dick et al. (2004), using a 7-point Likert scale, where 1 equaled 'Strongly Disagree' and 7 equaled 'Strongly Agree'.

To conclude the questionnaire, respondents were invited to make any additional comments they wanted to include.

The questionnaire was piloted in English using one focus group with three participants (non-native English speakers). In addition, after an initial revision based on the feedback gained from the focus group, 6 individual video interviews (2 native English speakers and 4 non-native speakers) were conducted, in order to test the instrument for comprehension and clarity amongst native English speakers and non-natives.

While the questionnaire presented in the interviews was a revised version from the version presented to focus group participants, both focus group and interviews followed the same structure. The focus group and interviews were divided up into 3 sections. In the first section participants were asked about their general attitude towards company internal questionnaires and what factors influenced their decision to take a questionnaire. The insights gained from these discussions were then incorporated into the design of the invitation and reminder emails and the layout and structure of the questionnaire.

In the second section participants of the focus group were asked to individually take the questionnaire and to make written comments and highlight uncertainties as they went through the questions. After all participants were finished with the questionnaire, we went through the questions item by item, discussing all the issues and concerns that had come up, while taking the questionnaire privately. Interviewees were offered to either take the questionnaire privately, followed by a subsequent discussion of concerns or to complete the questionnaire verbally, with me as researcher reading out the questions and them telling me their answers, as we went through the questionnaire together. All interviewees chose the latter option.

Based on the feedback gathered from both the focus group and the interviews, the wording of certain items was simplified where necessary, as to ensure that non-native speakers would also understand the meaning of the questions correctly and additional clarifications of terms were included, where respondents were unsure what was meant by them. In the final section of the focus group and the interviews, participants could comment on their impression of the questionnaire and the topic in general and whether they felt anything was missing or should be taken out.

With the feedback received from both the focus group and the interviews, the questionnaire was finalized and the used scales were measured for internal consistency using Cronbach's Alpha. The autonomy scale (9 items) returned an Alpha of 0.859 in the pilot and 0.841 in the final survey, the overload scale (5 items) also showed an Alpha of 0.859 in the pilot and 0.837 in the actual survey, the coping scale (3 items) returned an Alpha of 0.864 in the pilot, however it returned a low Alpha of 0.648 in the survey due to which one item had to be dropped leading to a new Alpha of 0.763.

The organizational identification scale (2 items) showed an Alpha of 0.985 in the pilot and 0.742 in the survey, followed by an Alpha of 0.936 for occupational identification (3 items) in the pilot but a low Alpha of 0.580 in the survey due to which the scale was not used. Furthermore, in the pilot an Alpha of 0.920 was returned for team identification (3 items), followed by an Alpha of 0.70 in the survey.

The hypo connectivity scale (3 items) returned an Alpha of 0.586 in the pilot due to which no scale was computed after all, and items were used individually. The hyper connectivity scale (4 items) showed an Alpha of 0.466 in the pilot, due to which one item was deleted returning a new Alpha of 0.798 with 3 items in the pilot and 0.740 in the actual survey.

Finally, during the analysis of the survey, scales were computed for the dependent variable “Peripheral Work Connectivity”, which consisted of 4 items with an Alpha of 0.886, and a scale was computed for perceived level of responsiveness pressure (3 items) for which an Alpha of 0.893 was returned. For more details about these scales, please refer to chapter 4.

I analyzed the data from this questionnaire using the statistics software SPSS (for details of the analysis refer to chapter 4) and I compiled a number of summary slide decks and presented these to TechComp management. No approval was granted from the legal department to publish the results to a wider audience internally, with the consequence that the results weren’t disseminated amongst employees. However, to thank employees for their participation and to reciprocate their efforts one i-Pad was raffled amongst all participants and finally sent to one employee from Denmark. Additionally, to ensure transparency, I conducted a short interview with the winner of the i-Pad and I published her name and the interview (after having obtained consent) in a short news article on the corporate intranet.

### **2.3.5. Interviews**

In addition to above discussed methods, interviewing was another fundamentally important research method I utilized in order to collect data at TechComp. In particular, I was interested in answering deeper questions of how power came into effect at TechComp and what implications such power relations had for individuals, based on the statistical trends I had identified from the survey.

In the survey I had observed two key themes that I wanted to explore further through in-depth conversations with employees. These themes were gender and degree of global work, both of which had turned out to be significant predictors of peripheral work connectivity at the studied organization (for more details see chapters 4-6). Due to the nature of qualitative interviews allowing an understanding to emerge about people’s real life experiences and meanings (Schultze & Avital, 2011; Farr, 1984; Kvale, 1983), interviews were particularly fit to investigate how employees dealt with expectations of ‘constant connectivity’, why they managed the way they did, and how they interpreted such expectations.

I formally interviewed a total of 87 employees, grouped into two topic groups. I interviewed 76 employees regarding the topic of gender as well as 11 employees regarding the topic of global work (see tables below). The interviews about gender were scheduled for 1 hour each and ranged from 35 minutes to 1 hour and 40 minutes with an average and a median of 58 minutes. The interviews for global work were scheduled for 45 minutes and ranged from 30 minutes to 63 minutes, with an average of 45 minutes and a median of 43 minutes.

| Gender Interviews | UK | Denmark | Brazil | UAE | India |
|-------------------|----|---------|--------|-----|-------|
| Women             | 29 | 8       | 15     | 10  | 7     |
| Men               | 7  |         |        |     |       |

**Table 3 – Chapter 2**

| Global Work Interviews | Europe | Asia / Australia | Middle East | Americas |
|------------------------|--------|------------------|-------------|----------|
| Women                  | 1      | 1                | 1           |          |
| Men                    | 6      | 2                |             | 1        |

**Table 4 – Chapter 2**

In such interviews it was especially important to me to understand the effects of peripheral work connectivity through the eyes of the people affected by it. Interviews are particularly useful to elicit self-reports in order to describe and reveal perspectives (Farr, 1984) and their “purpose is to gather descriptions of the life-world of the interviewee with respect to interpretation of the meaning of the described phenomena” (Kvale, 1983: 174).

However, in such interviews it is of key importance to be aware of one’s own role as interviewer, and as Farr describes it, the interview is an “inter-view” between two people. In addition, interviews don’t mean that one has observed something happening. Instead, interviews entail listening to the narration of the interviewee and often what people say and what they do are two different things (Becker & Geer, 1957). Due to this reason, I triangulated the data by presenting the interviewees with statistics from the survey and I sought their interpretation of these statistics as well as of their own behavior that they had described to me.

#### **2.3.5.1. Recruitment and Process**

I used different recruitment strategies for each country, depending on the level of access I had and the means and contacts available to me. In the UK, it was particularly easy to recruit women due to a large online women network group on the company internal Enterprise Social Media platform, in which I had been allowed to post a call for participation. On the day of the post, already 2 hours later I had 30 responses, due to which I had to close the call for participation. For male UK employees it was much more difficult to recruit online as there was no dedicated network group only open to male employees. For this reason I relied on referrals from women I had interviewed and snowballed from there.

Among the recruits from the UK there was one female Danish employee, who had close work relations with the UK, due to which she was part of the women network there. She functioned

as key informant and gatekeeper for Denmark, getting me in touch with a variety of other women of TechComp Denmark, whom I could interview and from whom I snowballed further.

In Brazil, I was able to get in touch with two key informants through my HR network at the headquarters, who each compiled a list of interested women for me.

In the UAE, I had a direct HR contact, who assisted in compiling another list of interested women for me, which was complemented by referrals from some women I interviewed.

Finally, in India, I again relied on an online women's network on the company social media platform, whose group admin got me in touch with a number of women who wanted to participate.

All interviews took place virtually using a video-conferencing technology, called Live Meeting and participants had been asked by me to sit in a quiet room, as to allow for confidential information to be shared without colleagues overhearing or interrupting.

#### **2.3.5.2. Consent**

Prior to conducting the interviews all participants had been informed of the purpose of the study and I had sent them a detailed email regarding the objectives, processes and anonymity precautions of this research. I explicitly stated in the email that their acceptance of the interview invitation, which was sent out electronically, would count as written consent that they had read and understood the details of the study and were voluntarily participating in the survey (see consent emails in appendix for chapter 2). Where employees had agreed, interviews were scheduled and I reviewed the main purposes of the study and process again together with each informant at the beginning of each interview, to ensure that they understood what they had agreed to be part of. The interviews were recorded and subsequently transcribed verbatim by me, as to avoid third parties from getting hold of the recordings.

I mainly investigated people's use of technology at work; however, I also asked them about their interpretations and perceptions of the various levels of connectivity they were experiencing at work for themselves and others.

During the interviews I was aware the whole time that informants shared a lot of their very personal thoughts and experiences with me and I wanted to reciprocate this openness by giving something back in return. For these reasons, I readily shared insights I had already gained and more general results from my research with the interviewees and I went further in that I started connecting those employees with each other, who had expressed to me that

they wanted more exchanges with other like-minded colleagues. For instance, I connected female engineers from the UK and Brazil who struggled to find other women in similar roles to share their experiences with and to seek advice from. Furthermore, I shared personal stories and experiences with the informants, to reciprocate their openness, being fully aware that in such inter-views (Farr, 1982) I was a co-constructor rather than a neutral observer.

#### **2.3.5.3. Interview Script**

Each interview was initially semi-structured but open ended in that I was ready to allow the conversations to go where the interviewees wanted to take them. Nonetheless, I had prepared key themes that I addressed with every informant, adjusted to the local context of the respective interviewee.

For the interviews relating to the question of gender and connectivity the key themes that I addressed were the following:

1. General background information about the informant (work role, nationality, family situation)
2. Experience of connectivity (expectations and pressures): Do you experience pressures of 'constant connectivity'? When / How / By whom etc. and how do you feel about such pressures? What strategies do you use to deal with such pressures? What expectations do you have of others? How connected to your family are you while you are at work? How does your family react to you working during off hours? What reactions do you get at work (from management and colleagues) when you decide to log off after work?
3. Blurred boundaries between work and private life: Is it important for you to separate between work and private life? Why, why not? How do you manage your boundary? Has your boundary management always been the same or has there been a point when you changed your behavior? If so what happened? How do you manage both work and family? Do you have help? Do you share with your partner? Who is the main person in charge regarding your household and the children?
4. For women → Female visibility in the workplace: Do you feel, as a woman and as a mother, your family expects more of you in terms of being available for them while at work? Do you feel that your colleagues are more alert in terms of how connected you are with your private life while at work because you are woman? Do you think that the level of connectivity you have and the degree of setting boundaries affects your career? In what way?



5. For men → Men and non-work responsibilities: How have you negotiated childcare and household responsibilities with your partner? How do you feel about this outcome? Are you happy with your current level of involvement at home and your engagement at work? Do you feel visible when you leave work to care for your child?
6. How mobile do you have to be for your work? How do you deal with such levels of mobility expectations?
7. What would be the one thing you would like to see changed to make your life easier to manage?

For the study of global work teams the following key themes formed the basis of the interviews:

1. Background (work role, nationality, family situation)
2. Global work practices: How often do you connect to work? How do you feel about this? What technologies do you use for what purpose and when? Describe the expectations of connectivity and availability of your team and your own? Who determines expectations and work routines in your team (e.g. when to meet) and how? Have your team's practices changed since you started working together?
3. Team work: What problems do you currently face in the team? Do you trust each other despite being located far apart? Are there misunderstandings due to technology mediated communication making up most of your team communications? What do you generally think about such global team setups? What could still be improved?
4. Blurred boundaries between work and private life: How do you manage the boundary between work and private life in such a global environment? What does your family think about your current role? Do you feel you have a good balance between your private roles and your work role? Is this current setup sustainable for you?

#### **2.3.5.4. Analysis**

The qualitative data were analyzed using the software NVivo and following a thematic analysis approach. Thematic analysis is a method for qualitative analysis that is well suited to understanding individuals' conceptualizations of the phenomenon one investigates and it allows for great theoretical flexibility (Braun & Clarke, 2006), making it a useful method spanning multiple disciplines from psychology to the social sciences. While thematic analysis boasts great flexibility, ranging from positivist to constructivist applications, it is nonetheless important to spell out the assumptions which underlie my use of thematic analysis. I use thematic analysis from the perspective of critical realism, as explained at the beginning of this chapter, again focusing on the discovery of mechanisms that shape social reality.

Thematic analysis entails pattern recognition through careful re-readings of the collected data, “where emerging themes become the categories for analysis” (Fereday & Muir-Cochrane, 2008: 82). It is an iterative and reflexive process that involves the initial development of a “code manual” which determines some initial themes to look for in the data prior to starting the analysis (see tables below).

#### Codes for Gender Study

| Code Name                 | Description   |
|---------------------------|---|
| Role Conflict             | Incidents / stories that describe how the demands of one role (e.g. work role) stand in conflict with demands of another role (e.g. parent role).                                     |
| Flexibility               | Incidents / stories that describe work arrangements that differ from the traditional 9-5, office based work of white collar workers (i.e. temporal flexibility, spatial flexibility). |
| Boundary Management       | Incidents / stories that describe the strategies people use to manage the transitions between their different roles (e.g. work role vs. parent role).                                 |
| Blurring Boundaries       | Incidents / stories that describe how the boundary between work and private life is getting blurred.  |
| Gender Discrimination     | Incidents / stories that describe how employees become disadvantaged because of their gender.   |
| Connectivity Expectations | Incidents / stories that describe the expectations of peripheral work connectivity of colleagues, management and oneself.   |
| Stress & burnout          | Incidents / stories that describe the perceived stress informants have in relation to their work.   |
| Cultural differences      | Incidents / stories that describe unique attributes of the cultural context of the informant.   |
| Company Culture           | Incidents / stories that describe the company culture of TechComp.  |
| Enterprise Social Media   | Incidents / stories that describe the interpretations of the informants regarding the new internal social media platform.   |

**Table 5 – Chapter 2**

## Codes for Global Work Study

| Code Name                   | Description  |
|-----------------------------|--|
| Dominant Work Culture       | Incidents / stories that describe what shapes the global team culture (i.e. what countries, what cultural values, what languages).   |
| Connectivity Expectations   | Incidents / stories that describe the expectations of peripheral work connectivity of colleagues, management and oneself.  |
| Team Misunderstandings      | Incidents / stories that describe problems and misunderstandings that arise due to the physical distance between team members and the main mode of communication being technology mediated.                        |
| Intensification & Extension | Incidents / stories that describe the technology enabled intensification of work (i.e. getting more done in the same or less time) and extension of work (i.e. work beyond individual's official core work hours). |
| Mobility Expectations       | Incidents / stories that describe the expectations and consequences of having to travel due to the global nature of team work.   |

**Table 6 – Chapter 2**

The next step in the analysis is then to gain an initial overview, to summarize and to describe the data (Fereday & Muir-Cochrane, 2008). As suggested by Braun and Clarke (2006), I started this process already while interviewing and during the transcription of the data. More precisely, after each interview I jotted down the most memorable parts of each conversation and I highlighted some initial key paragraphs during the transcription process, which I then paid special attention to during the first coding of the data. In addition, I kept a memo document, where I wrote down ideas and thoughts, labeled with date.

Upon reading the data for the first time, in a next step existing theory-driven codes are then applied to the data and additional patterns can be added in form of inductively derived codes (Fereday & Muir-Cochrane, 2008). Ideally, at this stage the analysis should start to move from mere description to a more interpretive level as the organization of data allows for meaningful groupings (Braun & Clarke, 2006). I did this, starting out with one interview and fully coding it both with pre-established codes as well as adding newly generated codes. Based on this initial deductive and inductive coding scheme, I then continued for the rest of the interviews, adding and altering where I considered it necessary.

Once codes have been applied to the data, the next step is to group codes under overarching themes and to corroborate the codes and the themes in an iterative process (Fereday & Muir-Cochrane, 2008), finally departing from description and moving towards interpretation. This was done at the very end of the initial coding process by reviewing the coding scheme, leading to the grouping and regrouping of codes into clusters that formed themes.

To do this, I reviewed each code and its meaning as well as each theme under which the codes were clustered. During this process, following suggestions of Braun and Clarke (2006), I eliminated inconsistencies in how I had applied codes and combined codes that turned out to describe the same construct. In this second round of coding I issued queries in NVivo for each code, reviewing all references which I had grouped under this code and recoding where appropriate.

Based on the final coding scheme and the identified overarching themes, I identified key quotes to be used in the write-up to illustrate the themes.

Shortened tables of all final codes used can be found below. For the complete tables please refer to the appendix for chapter 2.

| Code Level 1        | Code Level 2      | Description   | Code Level 1 | Code Level 2             | Description   |
|---------------------|-------------------|---|--------------|--------------------------|---|
| Reasons shaping PWC |                   | Incidents / Stories that describe the reasons why women regulate their PWC in a certain way.  | Strategies   |                          | Incidents / Stories that describe the strategies women use to deal with their conflicting roles and the expectations of work (i.e. high PWC levels).                                    |
| Reasons shaping PWC | Frustration       | Incidents / Stories that describe the frustrations women encounter due to which they regulate their availability accordingly.   | Strategies   | Impression Management    | Incidents / Stories that describe the situation where women use impression management to deal with connectivity expectations.   |
| Reasons shaping PWC | Guilt             | Incidents / Stories that describe the feeling of guilt women feel due to not being able to fulfill all of the roles they are occupying due to which they regulate their PWC in a certain way to manage this feeling.                | Strategies   | Rationalization          | Incidents / Stories that describe the situation where women rationalize their own behavior in order to accept their PWC level and associated consequences for career and private level. |
| Reasons shaping PWC | Fear of Judgement | Incidents / Stories that describe the fears of being judged by colleagues (both male and female) for not being able to fulfill one's work and private roles as expected due to which women regulate their PWC to reduce such fears. | Strategies   | Regulating home workload | Incidents / Stories that describe strategies where women regulate their home workload to cope with work related expectations including PWC level.                                       |
| Reasons shaping PWC | Triple Workload   | Incidents / Stories that describe the structural issues that women shoulder a high workload both at home (e.g. childcare, household) and in the workplace due to which they regulate their PWC accordingly.                         | Strategies   | Regulating job workload  | Incidents / Stories where employees regulate their job workload to suit their home circumstances.   |

**Table 7 – Chapter 2**

| Code Name Level 1     | Code Name Level 2         | Description   | Code Name Level 1 | Code Name Level 2          | Description  |
|-----------------------|---------------------------|---|-------------------|----------------------------|--|
| Dominant Work Culture |                           | Incidents / Stories that describe the hierarchical order of work cultures at TechComp.                                  | Exclusion         | In- and Out groups         | Incidents / Stories that describe the situation where a dynamics of an in-group becomes visible.                                     |
| Dominant Work Culture | Headquarter-Centeredness  | Incidents / Stories that describe the hierarchical order where headquarter culture dominates others.                    | Exclusion         | Local vs. Global Challenge | Incidents / Stories that describe the situation where team members with dual roles (global and local) become excluded.               |
| Work Conditions       |                           | All work related conditions that have to be negotiated between employee and employer.                                   | Strategies        |                            | Incidents / Stories that describe the strategies employees use to deal with expectations of high PWC and associated consequences.    |
| Work Conditions       | Workloads                 | Incidents / Stories that describe the amount of tasks one has to complete for work.                                     | Strategies        | Family related             | Incidents / Stories that describe the strategies where employees adjust their family situation or develop family related rationales. |
| Work Conditions       | Connectivity Expectations | Incidents / Stories that describe the expectations of how high one's level of PWC has to be.                            | Strategies        | Team work                  | Incidents / Stories that describe the strategies where employees adjust their team work behavior or develop team related rationales. |
| Work Conditions       | Mobility                  | Incidents / Stories that describe the degree of mobility that is expected of employees due to working in a global team. | Strategies        | Personal                   | Incidents / Stories that describe the strategies where employees adjust their personal lives or develop personal rationales.         |
| Exclusion             |                           | Incidents / Stories that describe how employees become excluded from team decisions and other internal issues.          | Strategies        | Technology management      | Incidents / Stories that describe the strategies where employees use technology to regulate PWC.                                     |

**Table 8 – Chapter 2**

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To sum up, I conducted a case study at TechComp, utilizing a variety of different methods, including documents, online and offline ethnographic work, surveys and formal interviews, underpinned by the philosophical position of critical realism. This allowed me to collect both quantitative and qualitative data, enabling me to triangulate the data sources and to investigate the stated research questions from different angles. While research involving human subjects always entails a variety of ethical considerations, I constantly reflected on all methods used throughout this research project and I tried to prevent any harm being caused to my informants by protecting their anonymity, as well as the anonymity of the company studied as well as possible. Furthermore, I aimed at staying reflexive of my own role as researcher throughout and I tried to uphold reciprocity by sharing my results with the company and my informants as often as possible. In the rest of this thesis, I will now turn to presenting the outcomes of my research efforts.

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### **3. Chapter 3 – Situating TechComp**

TechComp is a global organization with hundreds of thousands of employees spread across the world. And while its roots are in Europe, TechComp has a long history of innovating technologies and has early ventured out to tap into global markets. Due to this long trajectory they have developed a strong company culture that is very well known even amongst the wider public, fueled by a history of frequent media representations. In its country of origin, which for reasons of anonymity will not be disclosed, everybody knows TechComp. In the areas where it is most prominent it is one of the most important employers and has provided job security and prosperity to employees for many decades.

In the past such aspects were enough to ensure a generally positive image and a steady inflow of talent. However, in more recent years, as global competition has become more intense and new direct and indirect competitors have appeared, TechComp faces new economic and employee related challenges that cause regular internal reorganizations, posing additional demands on employees to accept frequent change. It is this context of frequent reorganizations in an attempt to modernize in which this case study is situated.

The data presented in this chapter stem primarily from the ethnographic work I conducted at TechComp between March 2014 and August 2015, drawing on observations, informal conversations, meeting attendance and interviews. In addition, these ethnographic data are complemented by a review of public company reports and a variety of publicly accessible PR materials.

Based on these data this chapter then aims not only to contextualize the research, but to attempt a first analysis of how various stakeholders at TechComp negotiate change and related power relations. In particular, I will look at the strategic perspective of senior company management, the regulation oriented perspective of the legal department, the protective perspective of employee representatives such as the workers council as well as the perspective of the employees themselves and their rather skeptical and creative response to such frequent change and struggle.

### **3.1. Idealized Images versus Outside Perceptions**

According to the company website and company reports, TechComp's values of excellence, innovation, and responsibility are historically aligned with their traditional position as technological pioneer in Europe as well as globally.

However, in times of digital technology and related companies like Google venturing into all spheres of soft- and hardware, TechComp's name has lost its association with innovation. As one popular media article expressed, which will not be disclosed for reasons of anonymity,

“TechComp is not fit for the future. It is a large construction site”. Old structures and bastions of power, so discusses the article, have led to inertia and to too long response times for a quickly changing market. These structural issues have negatively affected the employer brand of TechComp, making it more and more difficult to recruit new talent, further endangering positive future prospects. Finally, the company had received a lot of negative press a few years ago due to a corruption scandal and it had taken a long time and an intensive restructuring process implementing a new compliance system to recover from this.

The company structure itself was complex and made up of various managerial layers, which grouped different business units together. At the top of TechComp was the corporate headquarters, home to the management board and the CEO. This multi-layered structure meant that decision making was a long process and involved a great deal of political feel and instinct in order to get the various managerial levels on board. These political games were well known phenomena even down to the lowest level of employees, as was commented on by a variety of current and former employees in informal conversations.

In addition, while these general aspects of TechComp’s organizational culture were shared across sites, more complexity was added by the fact that the company sites were scattered across the world and throughout individual countries. This meant that individual site-specific cultures had emerged, ranging from very traditional manufacturing sites where people clocked in and out every day, to highly professionalized and flexible offices where employees had no fixed desk anymore and kept their belongings in movable file cabinets. Such diversity of work cultures amplified difficulties to make organization-wide change campaigns effective. Furthermore, there was no sense of unity within TechComp. Rather every single entity appeared to work against each other in order to optimize their own goals, but losing sight of the bigger picture of TechComp’s overall success. This was intensified through an internal charging structure, through which department A was charged by department B for any service B delivered to A. This meant, however, that individual departments didn’t look at the company as a whole but only at their own objectives, as the following quote illustrates:

*“We are always lectured about this, we are one TechComp, this is one company, but we obviously get a lot of products that we hand in to the customers here, we get them directly from the headquarters and there are times that meetings we’ve got with them are a lot more hostile than meetings with our customers. So it looks like, seriously, go to a rival or whatever and ask them, they are a lot more accommodating to us in giving us information whereas with TechComp, we are supposed to be one company and for everything they do they just seem to want to charge us...I just tell you one example of what I had to deal with today. Ordering*

*equipment from the headquarters. And talking to the customer, which is not the easiest customer to deal with, and I found it a lot easier to go back to my customer and say, what we agreed on we need to change. He was a lot more accepting of that than going back to the headquarters and say, we need to change, it is something you haven't even designed, it is just at the first steps. Because I know the second I say anything, they [other department at headquarters] are going to charge me.” (Female, Engineer, UK)*

Despite such challenges and negative press, employee turnover remained constant over the last years (from 2012-2014, as reported by the annual company report) at around 10%. So it appeared that the company remained a source of stability for many employees overall.

At the time I commenced this research project, TechComp had recently gone through a change at the very top; a new CEO had just been appointed. He came into office with his work cut out for him, but with equally ambitious plans. He wanted no less but change the company culture entirely by transforming TechComp from a bureaucratic, process-driven and highly political enterprise into an innovative and entrepreneurial organization. Such change, he hoped, would allow the company to retain its role as significant global player, revert back to its history as technological pioneer and become attractive again for new talent.

A key aspect in such organizational change was supposed to be transparency and openness, which he tried to live by organizing a first ever global CEO – Employee Q&A webcast that was supposed to allow employees from across the world to connect directly and live with their CEO. The scope of this event required the setup of a wide-reaching technological infrastructure and, as one corporate news article described, this new infrastructure was supposed to show that such new openness was not to be a singular and one-off occurrence. The investment in extensive communication infrastructure intended to demonstrate that this was the new lived culture of openness at TechComp.

In this webcast, which I was able to watch myself, the new CEO emphasized the need for more flexibility, quicker decision making and a general reduction of politics and bureaucracy. Yet, as a subsequent non-representative web poll of employees revealed, which had been publicly conducted by the communications department, many TechComp employees did not believe in successful changes. While 97% considered the new CEO's openness as positive, only 25% believed that bureaucracy would reduce. A staggering 75% of participants felt that this momentous task was unlikely to be achieved. In addition 92% expressed that better leadership was needed within TechComp in order for change to be successful. This showed that the internal employer brand was still marked by a perception of politics, bureaucracy and poor leadership and a singular global webcast couldn't change this.

### **3.2. Management: A New Strategy with (almost) the Same People**

With the new CEO in office, not only a new concern for openness arose but a fundamental strategic repositioning was to be implemented, involving the biggest restructuring process the company had experienced over the last decade. An entire management layer was to disappear, creating anxieties and great amounts of uncertainty.

In addition to this drastic change of delayering, two new board members were appointed, including a new head of Human Resources. With this appointment, TechComp sought to set the tone towards a more modern, diverse and digital employer brand and company culture. The new HR head was a great advocate of new ICTs for communication with strong Twitter, LinkedIn and internal Enterprise Social Media profiles and wanted to propagate a more open and transparent company culture, leading by example. And, in fact, as I could observe myself on the internal Enterprise Social Media platform of TechComp, even after the appointment to the board the new HR head did continue to actively publish posts through the internal social media channel and engaged in dialogue with employees through this platform.

Furthermore, a cross-departmental team had been assigned the task to develop concepts for the “future of work”, including the IT department, Human Resources and Estate Management. One aspect of this “future of work” task force was to implement an open office concept for all office based employees across as many company sites as possible, accompanied by a variety of policies including home office and flexible working arrangements. This concept had been trialed for a while in a number of sites and was ready to enter the second phase with more wide-reaching implementation.

So, in fact, in these first months after the change of CEO, major transformation efforts were visible throughout the company with the aim of rejuvenating and repositioning TechComp over the next five years. Yet, these first months were also accompanied by great uncertainty as the executive board was secretly developing new plans of how the new management structure would look like. Only few pieces of information slipped out to the employees who were eagerly awaiting news, fearing major layoffs. This secrecy stood in sharp contrast to the new values propagated by the management board.

Then, about a year after the new CEO had come into office, the new structure was ready to be implemented – literally over night. Through internal news and emails from the CEO, employees had been informed of the date when the new organization would come into effect. Yet, there was great diversity in how much some employees knew and how little others had been able to find out. There was an apparent lack of a coherent communication strategy.



Many employees had told me during conversations that they hadn't been informed until the day of the transformation about who their new team members and boss would be, leaving them guessing until the last minute whether they had been forgotten:

*"And it just all seemed like it was done in a rush. They sent out org charts, I think at 7 am on Friday morning saying this is the way it is now. There was no big meeting, there was no announcements, just an email and then when people looked at the org chart, a lot of people were missing or their names were spelled wrong. Why is my name not on there, does that mean I am fired? There is a lot of uncertainty and they could have done it very differently."*  
(Female, Support Function, Denmark)

Others had been told who their new team was but didn't know who their direct superior would be until the day of change. This happened for instance to the team which I was part of during my time as researcher at TechComp. Then there were teams which wouldn't change at all, especially those heavily involved in the day to day business activities of engineering and sales. And again others had been put into an entirely new team not knowing why. For instance, there was the case of one previous HR manager, who, practically over night, had lost all of his previous managerial responsibilities, leaving him wonder what he had done wrong and evoking great fears of an eventual layoff.

Due to my position in the global headquarters and being quite closely located to the heart of global decision making at TechComp, I learned that many senior managers were aware of such major communication failures. They knew that these hiccups shed a negative light on the management board, corroding their attempts at rebranding and transforming the company culture. Yet, due to the fact that the implementation of this new structure had been required by the board to happen as fast as possible, there simply had not been enough time to thoroughly plan the transformation process at lower levels in order to make it as smooth as possible.

Finally, the majority of new teams had been established and management positions had been filled. Yet a closer look revealed that the drastic changes announced hadn't translated into real managerial change. While posts had been swapped around, senior management still mainly consisted of the same people as before, albeit with new titles and sometimes different responsibilities than before, as was commented on by a female senior manager I had interviewed during my research:

*"When the reorg was announced about the changes that took place in October last year...they did a whole huge series of appointments with a 60 pages structure chart that came out and I*

*got a list of names, all [HQ country nationality] men. So there are, they had an opportunity at that point to change and they chose not to and I don't think it was an unconscious decision, it was just so glaringly obvious when you look at the list of names.” (Female, Legal, UK)*

As she pointed out, it was still the same sort of male, European elite that occupied the most important management seats at TechComp.

Finally, after months of great uncertainty a few weeks after the official start of the new structure nervousness and uncertainty had quieted down for the time being and people had returned to their daily business. Yet, the changes were so major, that much of the former processes had become obsolete, requiring a great level of strategic thinking, rather than a focus on the day to day. Even months after this major reorganization had gone into effect, many employees said to me that they still didn't know what they were doing and that they felt that their management didn't know either.

What was clear though was the fact that a certain number of employees were to be let go soon, leading to constantly present but covert feelings of anxiety and insecurity infiltrating the company and employees' days.

It was in this context of mixed messages, of transparency versus secrecy, new routines versus uncertainties of layoffs, and modernization and digitalization versus the same old managerial elite in which this study was situated, raising fundamental questions of how power relations were negotiated at TechComp in these times.

Yet, these mixed messages also illustrated the fact that there were many points of contestation at TechComp that involved a variety of stakeholders all eager to influence the future path, including above discussed management body, but also employee representative bodies such as the workers council eager to protect current work benefits, the legal team constantly concerned with regulations and the prevention of lawsuits and finally the employees themselves who needed to reposition themselves in these times of uncertainty and change. In the next section I will now turn to these other stakeholders, quickly elaborating on their views, as I came to interpret them through my observations and presence within TechComp. This further complicates the context by revealing a dynamic of constant struggle between these different parties, effectively leading to standstill.

### **3.3. Employee Representatives**

Historically TechComp employees had strong employee representation bodies in Europe, such as the global workers council, which was based at the headquarters, and they were still a very influential institution when I arrived at the company. This became visible to me through

numerous comments I heard from many different employees across different departments at the headquarters. These comments were mainly negative in nature, portraying the workers council as a major hurdle for getting things done and to innovation and change.

However, in times of great uncertainty many of the colleagues, who had earlier remarked how they found the workers council's involvement annoying at times, were then fairly pleased that employee representatives were implicated in negotiating the rationalization of personnel, which came with the major reorganization. So it became clear that especially employees in professional or knowledge intensive roles often had an ambivalent relationship with the workers council, as the following remarks of an IT employee demonstrate:

*[The global workers council] is an institution that should help, but at the moment I get the feeling that I am on the wrong side and that it is all about blocking...you know you have to fight as an individual, you need to make sure you set your own goals...sure there are people who may not be able to do that, but everybody who has got a good education, you are used to it, also from school, that such behavior is required from you and then you don't see why you'd need the workers council, because you stand up for yourself."* (Female, IT employee, Headquarters)

Manufacturing based employees were generally more unconditionally supportive of such employee representatives. Knowledge intensive workers clearly internalized the more individualistic values of the new autonomy oriented spirit of capitalism, as described by Boltanski and Chiapello (2005a, 2005b).

Despite such ambivalence, the workers council had a strong voice at TechComp and got involved in any policy decision that affected employees, such as the rollout of open offices, the regulation of home office and flexible working and even what tools were to be used for communication at TechComp. And while they always had the best interest of their employees in mind when debating policies, they usually used the most pessimistic outcome scenario as base for negotiations, as the following IT employee described, who had negotiated with the workers council regarding the implementation of new communication technology:

*"I put in a lot of effort and we have gotten a long way, but you have to tilt at windmills...The workers council is split into two groups. There are the conservatives and the progressive ones. The conservatives got disappointed at one point and seek revenge due to which they join the workers council. And from one of these I have literally heard from one guy at one point, we discussed about smartphone use, which is good for employees as they can check emails on trains and stuff...and he said when 100 employees are affected and 99 think it is great and*

*want to use it, he will be on the side of this one person who doesn't want to use it, because he or she can become disadvantaged because of it."* (Male, IT employee, Headquarters)

So, basically, every single attempt at automation or digitalization that was directly or indirectly related to employee issues was viewed with suspicion by the workers council, with the usual goal of trying to avert such change or at least to severely limit it.

### **3.4. Legal Department**

The legal department had a very high profile at TechComp and any policy changes, new regulation, or even employee surveys had to be run passed and approved by them. This extremely high level of influence was a historical legacy, as one of the former HR directors of the board had been a lawyer himself and had fundamentally contributed to lifting the legal department to its current level of influence, as one long-term employee told me. In addition, TechComp's recent history had been marked by a variety of corruption scandals spanning different countries and even continents. Due to this, a deep-reaching compliance initiative had been rolled out a few years back and a variety of processes had been installed to prevent future scandals.

These changes had all contributed to the prominence of the legal department who in return had established a culture of permanently scrutinizing everything from the perspective of a potential lawsuit. And while such diligence on part of the legal team was certainly aimed at deterring harm from the company, these efforts were not always greeted with enthusiasm by the employees of TechComp. Instead, especially the employees who were regularly dealing with policies, regulations and change management (e.g. IT, Communications and HR departments) often dreaded the required legal alignment.

*"The core message that is always behind all of this is that the employee must not get hold of any additional claims. He or she must not be able to sue TechComp...for every single piece of regulation they [legal department] have the idea of the worst possible employee...it does not stop with legal advice though, it goes as far as dictating us the exact wording. This has nothing to do with legal advice, in my opinion, it is more of a literary control...with the result that you always get a rotten compromise at the end."* (Male, HR, Headquarters)

The result of such legal negotiations was then often a drastically slimmed down version of previously exciting ideas or projects. For instance, one employee told me about the story of a video about cultural understanding that was supposed to be made available worldwide to develop TechComp employees' intercultural competencies. As the legal alignment progressed,

the once funny video with a sharp punchline at the end slowly turned into a polished corporate drabness.

Another example directly related to my own research at the company, as I had to seek approval for my research instrument (i.e. survey questions for web-based surveys). In the course of this alignment process I experienced first-hand how previously validated psychological scales that I had included in my research tool were questioned by the legal team, followed by a requirement to rephrase them as to take out the potential for trouble. Words such as pressure, demographic categories such as gender and age as well as questions relating to private behavior of employees immediately received a red flag by the lawyers. In fact, it required a great deal of negotiation on my part, supported by the HR and IT departments internally sponsoring my research, in order to retain the questions I considered most crucial in their original wording, while having to delete others.

In such situations individuals, who had to negotiate with the legal department, including myself, were very much confronted with a paradoxical situation. On the one hand, change management campaigns, new policies and employee surveys were intended to improve the current conditions or lay open issues in order to derive useful correctives. Yet, at the same time controversial questions and potentially dangerous topics were rigorously avoided as to prevent legal implications. While the perspective of the TechComp lawyers was certainly understandable and professionally justified, it created frustrations, resentment and even resignation among employees:

*“My problem is, I have been here for so long, that I don’t even see all of this bullshit anymore or I have accepted it as God-given.”* (Male, HR, Headquarters)

In fact, I, myself torn between the issue of retaining survey items in their original format as to ensure validity of scales and complying with legal requirements, felt at this point that change management couldn’t be successful at TechComp, if key questions couldn’t be asked and results couldn’t be communicated.

In sum, throughout my time at TechComp it quickly became apparent to me what role the legal department played across the company and how actively they were implicated in negotiating and influencing policies, regulations, and effectively change at TechComp, often leading to outcomes difficult to understand for employees. Yet, such legal prerogatives were not uncontested. Employees found ways around alignment, directives and regulations rebalancing the power dynamics in such situations, as we will see next.

### 3.5. Employees

Employees were heavily involved in shaping the work practices at TechComp through their daily activities as well as covert and overt acts of contestation. In relation to earlier discussed attempts at changing the company culture, the above cited internal poll demonstrated the lack of belief in the current leadership and buy-in regarding the new strategy. Employees furthermore loudly voiced their opinion in a worldwide employee survey that was conducted every two years. The overwhelmingly negative results of the survey that took place during my time at TechComp reflected the great fear and anger that employees felt in relation to the current changes and towards the company leadership.

Similarly, some employees utilized the new Enterprise Social Media platform to loudly voice their opinion, albeit in a fairly respectful manner as every comment employees made was visibly connected to one's real name. In addition, office grapevine was a wide-spread practice through which decisions at senior management level quickly trickled down to the bottom. So, for instance, I myself heard a lot of senior management news through said office grapevine.

New policies employees didn't agree with were furthermore circumvented by means of simply ignoring them or finding ways around. So, for example, Whatsapp, a very popular instant messaging app all across Europe, was officially prohibited on company smartphones. Yet, many employees simply ignored this directive and used it nonetheless with their teams, as I could observe first-hand. In addition, in offices where the new open office layout had already been implemented, employees resisted its intended "hot desking" policy by simply always sitting at the same group of desks with their team, as I could observe in one IT department. In relation to negotiating with the legal department, smaller surveys were simply run without legal alignment with the hope that no lawyer would find out:

*"I have just sent it out now, using SurveyMonkey (i.e. a very user friendly online survey tool that was neither approved by the IT and legal departments nor the workers council). Let's see if somebody raps me over the knuckles."* (Female, HR, Headquarters)

If the survey format had a larger scale, another option I was told about, was the possibility to split these large surveys up into small site-specific ones, which then no longer required neither legal nor workers council alignment. These stories were readily told by the employees at TechComp when informally talking to them about their experiences of getting new projects implemented or feedback collected.

These examples show that employees were just as heavily implicated in negotiating work practices at TechComp as were management, employee representatives, and lawyers, showing

that the power relations at the company were not a one-directional matter of employer or legal dominance. Instead, they were reconfigured every day anew through the agency of all actors involved, including the technology, which afforded and constrained possibilities for action.

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To conclude, this chapter has aimed at situating the case study in its current context that is marked by ongoing power struggles and more or less successful attempts at fundamental organizational transformation. As we have seen, and as we will see in the rest of this dissertation, work practices as well as power relations were heavily shaped by sociomaterial relations at TechComp, including management, lawyers, employees and their representatives as well as material actors such as open office layouts and available technology.

However, the often very opposing perspectives and objectives of management, employee representatives, legal department and employees themselves, frequently led to standstill. Key questions couldn't get asked, key information couldn't get communicated and key processes couldn't get set in motion, as to avoid hidden conflicts from becoming overt.

Instead of realizing a grand vision of change as desired by management as well as a good deal of employees, it was more a matter of micro steps constantly moving back and forth that characterized the current situation at TechComp. The new vision of what TechComp should be had not yet reached a stabilized level of acceptance and normalization and was still heavily contested.

### **3.6. References**

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#### **4. Chapter 4 – Mapping Connectivity: Connected Work Practices & their Drivers**

Connectivity is a complex phenomenon that greatly affects all aspects of our lives. I have argued earlier that work connectivity is specifically describing connectivity with work. Yet, the ubiquity of access through the mobility of the devices that enable work connectivity make it relevant beyond the sphere of work, as boundaries become blurred and work and private roles become integrated. For these reasons it is important to complicate work connectivity even further, by differentiating two elements, peripheral work connectivity (PWC) and non-peripheral work connectivity (NPWC). It is peripheral work connectivity that enables an ever more permeable work – non-work boundary and this makes it an especially important dimension to study.

While connectivity is an increasingly pervasive aspect of work in information societies, there are still significant differences in the level of connectivity individuals have with their work. For this reason this chapter will explore the extent of PWC and the factors that shape it in order to understand which employee groups are most connected to their work beyond traditional work hours.

To do this I will first focus more broadly on work connectivity by exploring the current communication and IT landscape at TechComp, since sufficient availability of technology that affords connectivity is a prerequisite for analyzing work connectivity. After this more broad background discussion I will then turn to PWC. Here we will see the extent of PWC at TechComp and it is already at this point that fundamental power relations become visible. These shape hierarchies and negotiate work connectivity at the studied company.

In the next section, I will begin building a multiple linear regression model, measuring peripheral work connectivity. To do this, I will start out describing all variables as well as their theoretical justifications that have been included. For completeness, I will also include theoretically important but statistically insignificant variables that have been excluded from the model. This part will be structured around three groups of variables: demographics, job related and IT related variables. By discussing both included and excluded variables, I aim to uncover further what factors shape peripheral work connectivity and with it power relations at TechComp.

Next, I will then go on to present the multiple linear regression model that summarizes the key predictors of connectivity at TechComp. This regression model will show that, unsurprisingly, peripheral work connectivity is associated with high status and responsibility. At TechComp, high PWC seems to be a fundamental condition for career advancement and success. Yet, at the same time, it comes with trade-offs and burdens that don't affect all highly connected individuals equally and that exclude others, primarily women, from moving up.

#### **4.1. Setting the Scene: Work Connectivity, Communication and IT Landscapes**

In order to understand work connectivity at TechComp, I begin by describing the current communication and IT landscape which serves as a backdrop to how work connectivity manifests at TechComp.

In today's information society, communication makes up a large amount of the work that is conducted on a daily basis (Rennecker & Godwin, 2005, Castells, 2010). Communication also plays a major role as part of work at TechComp. For roughly 30% of the studied employees, communication occupies the majority of their time at work, accounting for at least 61% of their workday. For 11% of the employees, communication makes up 80% to 100% of their workday. Unsurprisingly, job functions that require a lot of human interaction such as Human Resource Management and PR & Internal Communications, take on a leading role when it comes to how much one communicates during work. Yet since the core business of the company is the manufacture of high tech machinery at TechComp there are also a many jobs in manufacturing, engineering and R&D that are seemingly less communication intensive and more manual (see figure 3). As the total shows though, communication intensive and less intensive jobs hold the balance at TechComp.

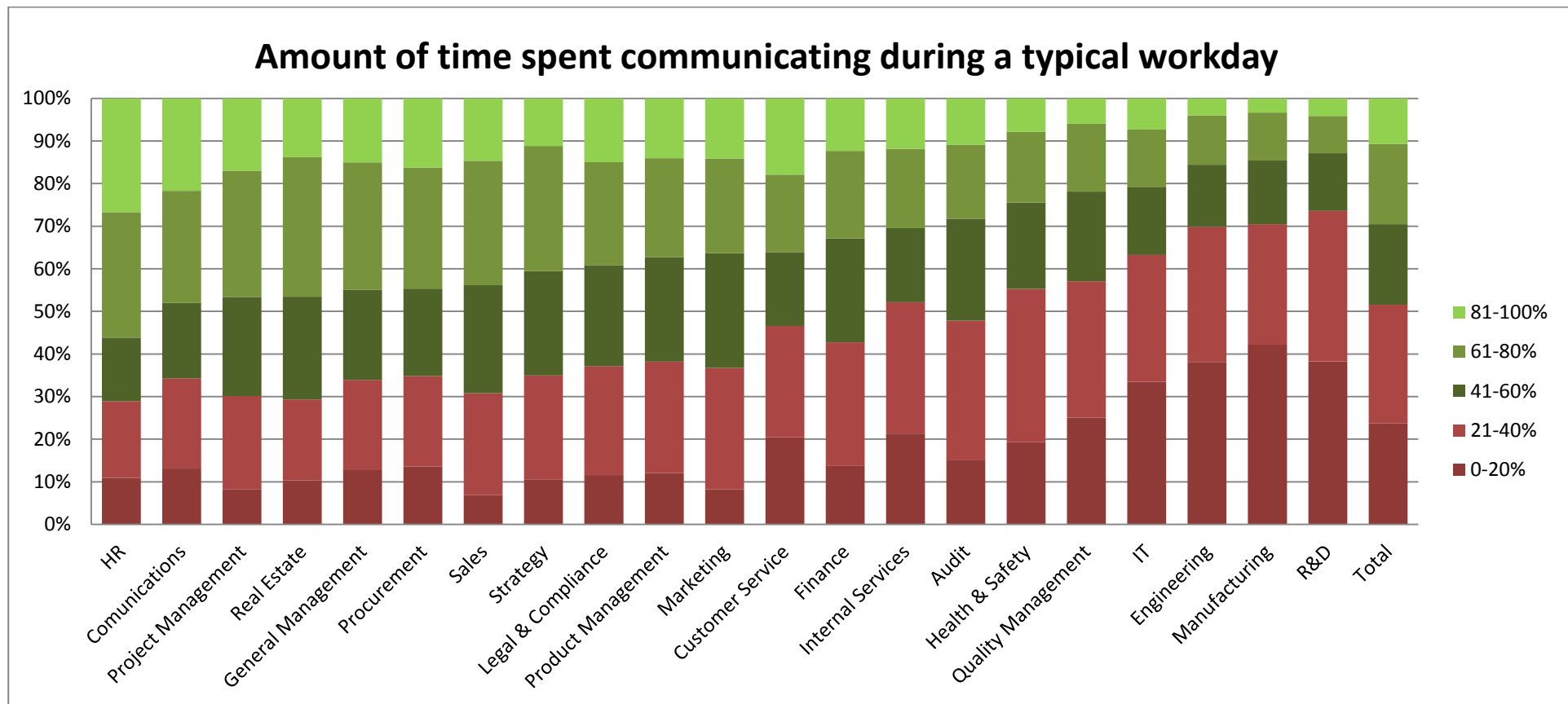


Figure 3 – Chapter 4

These results show that communication plays a major role in the studied company making up an important part of work for many employees at TechComp.

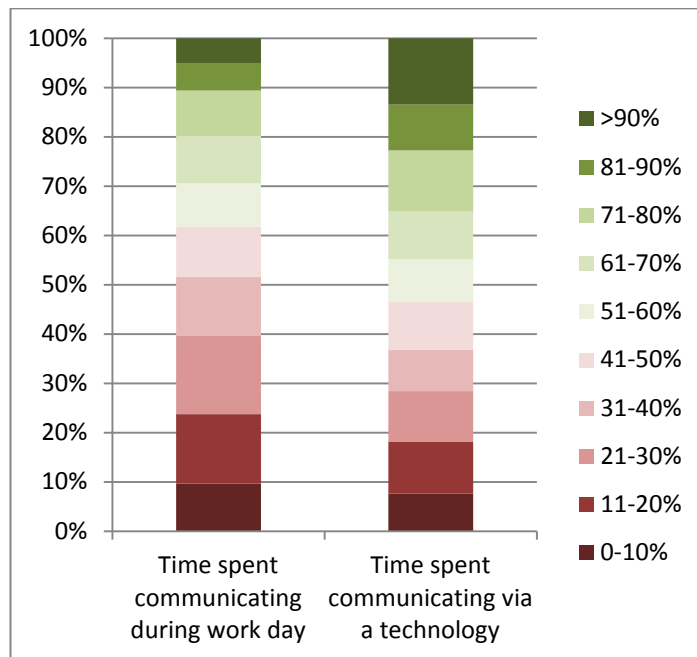


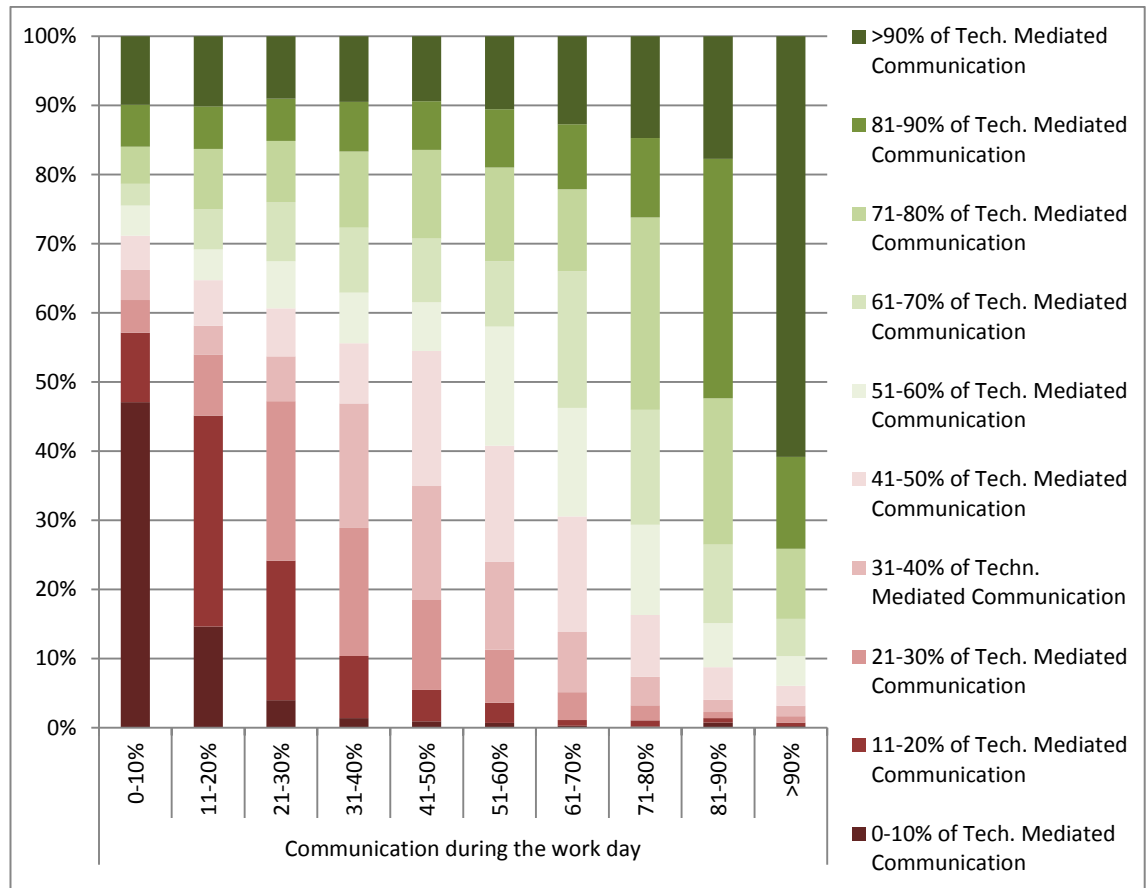
Figure 4 – Chapter 4

Additionally, there is a multitude of different general communication levels (e.g. 24% indicate that communication makes up less than 20% of their time at work, while 20% say that communication makes up at least 70% of their workday) and levels of technology mediated communications (see figure 4). This illustrates that work connectivity plays an important role in the studied company, but to varying degrees and it makes TechComp an ideal place to study work connectivity in the different forms it can take.

The extent of technology mediated communication in the company is a very important aspect in the study of connectivity. As Wajcman and Rose (2011) found, technology mediated communications make up a large part of all communications in work contexts nowadays. This is especially important when considering that communications that involve technology often (not always) take place between individuals that are physically distant from each other but that are connected via a technology. In this way technology mediated communication constitutes a large part of what is connectivity and in the context of TechComp work connectivity can be viewed as a proxy for understanding the extent of connectivity.

For TechComp employees whose work consists of a large amount of communication technology mediated communications – and hence connectivity – are very important. This can be seen in figure 5. The results of the study have shown that the more employees communicate as part of their work, the more likely they are to communicate via a technology.

Among employees whose daily work mainly consists of communication (>90%) 60% indicate that technology mediates more than 90% of their communicative activities. In contrast, for 57% of those who rarely communicate at work (<10%) technology mediated communication makes up less than 20% of their entire communicative activity.



**Figure 5 – Chapter 4**

In order to understand what forms work connectivity can take it is also important to understand which technologies are available to employees and which technologies they use for different situations throughout the day. Here, both social and material factors shape communication channel use. Hardware availability is one material factor shaping what communication channels employees will utilize. Indeed, the kind of technological devices that are made available to different employees at TechComp, have a lot to say about hierarchical structures and power relations within the company.

While it has been argued e.g. by Dubrovsky, Kiesler and Sethna (1991) that technology mediated communication can contribute to a decrease in hierarchical levels within organizations, other studies have found that the status of one's communication partner does play a major role in how we perceive communications even if they are mediated by technology (Rennecker & Godwin, 2005; Byron, 2008).

Furthermore, research has shown that technological artifacts are often used to demarcate one's position and status within an organization (Bechky, 2003, Schoenberger, 1994). As Gershuny (2005) has pointed out, in a society in which busyness is often seen as the "new badge of honor" technological means that help us stay busy more often and longer may be perceived as status symbols.

Harmon and Mazmanian (2013) further show that media representations of smartphone use illustrate how smart mobile devices are viewed as symbols of control and autonomy, productivity and effectiveness. In addition, in the short time span that we have had access to smart mobile devices we have seen a number of studies on smartphone use among knowledge professionals and managers, who are the groups most likely to have widespread access to such technologies again manifesting the symbolism of success and status that is associated with such devices (e.g. Mazmanian, 2013; Besseyre des Horts, Dery, & MacCormick, 2012; Middleton, 2007; Mazmanian et al., 2005).

This symbolic value was also evident at TechComp. The availability of different communication technology devices for work was often a marker of privilege and did in fact demarcate one's hierarchical position within the company. Indeed, obtaining such a device was much more a matter of departmental as well as corporate politics than a question of necessity for conducting one's job. This became especially apparent through comments from survey participants. These commentators were often in job roles that required a great deal of mobility, e.g. sales functions, but loudly complained about the lack of access to such technologies, which they considered crucial for fulfilling their job requirements, as the following employee pointed out:

*"I am from [a] sales background and I interact with clients, colleagues and supervisors very frequently but it is very difficult to open laptops every time. I suggest providing email [access] over personal smartphones or requesting [the] company to provide [a] smartphone/ i-pad with email facility."* (Male, 25-35 years, Sales, India)

In addition, there was a tension between what the company expected to be ideal characteristics of their employees and the IT landscape they allowed these employees to work in. So for instance, many comments referred to the paradox that employees of TechComp were expected to have an elevated interest in any kind of technology. Yet, as a consequence, employees who identified with this ideal were then also generally keen on always being equipped with the latest communication technology, an often unfulfilled expectation:

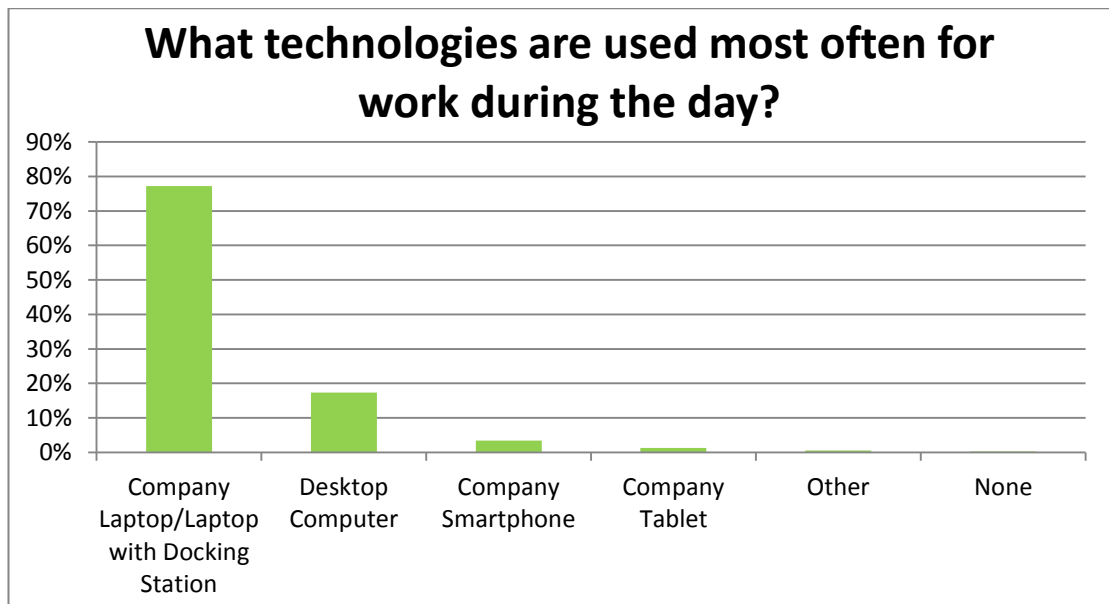
*“Modern communication technology should be a standard thing within TechComp, not something you have to ask for.” (Male, 36-45 years, HR Professional, India)*

*“To be frank, it is a standing joke within the TechComp world that the employees of a company which prides itself on being a technology company use obsolete and inefficient communication technology to perform their daily tasks. Much time and productivity is lost due to issues with communications technology.” (Male, 25-35 years, Legal & Compliance, India)*

It was therefore perceived as negative by many employees that availability of high tech IT seemed to have much more to do with who you knew and what status you had within the company than actual work related needs. They found it hard to accept that a leading technology company wasn't able or even willing to provide all employees regardless of status and position with the latest state-of-the-art communication technologies to conduct their work.

While complaints about not being equipped properly with technology were common, as figure 6 illustrates it was only 0.2% of employees who did not use any communication technology for their work. 77% of all respondents mainly utilized a laptop for their work, in addition to 5% who used either smartphones or tablets most often. This showed that even though obtaining communication technology for work involved politics and power dynamics, when only considering the availability of technology alone it became clear that mobile technology was available for most employees even if it was only a laptop. Yet this also meant that in theory a certain degree of work connectivity and with it mobility was provided to most employees. Only 17% were definitely bound to a specific workspace due to utilizing a desktop computer most often. And additionally, this vast availability of mobile devices further illustrates the importance of connectivity within the company.





**Figure 6 – Chapter 4**

Since work connectivity is greatly shaped by the way people communicate for work, it is also important to look at what communication channels are most often used during the workday. Figure 7 below shows that email is by far the most important communication channel, closely followed by phone calls and then face-to-face conversations. This again shows that, while technology-free communication still plays a very important role in the company, technology mediated communication has become more important highlighting once more the important role work connectivity plays in the company.

Additionally, it is worth noting the uncontested dominance of email. This is interesting in the light of both popular media and more and more organizations demanding an email-free future (e.g. IT company Atos abandoning email and Volkswagen turning off email delivery after employee's work hours), not least due to the often cited danger of email overload and associated stress levels (e.g. Barley et al., 2011). So, according to informal conversations with employees from the IT and HR departments at TechComp, as more and more other text-based communication channels had been made available (e.g. Enterprise Social Media, the Microsoft Chat service "Communicator"), they had expected that email use would decrease. Especially the introduction of an Enterprise Social Media platform was supposed to help TechComp finally transform their communication practices to meet 21<sup>st</sup> century digital standards.

From figure 7 it becomes clear, however, that email messages remain a fundamentally important communication channel for employees at TechComp. At the point of the survey, a year and a half after the introduction of Enterprise Social Media, this new channel had not yet had the anticipated effects, highlighting that technology by itself does not lead to change but

that it is the entanglement of the social and the material that shapes outcomes. What becomes apparent as well though is that email, an asynchronous technology mediated mode of communication, is the most popular channel among TechComp employees when communicating for work and engaging in work connectivity.

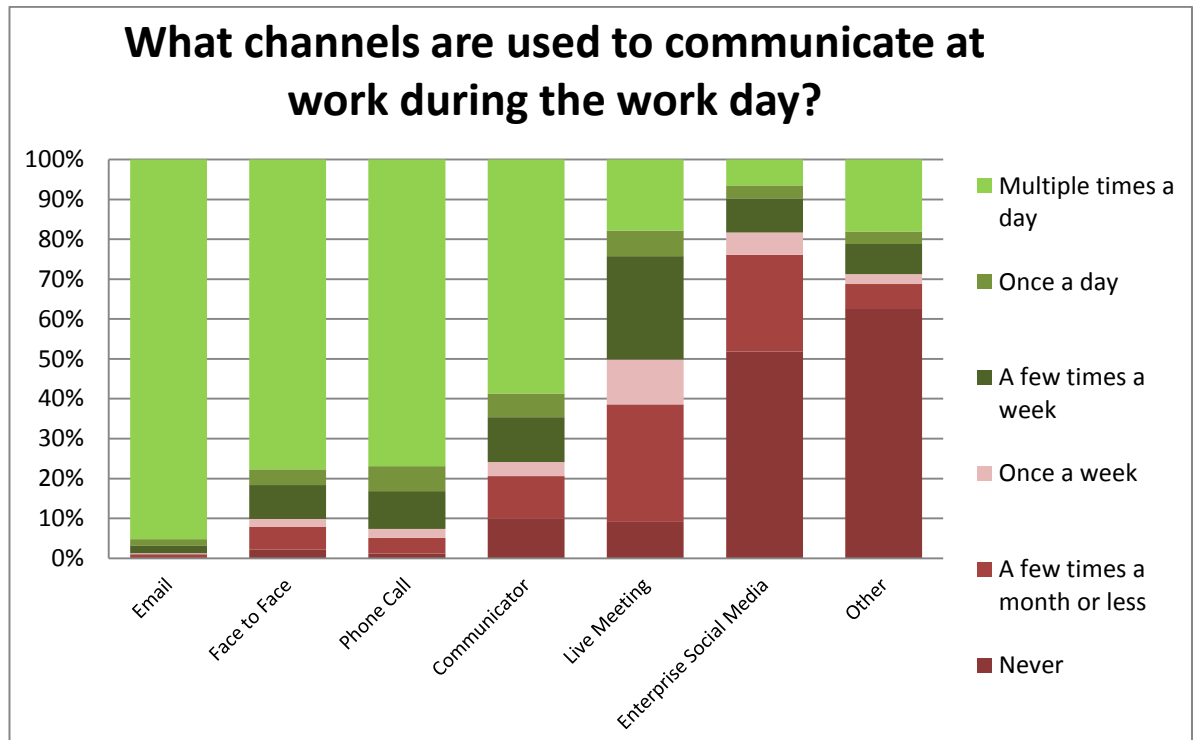


Figure 7 – Chapter 4

#### 4.1.1. Connectivity at the Periphery of the Workday

Work connectivity becomes especially relevant in the context of being connected to work before or after official work hours, that is, at the periphery of the workday, as this form of connectivity deviates the most from the traditional notion of two separate spheres of work and private life. While there is only few examples of studies that look specifically at work connectivity (e.g. Wajcman & Rose, 2011), there is a growing number of researchers investigating the work-extending and work-intensifying aspects of smart mobile devices (e.g. Chesley & Johnson, 2015; Chesley, 2014; Moen et al., 2013; Duxbury & Smart, 2011). As we have seen in chapter 1, these studies highlight the increasing blurriness of the work – non-work boundary with implications for individual well-being, leisure time and family relations. How this affects families and women in particular and what such developments mean for women’s career prospects, I will explore in a later chapter. For now, I want to spell out the vastness of the phenomenon of “peripheral work connectivity” at TechComp and what technologies and communication channels are used most often for this purpose.

To start with employees were asked how often they connected to work during mornings prior to officially starting work or arriving at their offices, during evenings after core work hours, during weekends and public holidays and during personal holidays. The results show that bespoke peripheral work connectivity is a widespread phenomenon at TechComp (Figure 8).

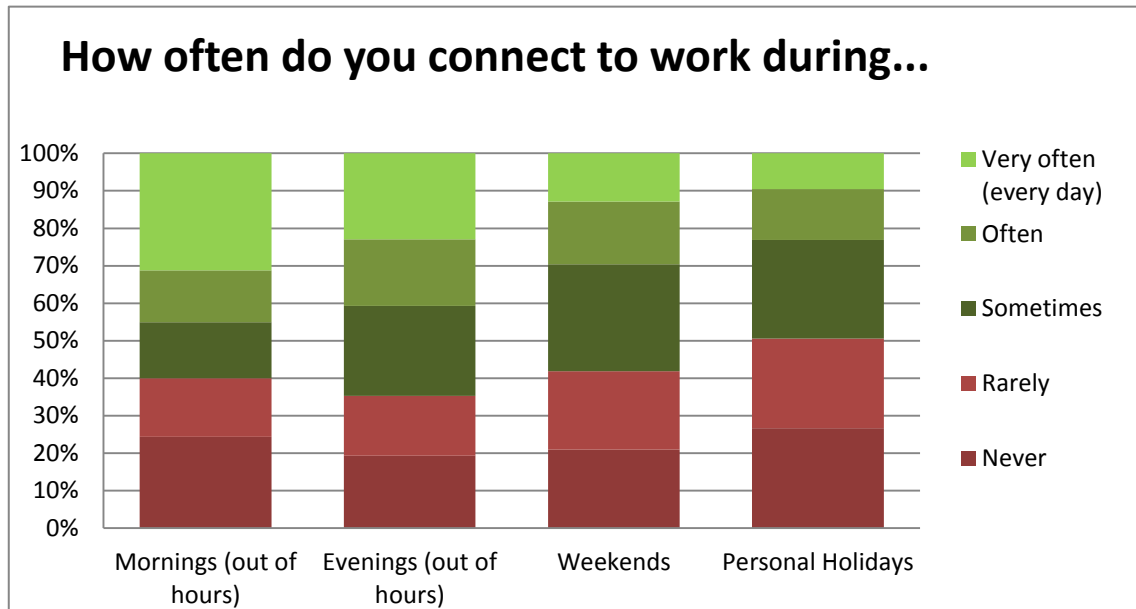


Figure 8 – Chapter 4

60% indicated to be connected to work during mornings at least sometimes and 65% indicated the same for connectivity with work in the evenings. During days off the connectivity level decreased slightly but still 58% said they connected to work during weekends and public holidays at least sometimes. 49% still said the same for connectivity with work during personal holidays.

This shows that the majority of TechComp employees regularly connects to work out of official work hours and for almost half of employees, it is common practice to connect with work even while being away on holiday. This denotes a significant shift in socially acceptable norms of being available for work at TechComp and further illustrates the earlier discussed increasingly ubiquitous nature of work that spills over into the home.

This high degree of peripheral work connectivity is enabled by the availability of smart mobile devices, in particular laptops and smartphones that the company has issued to its employees (see figure 9 below). So interestingly, it is not just smartphones that are used to engage in PWC, even though this is the technology usually studied in relation to PWC. Laptops, which are much more widely spread than smartphones are the most important tool to connect at the periphery of the day followed by company smartphones.

Yet, PWC is not limited to these two technologies. Surprisingly, 25% indicated that they also used their private phones to connect to work out of hours, 7% used their private computer and still 4% used their private tablet computer (see figure 9). This shows that there is more to peripheral work connectivity than a company facilitated tactic to equip employees with mobile devices in order to make them work longer. As below figures on use of personally owned devices demonstrate, some employees use their own resources to increase connectivity with work.

The question then is whether this is the result of voluntary choice or whether norms and expectations of connectivity at TechComp have surpassed the availability of technology. This highlights very well how employees actively take part in negotiating their own level of connectivity without a higher managerial force and a technology singularly imposing it on them. Following Foucault's notion of power being relational, dynamic and productive, employees are actively implicated in reconfiguring power relations that govern the employee-employer relationship.

Furthermore, the data revealed that people mainly connect to work out of core hours to do emails (82%, see figure 10), showing that norms of email responsiveness at TechComp are high, possibly even for those who don't own a company smartphone. Yet as has been argued by Loeschner (n.d.), a mismatch of technology availability and high expectations of responsiveness can contribute to the perception of email overload for employees. Hence, it can be an explanation why employees without company technologies revert to use their personal devices to mitigate this feeling.

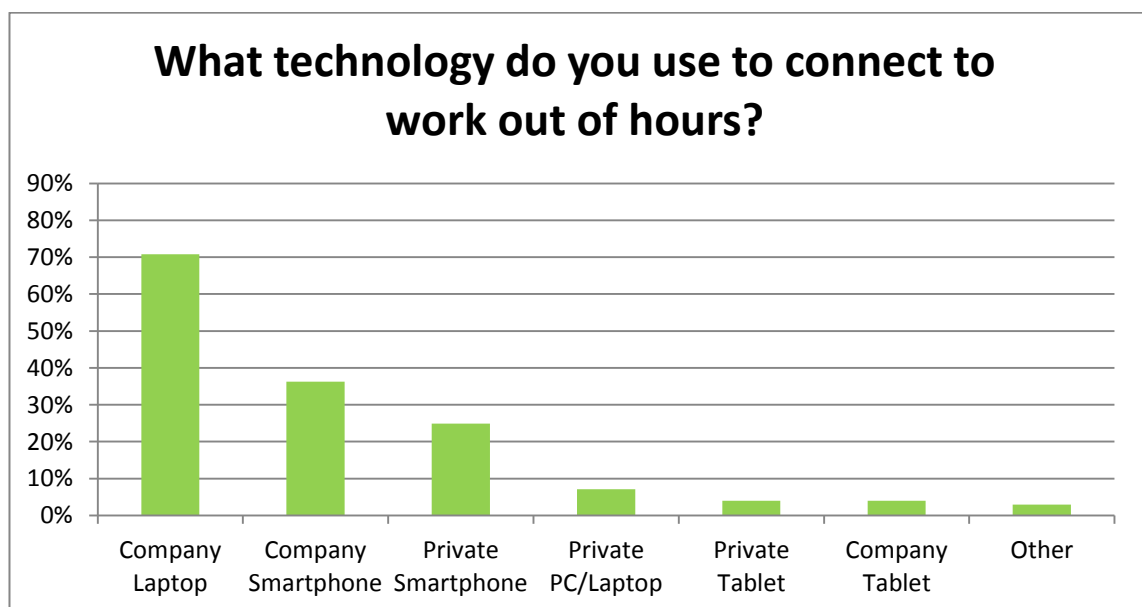


Figure 9 – Chapter 4

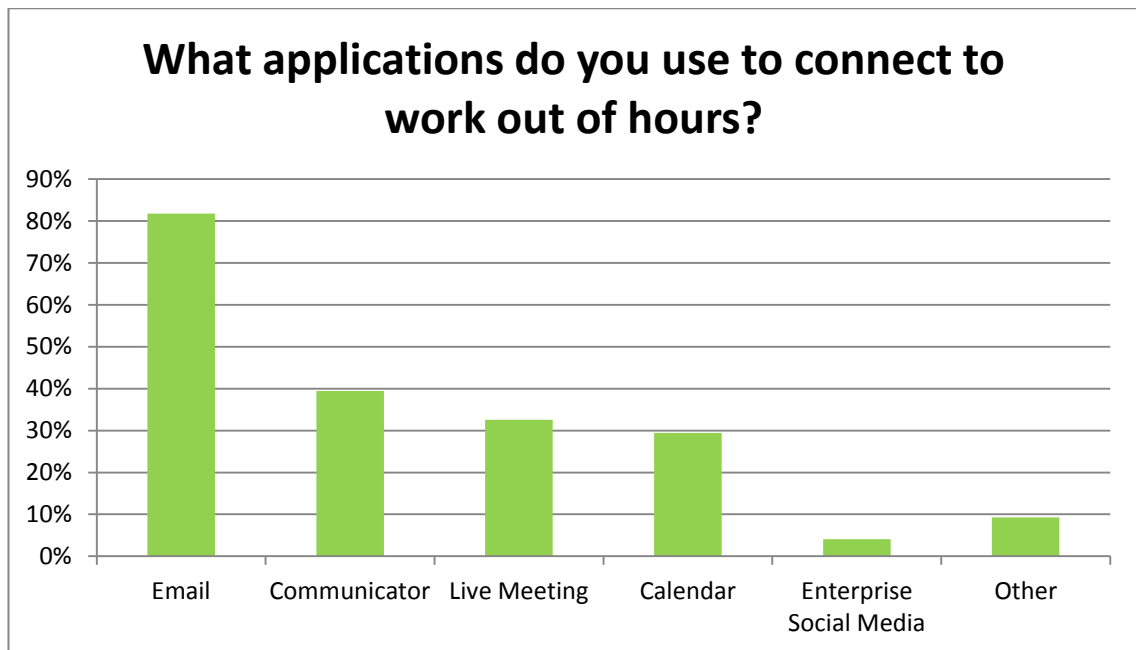


Figure 10 – Chapter 4

#### 4.1.2. Peripheral Work Connectivity through Personal Devices

So, when we look at the availability of smartphones in particular, it becomes clear that the distribution of this kind of mobile device is indeed both very limited and falls behind the realities of private ICT use by TechComp employees. For instance, while 78% of all participants had indicated to possess a private smartphone, only 41% said that they owned a company smartphone. Furthermore, there are significant differences between countries with Western ones being more likely to equip their employees widely with company smartphones (see figure 11). In addition, not having access to a company smartphone is associated with the increased tendency to use one's private phone for work, as can be seen from figure 11 and 12. While this trend is moderated by other factors such as distribution of job types per country, a lack of company smartphone availability is statistically significantly related to the increased use of one's personal phone (Cramer's  $V = 0.234$ ,  $P < 0.01$ ).

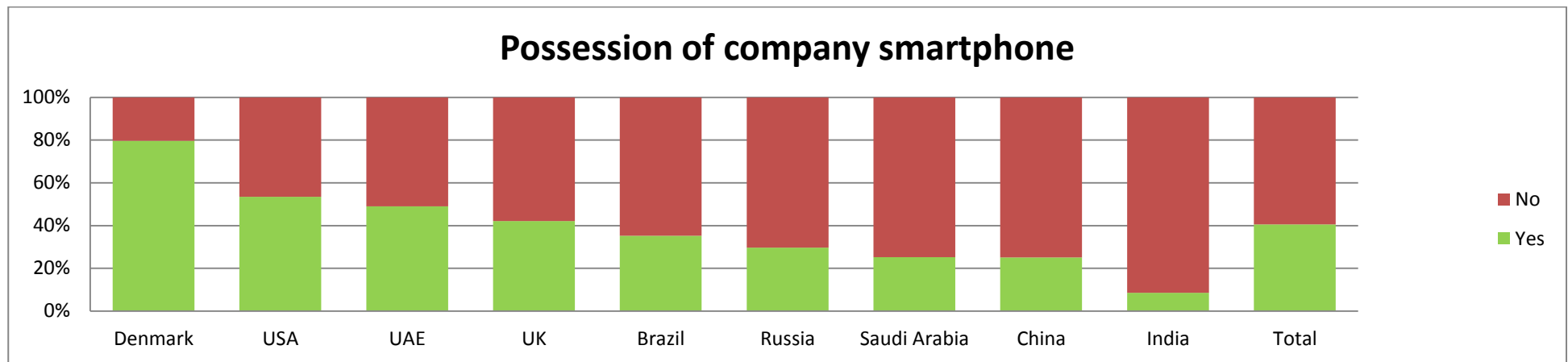


Figure 11 – Chapter 4

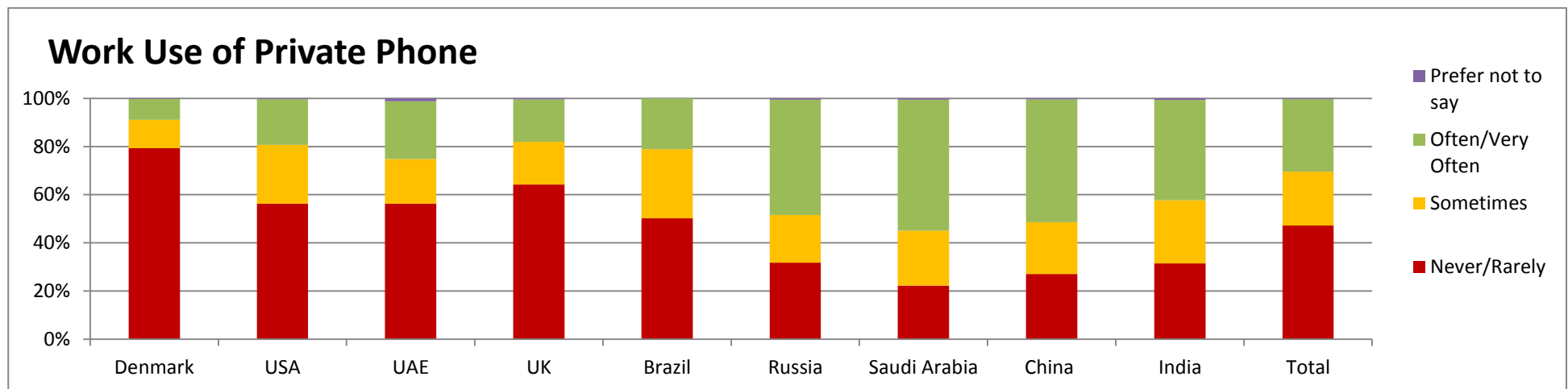
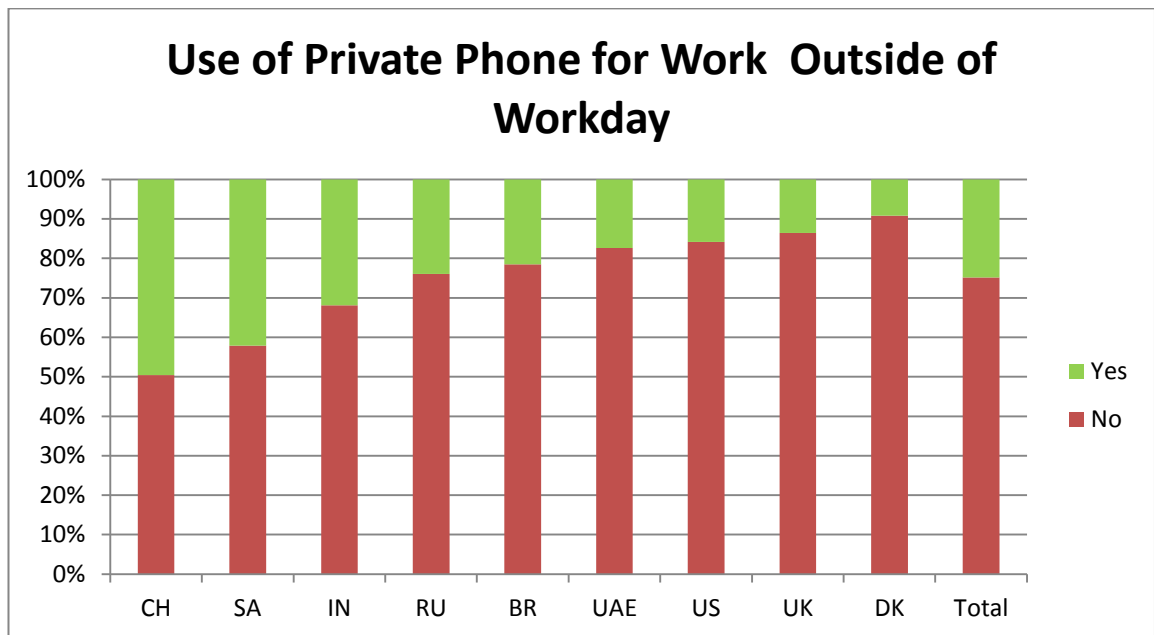


Figure 12 – Chapter 4

In addition, when explicitly looked at private phone use outside of work hours, then the trend becomes even more visible (figure 13).



**Figure 13 – Chapter 4**

This tendency for increased use of private smartphones for work in non-Western countries to establish peripheral work connectivity, coupled with the absence of company smartphones, raises important questions of uncompensated resource exploitation by the company. The trend for Western countries to show less signs of this source of employee exploitation could then be associated with stronger employee protection through legislation and employee representation bodies. These forms of employee protection lead to very clearly regulated use of both private devices for work and private use of work devices and are much stronger in countries such as the UK and Denmark than in India or China. This was also apparent prior to and after conducting the survey, as legal and workers council alignment was not necessary for non-Western countries. In the UK, Denmark and the US there were long processes attached to conducting an employee survey as well as severe constraints on communicating the results internally.

In addition to such legal and structural considerations, the social aspect of feeling out of the loop in times of high connectivity expectations may further explain, why employees revert to using private phones, when no company phone is available. This is supported by the data (see figure 14), which revealed that employees who didn't own a company phone were statistically significantly more likely to feel disconnected and out of the loop (Cramer's  $V = 0.178$ ;  $P > 0.01$ ). It also illustrates the paradox that in light of high expectations of responsiveness and a generally high level of peripheral work connectivity at TechComp, employees may find it

necessary to increase PWC with colleagues and work, even though the company is not prepared to provide the necessary means for this purpose, effectively shifting the responsibility for certain means of work to employees.

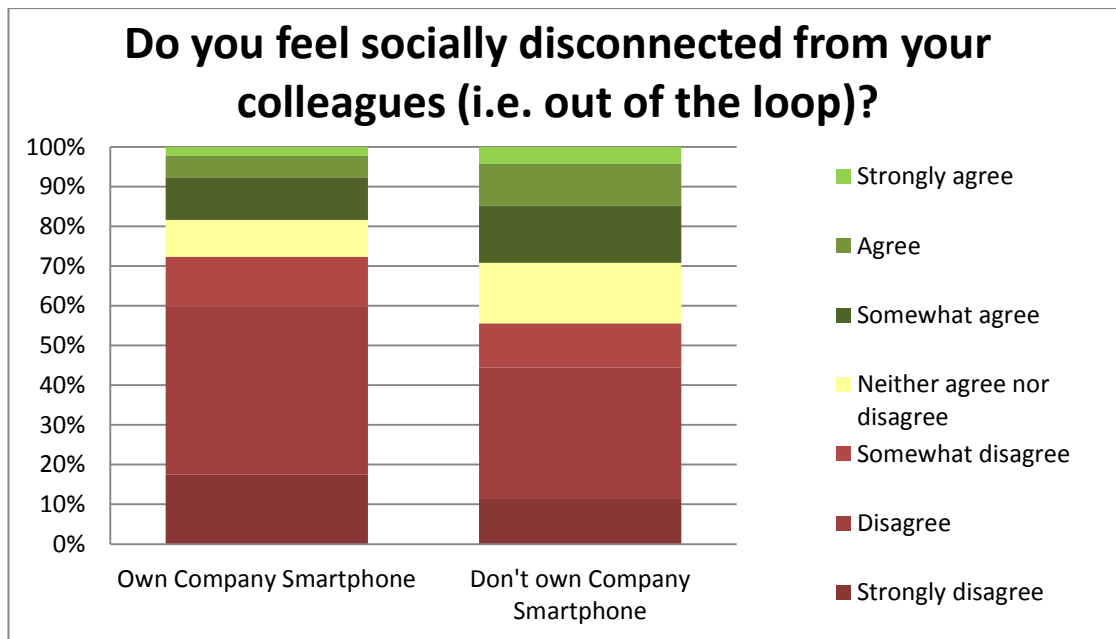


Figure 14 – Chapter 4

Finally, another reason for use of personal devices could be a technological aspect that is again linked to aspects of power and hierarchy, namely, the quality and stability of the communication channels made available to employees. In the chart below it becomes visible that a large amount of employees at TechComp across all countries were greatly dissatisfied with the quality of the communication technology made available to them, yet the biggest deficits existed in non-Western countries such as Russia, Brazil and China (see figure 15). While such lack could also be due to infrastructural issues, the high private use rates of IT in these countries made this explanation unlikely.

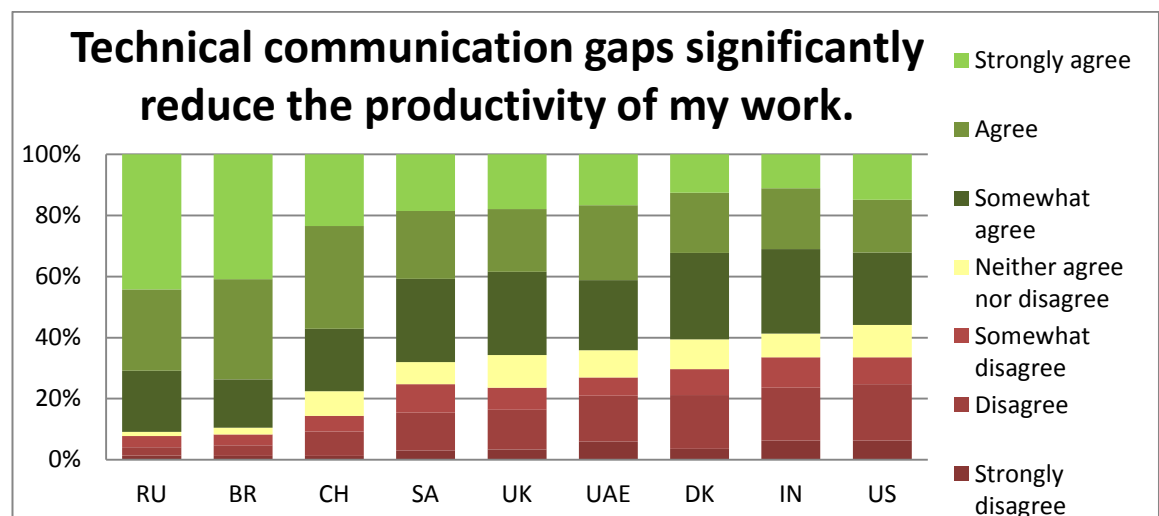


Figure 15 – Chapter 4



This was moreover in line with earlier mentioned comments of employees that pointed out the paradoxical situation that TechComp was priding itself with the image of being a high-technology company, but at the same time it couldn't provide adequate IT to employees. The high level of perceived media literacy at TechComp (i.e. 75% described themselves as having pretty good to extremely good media literacy and 65% and 63% said the same for their colleagues and managers respectively) further points to the fact that employees' skills and interests in using new ICT didn't match the current state of technology at TechComp. For many the means made available to them didn't live up to the standards of their private ICT and hence they preferred to use their personal devices.

For instance, and as mentioned previously, according to many comments in the survey as well as informal and formal conversations in the field, it was in fact a matter of hierarchical standing in the company that determined whether one received a smartphone at all and what's more what model one received rather than an actual need based evaluation as the following home-based employee pointed out:

*"Yes, yes. If you work in [country headquarters], it seems like you have an i-Phone. What makes working in [country headquarters]'s office any more special than working from home. It is about the job you do and having the right tools."* (Female, 35-45 years, Accounting, UK)

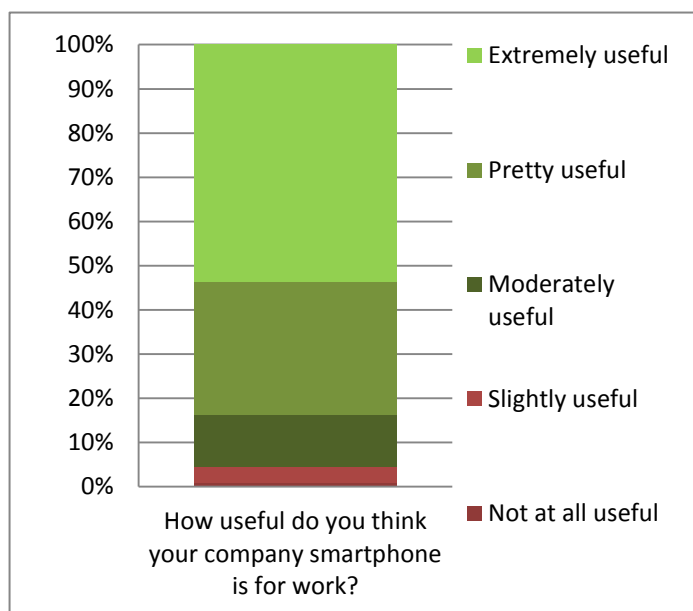


Figure 16 – Chapter 4

Especially the corporate headquarters seemed to have an exclusive standing. There and in corporate functions generally, i-Phones were widespread in contrast to non-corporate business divisions that mainly used Android phones. And while employees who possessed a company smartphone mostly perceived such devices as useful for their work (see figure 16), these visible differences of

smartphone availability and models functioned as markers of hierarchy. They fostered frustrations, demoralization and jealousy amongst employees and especially resentments towards the corporate headquarters.

#### 4.1.3. Connectivity Norms and Expectations

What the trend for use of personal devices for work also demonstrated was not just the fact that hierarchies shaped who received a company phone and who didn't. It also illustrated that a high degree of connectivity and responsiveness was expected by and of all employees and this was not necessarily bound up with the technology made available to them by the company. As figure 17 demonstrates, 94% of employees at TechComp considered it good



Figure 17 – Chapter 4

practice replying to messages from their colleagues at least within the same day. And there were even more employees (97%) who said the same about responding to messages from their managers. Here 34% even said that they considered it good practice to reply to managerial messages immediately. In contrast, norms of responsiveness were much lower when replying to messages from family and friends received during the workday.

This shows that the work related norms of responsiveness were quite high at TechComp, leaving the employees little choice but to use personal devices to meet such high demands.

The majority of employees, however, didn't seem to have a problem with such expectations, as 56% stated that they considered the alignment of their own with their management's connectivity and responsiveness expectations to be pretty good or excellent (see figure 18). 60% also considered the communication of expectations by their management as pretty good to extremely good. Nonetheless, for 40% of employees, managerial expectations of

connectivity seemed to align only moderately well or poorly with their own preferences. And as I will discuss in a later chapter, such mismatch of expectations may impact on career progress especially in relation to gender.

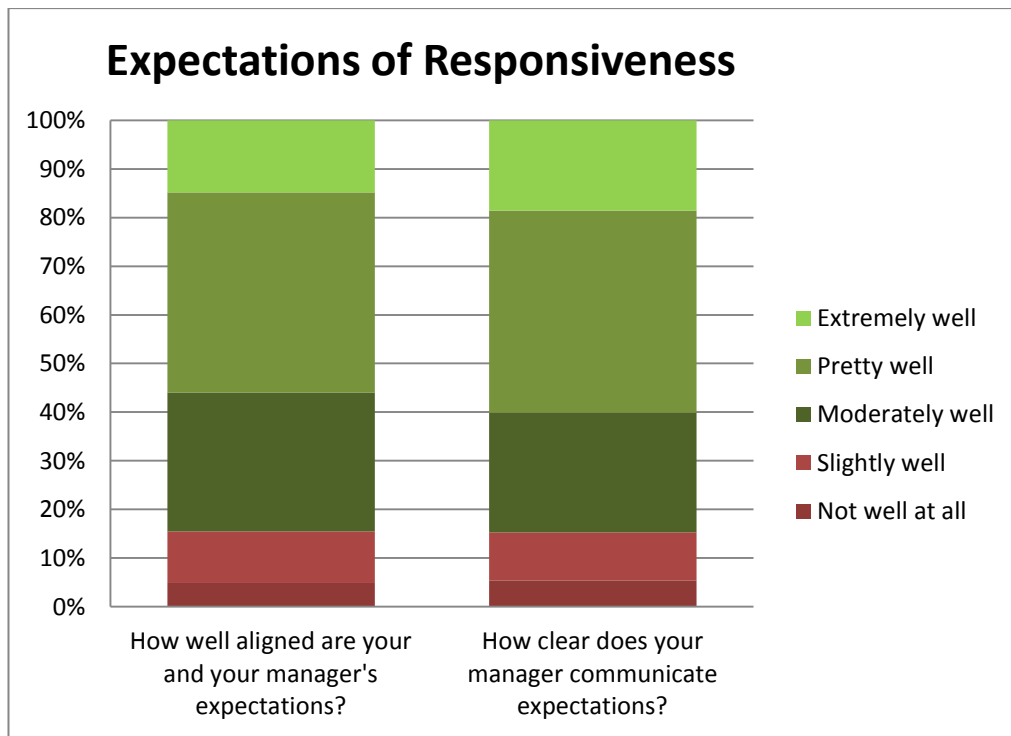


Figure 18 – Chapter 4

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To sum up, communication at TechComp made up a big part of daily business and the majority of it was technology mediated. Furthermore, the availability of a smart mobile device (e.g. laptop, smartphone) was afforded to most employees; and many made use of these tools by regularly connecting to work outside of core work hours, leading to a very wide spread fairly high level of PWC. When looking at norms of responsiveness, it also became clear that TechComp employees had high expectations of responsiveness for work messages but many considered their expectations to be well aligned with their management. This shows that high responsiveness levels were not a one-directional and detested imposition by management. Instead a normalizing process had led to wide-ranging acceptance of such levels.

Yet, we have also seen that there were significant technical flaws with the quality and stability of the technology and the network provided to employees and often equipment wasn't distributed according to need but hierarchical position. This left many employees disappointed with the fact that a technology company like TechComp was no longer able or willing to provide state-of-the-art equipment to employees.

This not only left these employees frustrated, but also furthered the use of personal devices for work purposes in great numbers. Yet this use of private ICT comes with major risks. Use of personal devices raises concerns of data security for the company (Budak, 2012; Bennett & Tucker, 2012) but it is also a privacy issue for employees “where the employees have more to lose” (Miller et al., 2012: 55). For instance, companies may gain access to data that the employee would rather keep private and the burden of purchase of means of production is increasingly shifted to the employee.

## **4.2. Measures: What Drives Peripheral Work Connectivity?**

Having described the current IT and communication landscape at TechComp, we can conclude that the company had a high degree of work connectivity as well as peripheral work connectivity, linked with high expectations of responsiveness. Yet, we have also seen that there were significant differences in how much and how often one communicated at TechComp, highlighting that there were also different levels of PWC. Since PWC, as we have seen in chapter 1, may have major implications for work practices, boundary management and perceptions of overload, it is important to identify what drives work connectivity at TechComp and in particular what drives peripheral work connectivity. This I will set out to do in the second part of this chapter.

First, I will spell out in more detail the dependent variable as well as the independent variables that were included or excluded from this model. I will start by looking at general demographic factors such as country, gender, age etc. Then I will look at workplace demographics such as job level, job type, and team set-up, followed by ICT related factors such as smartphone availability. I will then present the connectivity regression model with all included predictor variables. Finally, I will conclude by describing a typical profile of a highly connected TechComp employee.

### **4.2.1. Dependent Variable**

*Peripheral Work Connectivity:* As I have outlined in chapter 1, peripheral work connectivity is the degree of connectivity an individual has with his or her workplace while away from the main office and during non-work hours. Kolb (2008) has conceptualized connectivity as the connection of two technological devices with each other. It does not require an active act of communication (e.g. writing of an email) to take place. Furthermore, as I have spelled out earlier, connectivity and PWC in particular are new agents in power negotiations. PWC is a state of consciousness, a form of disciplining oneself to fulfill normalized expectations of others and of oneself and to reduce uncertainty.

For these reasons I measured peripheral work connectivity by means of a composite scale out of four different questions, each capturing a different aspect of the periphery of work connectivity (Cronbach's Alpha = 0.886). On a 5-Point Likert Scale (Never = 1; Rarely = 2; Sometimes = 3; Often = 4; Very often (daily) = 5) participants were asked the following questions: How often do you connect to work...

1. ...prior to arriving to work in the morning?
2. ...after leaving the office in the evening?
3. ...during weekends and public holidays?
4. ...during personal holidays/annual leaves?

Scores from these answers were combined and then divided by four to receive an averaged overall peripheral work connectivity score (PWCS) ranging from 1-5, with 1 = no peripheral work connectivity and 5 = daily peripheral work connectivity (see descriptive statistics below in table 9).

| Descriptive Statistics | N     | Minimum | Maximum | Mean | Std. Deviation |
|------------------------|-------|---------|---------|------|----------------|
| <b>PWCS</b>            | 19075 | 1.00    | 5.00    | 2.89 | 1.21           |

Table 9 – Chapter 4

In addition, to assist analysis and visualization of the independent variables the PWCS was used to group respondents into four categories of degree of peripheral work connectivity. Group 1 (i.e. very low connectivity) included participants, whose PWCS ranged from 1-2. Group 2 (i.e. low connectivity) consisted of individuals, whose PWCS ranged from greater 2 to 3. Group 3 (i.e. moderate connectivity) included respondents with PWCS range greater 3 to 4 and finally, group 4 consisted of participants with scores greater than 4 (i.e. high connectivity).

#### 4.2.2. Independent Variables

The following variables have been tested in the model as independent variables due to their theoretically derived relevance, as will be explained below.

##### 4.2.2.1. Demographic Variables

###### 4.2.2.1.1. Gender

Gender plays a major role in how people conduct their work and also in relation to what extent they integrate their private life with their work life. So for instance, Sturges (2013) has found that women tend to work fewer hours due to other responsibilities, often prioritizing their home responsibilities over their work responsibilities. A recent study on how people in sales

utilize new communication technology, such as smart mobile devices, in order to manage their work – non-work boundary has found that there are different use types and each use type is associated with a different degree of struggle to balance both work and private life (Duxbury, Higgins, Smart & Stevenson, 2014). These types were identified as integrators, segmentors and struggling segmentors. While the categories of integrators and struggling segmentors were mixed in terms of gender, the group of segmentors was only occupied by women, showing that some women want to segregate much more strongly to cope with demands placed on them in both spheres of their lives.

According to Kossek, Lautsch and Eaton (2006), such segregation can help avoid role conflict, a situation women are more often confronted with than men due to females still shouldering the bulk of household chores and caring responsibilities. For these reasons, gender was included as a theoretically important independent variable (see table 10).

| Gender  | Female | Male  |
|---------|--------|-------|
| Percent | 27.1%  | 72.9% |

**Table 10 – Chapter 4**

#### **4.2.2.1.2. Number of Children under 16 Living in One's Household**

Studies have shown that childcare responsibilities have significant effects on work-family role conflict (Kelly et al., 2014; Byron, 2008; Amstad et al., 2011). In particular, long work hours are associated with greater work-family conflict and especially for those with childcare responsibilities (Byron, 2008), while flexible work hours and spaces can mitigate such effects (Kossek et al., 2006; Scandura & Lankau, 1997). Others have furthermore argued that new technologies allow for better micro management of family (Wajcman et al., 2008). The technologically afforded possibility to work increasingly spatially and temporally flexibly can hence be viewed as a means of reducing work-family role conflict for parents. Especially mothers may profit from the possibilities afforded by peripheral work connectivity as they may allow them to balance both roles. For these reasons they may utilize the option to work outside of normal work hours in order to better fulfill their parent and their work role. Consequently, number of children was included in the model as a theoretically important independent variable to test whether and how the number of children living at home shapes peripheral work connectivity (see table 11).

| Number of Children | 0     | 1     | 2     | 3    | 4    | 5    | 6    | >6   |
|--------------------|-------|-------|-------|------|------|------|------|------|
| Percent            | 53.2% | 27.3% | 15.0% | 3.1% | 0.9% | 0.1% | 0.1% | 0.2% |

**Table 11 – Chapter 4**

#### 4.2.2.1.3. Country

While a growing number of studies are addressing the phenomenon of connectivity empirically, the large majority of such research is based in the Anglo-Saxon world with a great amount of studies coming from the US (e.g. Mazmanian et al., 2013; Matusik & Mickel, 2011) or Australia (e.g. MacCormick et al., 2012; Wajcman & Rose, 2011). Yet in order to understand the phenomenon of connectivity in the context of a global company, it is important to look at differences between countries with different backgrounds. For this reason the 9 countries that participated in the survey represent a variety of different cultural backgrounds, aiming to go beyond the Anglo-centeredness of most existing research. Consequently, country was included to test whether it shapes peripheral work connectivity (see table 12).

|         |       |       |         |        |       |       |        |              |      |
|---------|-------|-------|---------|--------|-------|-------|--------|--------------|------|
| Country | USA   | UK    | Denmark | Brazil | China | India | Russia | Saudi Arabia | UAE  |
| Percent | 37.6% | 12.4% | 6.6%    | 5.9%   | 20.8% | 11.9% | 2.2%   | 1.0%         | 1.6% |

**Table 12 – Chapter 4**

#### 4.2.2.1.4. Age

Age is also often said to be a key variable in determining the degree of work and non-work integration as well as the amount of ICT use. A 2013 study by PricewaterhouseCoopers found that Millennials (i.e. the cohort born between the early 1980s and during the 1990s) are very much concerned with adequate work-life balance and at the same time want flexible work hours and state-of-the-art technology, allowing them to utilize their day as flexibly as possible (Finn & Donovan, 2013). In another study it was also found that 88% of Millennials highly cherish the ability to integrate their work and private schedules (Asghar, 2014).

This would lead one to believe that Millennials are much more likely to show high connectivity with work outside of regular work hours as they choose to work more flexibly and at unconventional work hours. Furthermore, when looking at technology alone, a 2014 study by the Pew Research Center found that in the US 83% of people between 18 and 29 owned a smartphone, followed by 74% amongst those aged 30-49, and 49% of those between 50 and 64. A similar study by Deloitte found that in 2013 71% of people in developed countries between 18 and 54 years of age owned a smartphone, declining with age. For these reasons, age was included in the model to test whether it shapes PWCS (see table 13).

|         |      |       |       |       |       |
|---------|------|-------|-------|-------|-------|
| Age     | <25  | 25-35 | 36-45 | 46-55 | 55+   |
| Percent | 4.9% | 37.0% | 26.0% | 20.4% | 11.7% |

**Table 13 – Chapter 4**

#### 4.2.2.2. Work Related Factors

##### 4.2.2.2.1. Job Level

Connectivity with one's work greatly depends on the availability of mobile technology. And as we have seen, being equipped with technology at TechComp was associated with hierarchical position level and status. Other researchers have furthermore found that communication makes up an important part of the workday of employees in managerial roles and negotiates how employees communicate (Rennecker & Godwin, 2005; Leonardi et al., 2012; Barley et al., 2011). In addition, high status employees were the earliest group to adopt new mobile technologies due to which they have been most widely studied (e.g. Besseyre des Horts et al. 2012; Duxbury et al., 2014). For this reason it is important to include job level as an independent variable in this analysis (see table 14).

| Job Level | Individual Contributor | Middle Management | Senior Management |
|-----------|------------------------|-------------------|-------------------|
| Percent   | 73.8%                  | 21.7%             | 3.5%              |

**Table 14 – Chapter 4**

##### 4.2.2.2.2. Job Type

Most research to date has primarily focused on high status professions and occupations, assuming that these job types are the most likely to experience great levels of connectivity (e.g. Duxbury et al., 2014; Barley et al., 2011; Mazmanian et al, 2013). However, much less is known about other job types and their degree of connectivity (Hislop & Axtell, 2011). Consequently, it is crucial to include job type as an independent variable in the model to account for variation of connectivity due to the characteristics of one's work role (see table 15).

| Job Type           | Percent | Job Type           | Percent |
|--------------------|---------|--------------------|---------|
| Audit              | 0.2%    | Legal              | 1.1%    |
| Communications     | 0.9%    | Manufacturing      | 6.7%    |
| Customer Service   | 10.3%   | Marketing          | 2.5%    |
| Engineering        | 20.0%   | Product Management | 1.6%    |
| Health & Safety    | 1.1%    | Project Management | 7.2%    |
| Finance            | 7.2%    | Quality Management | 4.1%    |
| General Management | 2.3%    | Real Estate        | 0.3%    |
| HR                 | 1.9%    | R&D                | 6.5%    |
| IT                 | 8.4%    | Sales              | 10.3%   |
| Internal Services  | 1.3%    | Procurement        | 5.3%    |
| Strategy           | 0.7%    |                    |         |

**Table 15 – Chapter 4**



#### 4.2.2.2.3. Degree of Collaboration with Colleagues in Different Time Zones

TechComp is a global organization and many employees regularly worked in international teams with colleagues spread around the world and in different time zones (this will be discussed in more detail in chapter 6). A growing body of research on distributed teams has identified many issues that employees face when they work with colleagues who are not physically collocated. So for instance, it is much harder and takes much longer to form a distributed team and to develop personal relationships since communication is mainly technology mediated and non-verbal cues and spontaneous communications are usually absent (MacDuffie, 2007). Such issues become intensified, as the difference in work hours becomes larger.

Furthermore, for many employees in distributed teams it is hard to strike a balance between being over-connected and under-connected to their colleagues and norms of peripheral work connectivity tend to be higher in such teams (Collins & Kolb, 2012). For this reason it is very important to include this independent variable in the model.

To measure this variable, employees were asked the following question:

In your current job, what best describes how often you collaborate with colleagues in a different time zone (more than +/- 1 hour time difference)?

Respondents could choose from Never = 1, Less than once a month = 2, Once a month = 3, A few times a month = 4, Once a week = 5, A few times a week = 6, Daily = 7

Responses were then grouped in the following way:

No collaboration: Never

Infrequent collaboration: Less than once a month – Once a month

Frequent collaboration: A few times a month – Once a week

Constant collaboration: A few times a week – Daily

| Frequency of collaboration<br>with employees in different<br>time zone | Never | Less than<br>once a<br>month | Once a<br>month | A few<br>times a<br>month | Once a<br>week | A few<br>times a<br>week | Daily |
|--|-------|------------------------------|-----------------|---------------------------|----------------|--------------------------|-------|
| Percent  | 25.2% | 15.1%                        | 5.9%            | 13.5%                     | 6.7%           | 17.8%                    | 15.8% |

**Table 16 – Chapter 4**

#### 4.2.2.2.4. Degree of Mobility of One's Work

Mobile work has received a lot of scholarly attention for decades now but with the dawn of smart mobile devices of recent years spatial mobility and flexibility have become buzzwords in the Western corporate world. Many companies have even made the option of mobile work, be it from home or in a third space, one of their key fringe benefits that they use to attract and retain valuable “knowledge workers”. TechComp is one example of such firms.

This focus on knowledge workers shows however that such privilege of spatially flexible working is only available to a small group of elite professionals and managers and excludes the majority of employees (Coyle, 2005; Morgan, 2004). Yet it is this group of high status professionals who are most likely enjoying the possibility for working spatially flexible and who are also facing the greatest pressures to be always on, facilitated by the availability of technology (Collins & Kolb, 2008). For these reasons ‘degree of work from home’ (i.e. telework) and ‘in a third space’ have been included in the model (see tables below).

|                    |             |       |       |        |        |        |        |        |      |
|--------------------|-------------|-------|-------|--------|--------|--------|--------|--------|------|
| Amount of telework | None at all | 1-5h  | 6-10h | 11-15h | 16-20h | 21-25h | 26-30h | 31-35h | >35h |
| Percent            | 30.2%       | 33.5% | 17.2% | 6.0%   | 3.9%   | 1.7%   | 1.0%   | 0.6%   | 6.1% |

**Table 17 – Chapter 4**

|                             |             |       |       |        |        |        |        |        |      |
|-----------------------------|-------------|-------|-------|--------|--------|--------|--------|--------|------|
| Amount of work in 3rd space | None at all | 1-5h  | 6-10h | 11-15h | 16-20h | 21-25h | 26-30h | 31-35h | >35h |
| Percent                     | 54.9%       | 23.1% | 7.2%  | 3.3%   | 2.6%   | 1.5%   | 1.4%   | 1.3%   | 4.5% |

**Table 18 – Chapter 4**

#### 4.2.2.2.5. Pressure of Responsiveness

In recent years, we have seen debates around the question what effects smart mobile devices have on work and private life. Researchers generally agree that mobile technologies have facilitated an increase in peripheral work connectivity and led to high norms of availability and responsiveness outside of hours (Mazmanian et al., 2013; Duxbury et al., 2014; Matusik & Mikel, 2011). Turkle (2008) even goes as far as saying that we now need to justify when we disconnect. For this reason, the perceived pressure of responsiveness is a crucial variable to be included in the model. This variable has been computed by creating a scale from the responses to three questions (Cronbach's Alpha = 0.893):

How often do you feel you need to respond quickly (within 1 hour) to work related digital messages...

1. ...before or after your core work time?
2. ...during weekends/public holidays?
3. ...during personal time off/annual leaves?

Response options were provided in form of a 5-point Likert scale where 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = All the time. The answers to these questions were summed up and divided by three, leading to a pressure score between 1 - 5, where 1 reflected “no perceived pressure”, and 5 represented constant pressure. The summary statistics for this variable are given in table 19.

|                | N     | Minimum | Maximum | Mean | Std. Deviation |
|----------------|-------|---------|---------|------|----------------|
| Pressure score | 19370 | 1.00    | 5.00    | 2.70 | 1.01           |

**Table 19 – Chapter 4**

#### **4.2.2.2.6. Work Autonomy**

In addition to discussed findings linking increased responsiveness pressures with smart mobile devices and connectivity, research has also found that there are contradictions surrounding the use of such technology (Jarvenpaa & Lang, 2005). In particular, Mazmanian et al. (2013) have identified an autonomy paradox in which the possession of smart mobile devices is initially associated with increased work autonomy but that the collective use of such devices has led to shifting norms of responsiveness, compromising earlier acquired increase in autonomy.

For this reason autonomy was included in the model as independent variable measured by means of a 9 item scale (Cronbach’s Alpha = 0.841), covering different dimensions of work autonomy, as conceptualized by Breugh (1999, 1985). Please refer to the methodology chapter (chapter 2) for a more detailed description of how the scale was composed.

Participants were asked: How much influence do you have on deciding...

1. ...how hard you work?
2. ...what tasks you are to do?
3. ...how you are to do the tasks?
4. ...the quality standards to which you work (i.e. criteria by which you are evaluated)?
5. ...when you work (i.e. start, finish, take breaks)?
6. ...from where you work, e.g. home, main office, client site, café, etc.?
7. ...how you communicate at work (i.e. what medium you choose for communication)?
8. ...how often you connect to work after regular hours?
9. ...when to turn off your company communication devices?

The questions were presented in form of a 5-point Likert scale where 1 = none at all, 2 = not much, 3 = a moderate amount, 4 = a fair amount, 5 = a great deal. Responses to these 9

questions were then combined and divided by 9, leading to an autonomy score between 1 and 5, where 1 reflected no work autonomy at all and 5 represented very high work autonomy.

Summary statistics for the variable are presented in table 20:

|                | N     | Minimum | Maximum | Mean | Std. Deviation |
|----------------|-------|---------|---------|------|----------------|
| Autonomy score | 18754 | 1.00    | 5.00    | 3.57 | 0.75           |

**Table 20 – Chapter 4**

#### **4.2.2.3. ICT Related Factors**

In addition to these demographic and job related aspects, it is important to look at Information and Communication Technology that has to be available in some form or another in order to enable connectivity. This does not automatically mean that the company has to provide employees with the necessary technology. Instead I have shown earlier that often employees use their personal devices for work purposes demonstrating a trend towards “Bring Your Own Device”. In addition, mobile devices have been associated with higher levels of connectivity and have even been labeled work extending technologies (Duxbury & Smart, 2011; Duxbury et al., 2014).

##### **4.2.2.3.1. Company Smartphone Ownership**

In this context, particular attention has been paid to mobile phones and especially smartphones, which have been seen as the main enablers of peripheral work connectivity (Perlow, 2012; MacCormick et al., 2012; Matusik & Mickel, 2011), due to which I included company smartphone ownership as independent variable (see table 21).

| Own company smartphone | Yes   | No    |
|------------------------|-------|-------|
| Percent                | 40.6% | 59.4% |

**Table 21 – Chapter 4**

##### **4.2.2.3.2. Permission to Use Work Phone Privately**

In addition to owning a company smartphone, the question whether employees are allowed to use their work phone privately is another key aspect to consider. A previous study has found that employees who only own a company smartphone and use it for their private communications as well are more likely to be available around the clock, as they tend to carry their phone with them all the time, even during holidays (Loeschner, n.d.). This reflects earlier discussed boundary theory (Ashforth et al., 2000; Fonner & Stache, 2012), which states that individuals have different levels of integration between work and private life. Using only one phone for communications in both domains and carrying it with it at all times tends towards an integration strategy as other scholars have found that many employees segregate by leaving

their work phone in a different place during time off from work (Hislop & Axtell, 2011). For this reason it was important to include this independent variable in the model (see table 22).

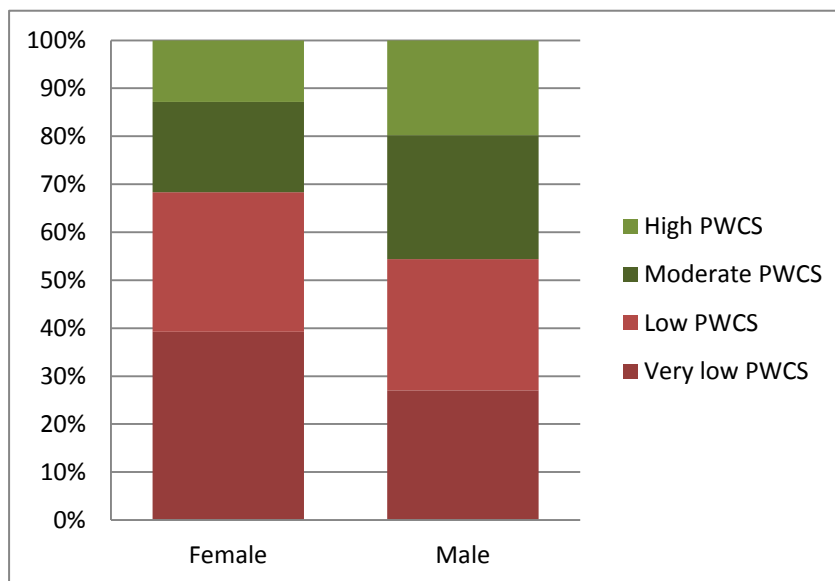
|   |       |       |            |
|---|-------|-------|------------|
| Permission to use<br>smartphone privately | Yes   | No    | Don't know |
| Percent                                   | 41.0% | 23.9% | 35.1%      |

**Table 22 – Chapter 4**

### 4.3. Results – Modeling Connectivity at TechComp

#### 4.3.1. Demographic Variables

##### 4.3.1.1. Gender



**Figure 19 – Chapter 4**

From figure 19 we can see that also at TechComp women were significantly less probable to be highly connected to their work outside of core office hours than men. While close to 46% of men indicate to have moderate to high PWC, only 32% of

women report the same. So gender seems to be an important driver of peripheral work connectivity. Unsurprisingly then, when regressing gender in relation to connectivity, gender added significantly to the prediction ( $B_{HC} = 0.098$ ,  $St. Error_{HC} = 0.015$ ,  $P < 0.01$ ). This meant that in the model presented, being male increased one's predicted connectivity level by 0.098 units, all other variables held constant.

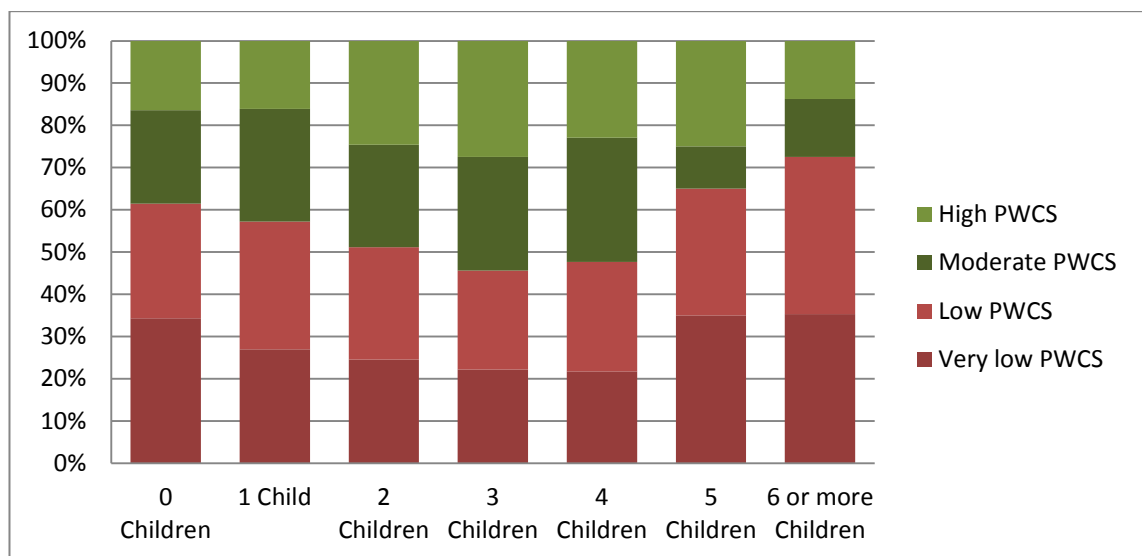
Yet, in a world where "extreme jobs" marked by long work hours become increasingly widespread (Hewlett & Buck Luce, 2006) and expectations of 'constant connectivity' are rising (Mazmanian et al., 2013), this may significantly affect women's career prospects.

##### 4.3.1.2. Number of Children under 16 Living in One's Household

The analysis has shown that in addition to gender having children also seemed to greatly affect the way people connected to their workplace, albeit in a somewhat counterintuitive manner. The below results (figure 20) show that PWC first increased with the number of children one had living in one's household. In fact, employees with 3 children were the most connected

group overall. Once this tipping point was reached, connectivity decreased again – and most drastically between 4 and 5 children. So there was no linear relationship.

These results suggest that having children did not automatically imply that one is less available for work, as many employers often assume. Quite the opposite seemed to be the case. Indeed, other research has shown that individuals are more concerned with keeping their jobs once they have childcare responsibilities (White et al., 2003) and due to this especially men seem to invest more time and earn higher wages once they have children (McGovern et al., 2004). Women on the other hand have been found to be more likely to reduce work hours, when they face role conflict between work and family (Reynolds, 2005).



**Figure 20 – Chapter 4**

Furthermore, in times of flexible work policies and smart mobile devices at TechComp, it may well be that parents left their workplace early or on time to spend time with their children and then logged on to work again after they had put their children to sleep. These aspects may explain why connectivity with work increased initially. Once the tipping point of 3 children was reached, it appeared that family responsibilities seemed to take up more room and connectivity decreased accordingly. However, what also became clear was that having children did affect one's connectivity level with work significantly. This was also confirmed by the predictive capacity of the variable, due to which the variable was retained in the regression model. Yet, in order to account for the nonlinear pattern of this variable, responses were included in form of dummy variables (see B Coefficients in table 25 on page 143). For instance, employees who have 2 children are predicted to have a 0.1195 units higher peripheral work connectivity level than employees without children ( $B_{HC} = 0.1195$ ,  $St. Error_{HC} = 0.0184$ ,  $P < 0.01$ ).

#### 4.3.1.3. Country

When looking at figure 21 below, we can see that there are country differences in terms of connectivity. The country with the most highly connected employees were the United Arab Emirates, followed by the US, Russia and Saudi Arabia. The other two Western countries, UK and Denmark, were in the middle and the least connected countries were India, China and Brazil. This is very surprising when considering statistics on mobile device and internet usage by country, which found that already in 2012 India, China and Brazil were countries where people were heavily using the internet and communication technologies such as smartphones (The Nielsen Company, 2012).

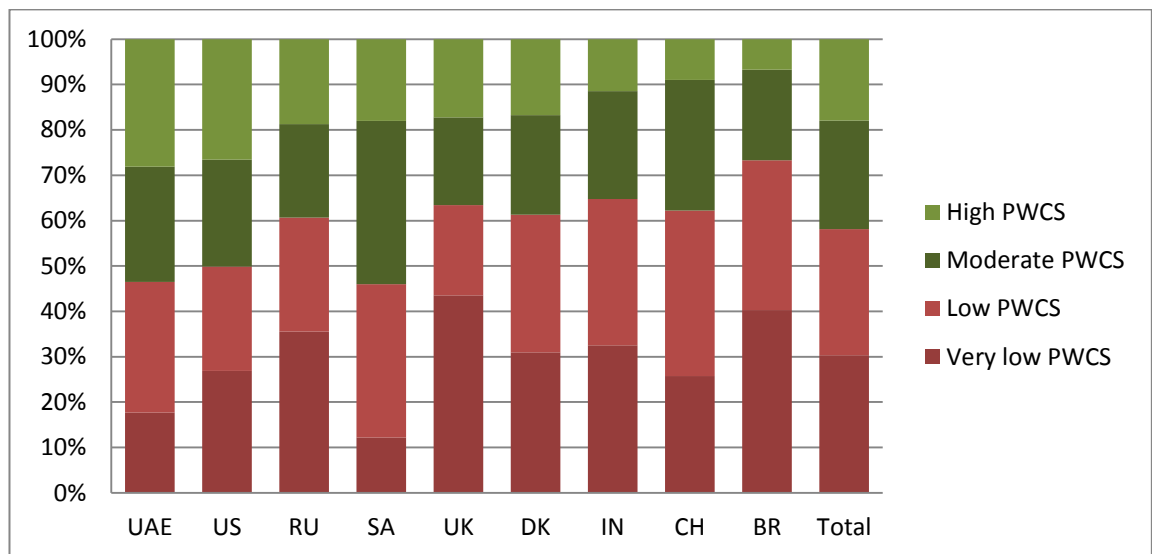


Figure 21 – Chapter 4

In the data I presented earlier, I also showed that company smartphone availability was less common in these three countries possibly explaining this result to some extent. However, the moderate amount of connectivity in Denmark, the country with the highest company smartphone distribution, indicates that there must be other reasons driving peripheral work connectivity than simply technology availability and people's level of comfort in using such technology. Instead, it could also be a matter of different ideal types of work and personal life that lead employees to uphold the boundary between work and non-work much more firmly.

In addition, as I have been told by employees from the UAE who I interviewed for this study the Middle East is a major hub for career progression at TechComp, where ambitious Western managers go on delegation to quickly progress. While they are there, they usually only focus on work and nothing else, often not having brought over their families with them, explaining long work hours and high levels of peripheral work connectivity. The variable was therefore retained in the regression analysis, as it added significantly to the predictive capacity of the

model. Brazil, the country with the lowest overall peripheral work connectivity levels, was chosen as reference category (for B Coefficients of all country dummy variables refer to table 25 on page 143). So for example, a person working in the UAE has a 0.329 units higher predicted peripheral connectivity level than a person working in Brazil.

#### 4.3.1.4. Age

From earlier discussed statistics alone one would expect to see high levels of connectivity with work amongst the younger generations and a decline with age. Yet, from figure 22 it appears that quite the opposite was true at TechComp.

In fact, it seemed that with age connectivity with work significantly increased, peaking between the ages of 46-55 and slowly decreasing again with 55+ years.

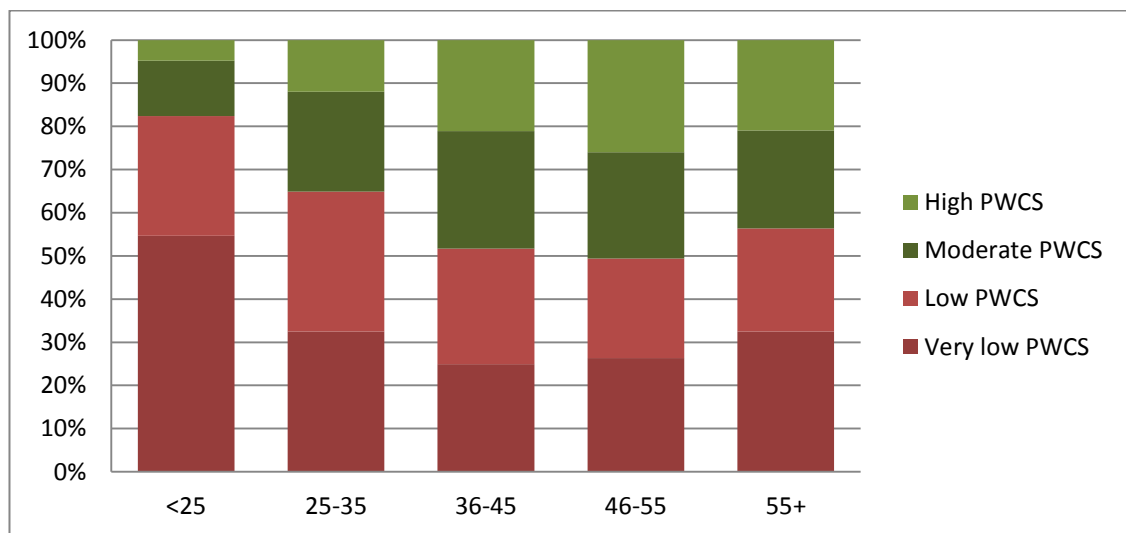


Figure 22 – Chapter 4

So while the youngest age group among the workforce, who are also often referred to as the first generation of digital natives (Palfrey & Gasser, 2008), may have been expected to demand a high degree of peripheral work connectivity so that they can flexibly shape their day, in reality, they were by far the least connected group. Putting this interesting pattern in the context of discussed hierarchical process of obtaining ICT at TechComp, it further underlines earlier discussed finding that availability of smart ICT, and with it the degree of peripheral work connectivity, was heavily shaped by hierarchy and status. So rather than age, it seemed to be one's level of employment that drove PWC at TechComp. Moreover, and likely due to this interaction, when predicting connectivity in relation to age this variable was not found to be significantly adding to the model.



### 4.3.2. Work Related Variables

#### 4.3.2.1. Job Level

As we can see from below figure, senior management was by far the group most connected to work at the periphery of the workday, followed by middle management. Job level was furthermore returned as a significant factor predicting connectivity at TechComp (Middle Management:  $B_{HC}=0.212$ ,  $Std\ Error_{HC} = 0.017$ ,  $P < 0.01$ ; Senior Management:  $B_{HC} = 0.329$ ,  $Std\ Error_{HC} = 0.033$ ,  $P < 0.01$ ). This means that being in a senior management role increased employees' predicted PWC score by 0.329 units compared to somebody in a non-managerial role. Figure 23 below further illustrates that there was a moderate to great level of peripheral work connectivity for the large majority of employees in managerial positions.

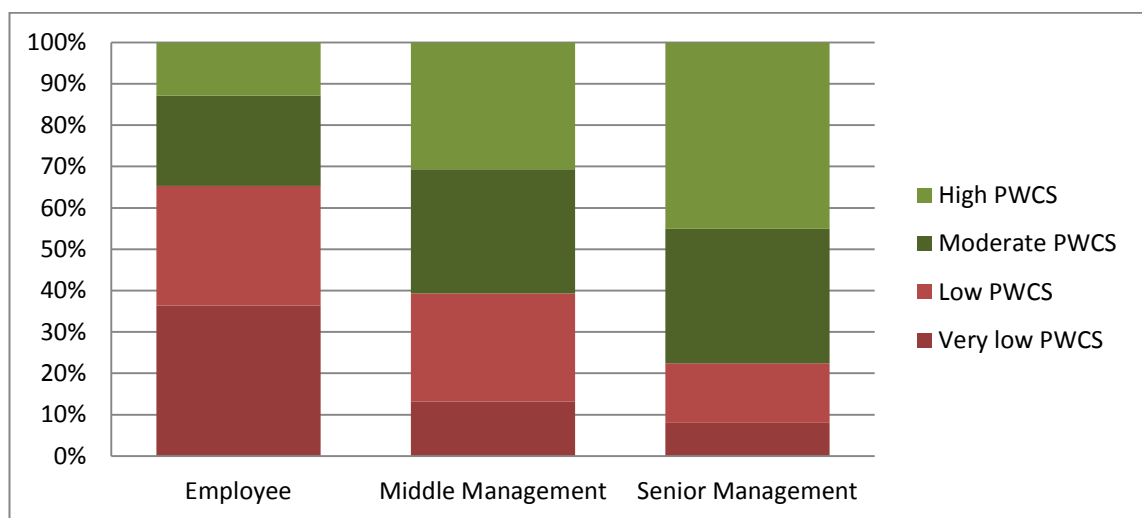


Figure 23 – Chapter 4

However, moderate to high connectivity with work outside of normal office hours was also part of the work practices of 35% of employees without any managerial responsibility. This showed that the availability for work at unconventional hours seemed to have become a widespread phenomenon at TechComp probably also because of almost ubiquitous availability of some mobile device e.g. the laptop, as I highlighted earlier.

It furthermore reflects research on the growing flexibility of work (Gallie, Felstead & Green, 2012) and the extension of work hours often facilitated by new communication technologies (Moen et al., 2013; Duxbury & Smart, 2011). Yet such long work hours are linked to increased work – family conflict (Boswell & Olson-Buchanan, 2007) and may contribute to spillover in both directions (Chesley, 2005; 2010).

At the same time this increased flexibility, facilitated by connectivity, is often seen as beneficial to the management of both work and private life. Many employees are actually grateful when

granted the option to work flexibly in terms of work hours (Kelliher & Anderson, 2010). Flexible work policies were formally in place for many job types across TechComp (excluding factory based work), but in day-to-day practice there were many other factors shaping the actual flexibility of one's job and influencing employees' connectivity level. In fact, employees reported that there was a wide gap between lived reality and the flexible policies formerly in place. Instead, it appeared that management was merely paying a lip service in many instances. They wanted to be seen as a family friendly employer but attitude and culture to support this family friendliness were often lagging behind. This shows the contested nature of the degree of flexibility employees had that was facilitated by the possibility to conduct work spatially distant from the main office. Furthermore, there were gendered implications in relation to flexible working and connectivity that I will discuss in chapter 5.

#### **4.3.2.2. Job Type**

In addition to job level, job type has also been identified as a key determinant of connectivity level. Sales as well as corporate functions such as marketing and strategy were the most connected groups at TechComp (see figure 24), while manufacturing was the least connected group (chosen as reference category in the regression analysis). This was also reflected in the regression analysis (for B Coefficients for all job types refer to table 25 on page 143). For instance, this meant that employees in a sales function were predicted to show a by 0.202 units higher level of peripheral work connectivity than employees in manufacturing.

While employees in sales and marketing were typically considered as very mobile and were often expected to be available for their customers also during unconventional hours, work roles belonging to the strategy job group had a high profile within TechComp as these jobs were heavily linked to the overall well-being and direction of the company. This showed again that a high level of connectivity at TechComp could at least partly be viewed as an expression of status and prestige. It was then somewhat surprising to see that R&D, the department that was most responsible for the future health and success of this technology company, was one of the least connected departments. This could be due to the high sensitivity of the information R&D employees dealt with that was not normally communicated widely via digital channels, as well as this type of work being typically confined to company premises. Yet, these employees then had to find different ways to make themselves seen and heard within the company, as visibility through technology mediated communicative activity was not an option.

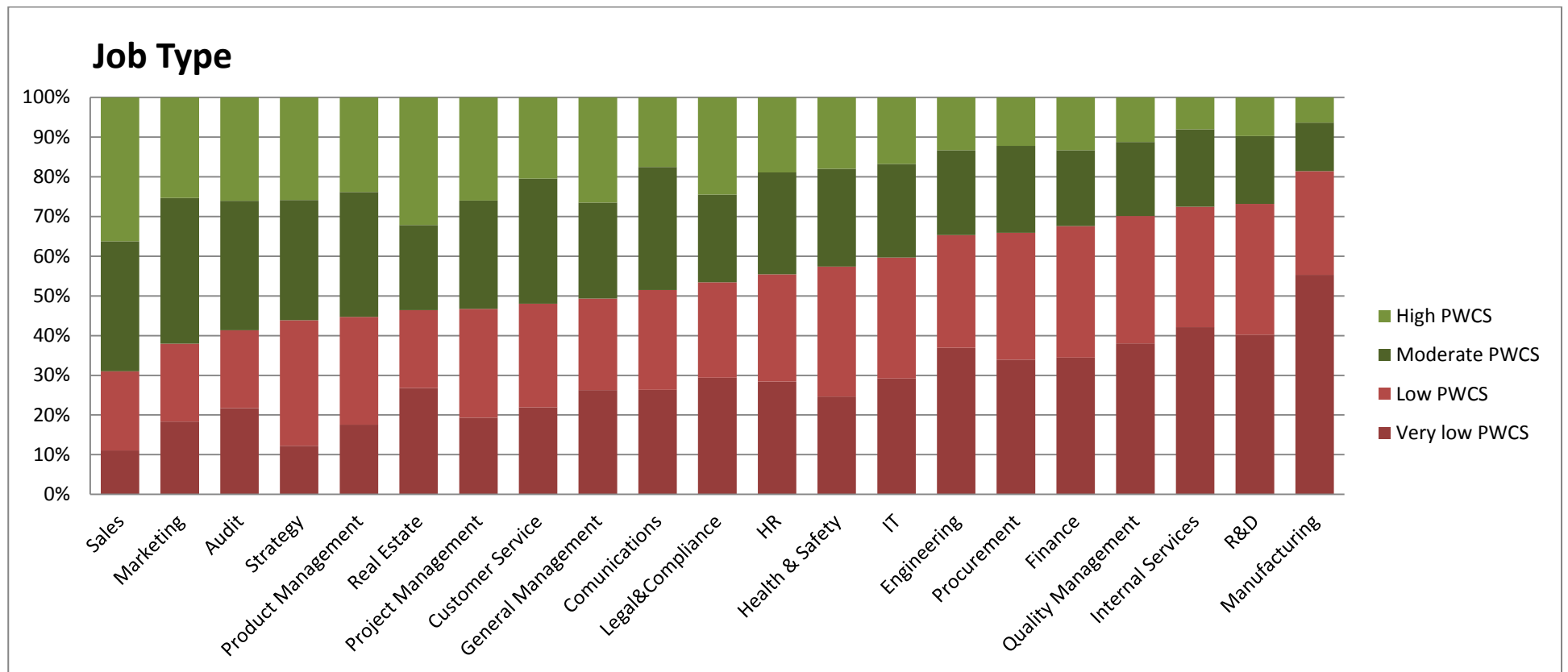


Figure 24 – Chapter 4

#### 4.3.2.3. Degree of Collaboration with Colleagues in Different Time Zones

Figure 25 illustrates that also for this variable there was a clear connectivity trend. The more often employees collaborated with colleagues in different time zones, the more likely they were connected to work outside of conventional office hours.

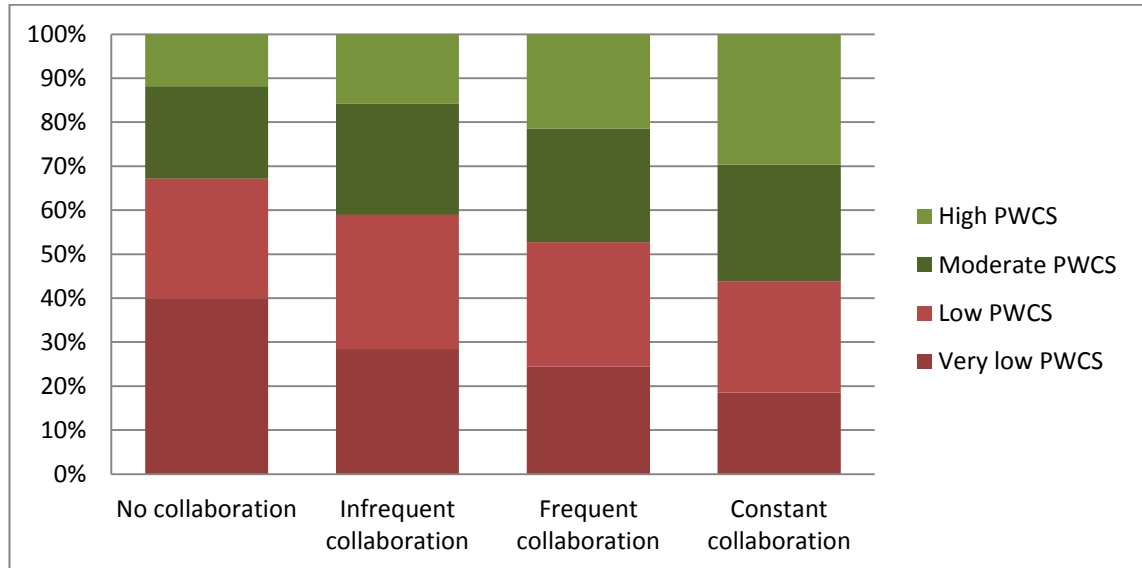


Figure 25 – Chapter 4

When considering the great value that is still often placed on synchronous and verbal communication as a substitute for face-to-face interactions, this is not surprising. For instance, employees based in Western Europe may then have to wake up early to have a video-conference with a team member in Australia, while the Australian colleague has to work until late in the evening. Consequently, unsurprisingly one's degree of collaboration with colleagues in different time zones was identified as a significant predictor of connectivity (Infrequent collaboration:  $B_{HC} = 0.062$ ,  $Std\ Error_{HC} = 0.017$ ,  $P < 0.01$ ; Frequent collaboration:  $B_{HC} = 0.133$ ,  $Std\ Error_{HC} = 0.017$ ,  $P < 0.01$ ; Constant collaboration:  $B_{HC} = 0.246$ ,  $Std\ Error_{HC} = 0.020$ ,  $P < 0.01$ ). This means that if employees constantly had to collaborate with colleagues in a different time zone, their peripheral work connectivity level was predicted to be 0.25 units higher than that of an employee who never had to collaborate with colleagues in different time zones.

As we will see in chapter 6, this connectivity was however not merely driven by the fact that employees collaborated with colleagues in different time zones; instead power and hierarchy were other crucial factors to consider in this context. Research has found that cultural background plays a very important role in such team dynamics. Often there is a hierarchy in which one culture dominates others; and often this culture is a Western one (Hinds, Liu & Lyon, 2011). In a global organization that was still very strongly dominated by the European headquarters, this was also a pattern that became visible at TechComp and manifested itself

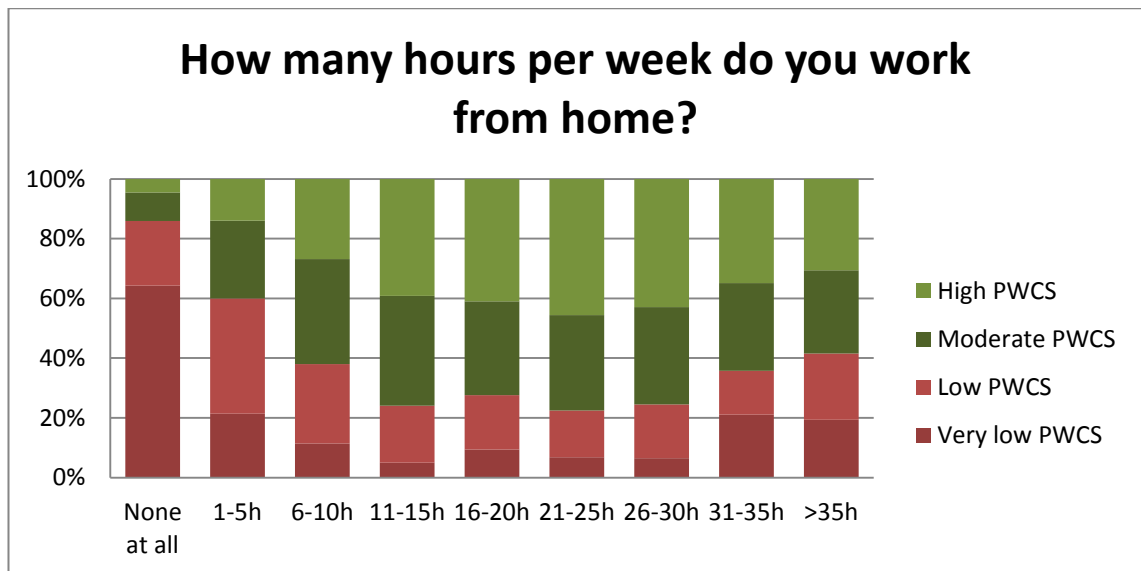
through both material and social aspects such as availability of technology as well as the power to schedule meetings at certain hours. Yet it further illustrated the contested nature of power relations at TechComp, especially in relation to peripheral work connectivity.

#### **4.3.2.4. Degree of Mobility of One's Work**

At TechComp policies enabling home office days had been introduced over the last decade and had been approved by employee representation bodies within the firm. Yet their actual implementation and acceptance seemed to greatly depend on the respective line manager and job type. So, for instance, as was reported by many employees I interviewed throughout this study, at TechComp accounting and finance departments continued to foster a culture of presenteeism, whereas HR and communications departments had embraced flexible working much more. Furthermore, it became clear that the employees in the corporate headquarters were much more likely to enjoy the freedom to work somewhere else but their office than people in the different business units, as the new open office concept had first been rolled out across all corporate units and sites, before bringing it to the business units.

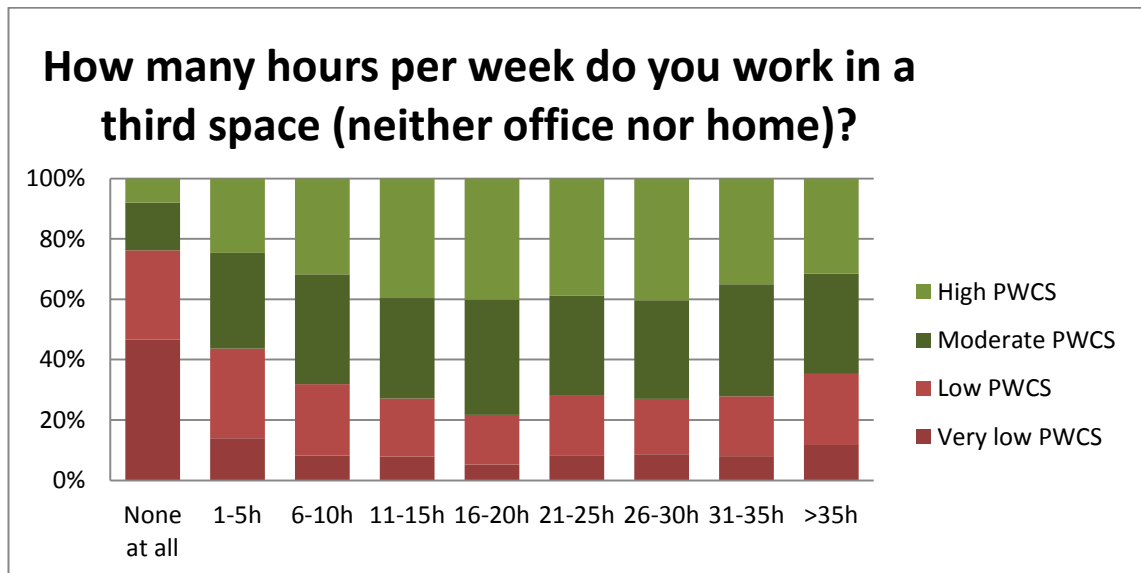
This showed that spatially and temporally flexible working was heavily linked to the privilege of working in the corporate headquarters and sent a strong message of status to the rest of TechComp. So, while many employees beyond the corporate headquarters were equipped with smart mobile devices that would, in theory, allow them to make use of flexible working, actual and accepted work routines were much more shaped by the immediate line managers and the power dynamics between corporate and business units as well as site specific norms and work cultures.

In addition, the degree of mobility of one's work did not just manifest one's position within the company but was also heavily linked to peripheral work connectivity levels. When looking at the amount of time employees spent in an average week working from home or in a third space, an interesting U-curved pattern emerged. The more hours employees worked from home, the more likely they were highly connected to work outside of core work hours until the tipping point category of 21-25 hours/week was reached. From this point onwards, connectivity with work decreased again (figure 26).



**Figure 26 – Chapter 4**

The results for working in a third space were very similar (figure 27), although the tipping point was reached a little bit earlier and then peripheral work connectivity plateaued for a little bit. Yet this general trend of initially increasing and then decreasing connectivity with work may show that working spatially flexible was a right granted to employees depending on their job level and on how elitist their profession was perceived to be.



**Figure 27 – Chapter 4**

It is important to point out though that in order to become a privilege employees still require a desk in an office where they can conduct their workday. Only having both options available and being free to choose between these makes such flexible work arrangements a true symbol of status and privilege. And as we have seen from earlier discussed variables such as job level

and job type, the higher up employees were in the TechComp hierarchy, the more they were connected with their work outside of normal hours.

So, after the tipping point of 25 hours per week, employees seemed to work from home or in a third space most of the time, making them quite possibly office-location-independent workers with an official telework contract in place. Under such conditions, working from home may not be seen as a marker of status and privilege anymore, as the workstation in the company office – and with it the option to choose where to work – vanishes. This may then explain why connectivity with work decreased again after the tipping point, as such contracted telework did not transport the same message of status and possibly the same degree of expectation to be available for work outside of core work hours.

With respect to the regression model, the amount of work from home and the amount of work in a third space were included as variables. Both added significantly to the predictive capacity of the model. In addition, in order to account for the nonlinear pattern of these variables I added nonlinear mean centered components (Centered Telework:  $B_{HC} = 0.228$ ,  $\text{Std Error}_{HC} = 0.007$ ,  $P < 0.01$ ; Centered Telework Squared:  $B_{HC} = -0.036$ ,  $\text{Std Error}_{HC} = 0.001$ ,  $P < 0.01$ ; Centered work in third space:  $B_{HC} = 0.109$ ,  $\text{Std Error}_{HC} = 0.008$ ,  $P < 0.01$ ; Centered work in third space squared:  $B_{HC} = -0.013$ ,  $\text{Std Error}_{HC} = 0.001$ ,  $P < 0.01$ ). So in more concrete terms this means that in the case of work from home, for every additional unit of work from home, employees are predicted to show 0.228 units higher peripheral work connectivity.

#### **4.3.2.5. Pressure of Responsiveness**

When looking at pressure of responsiveness, that is, how often employees feel they have to respond quickly (within 1 hour) to work related messages outside of core work hours, from figure 28 we can see a clear trend indicating that increased average responsiveness pressure was linked to higher average peripheral work connectivity levels. This variable has furthermore been found to add significantly to the regression model (Responsiveness Pressure:  $B_{HC} = 0.441$ ,  $\text{Std Error}_{HC} = 0.008$ ,  $P < 0.01$ ). This means that for every unit of perceived responsiveness pressure, employees are predicted to have a 0.441 unit higher level of peripheral work connectivity.

Yet, while it is clear that the availability of smart mobile devices is clearly associated with such increased pressures, it is not the technology alone that drives these pressures, but the expectations and behaviors of the people that use them. This may explain why the initially linear relationship between pressure and connectivity dipped after a certain level of responsiveness pressure. Having reached this very high level of pressure paired with high levels of peripheral work connectivity, employees might have decided that they are not willing

to be even more connected as a reaction to ever higher pressure of responsiveness and availability. To account for this nonlinear pattern I added a nonlinear mean centered component to the regression model, i.e. responsiveness pressure squared, (Responsiveness Pressure Squared (centered):  $B_{HC} = -0.103$ ,  $Std\ Error_{HC} = 0.005$ ,  $P < 0.01$ ).

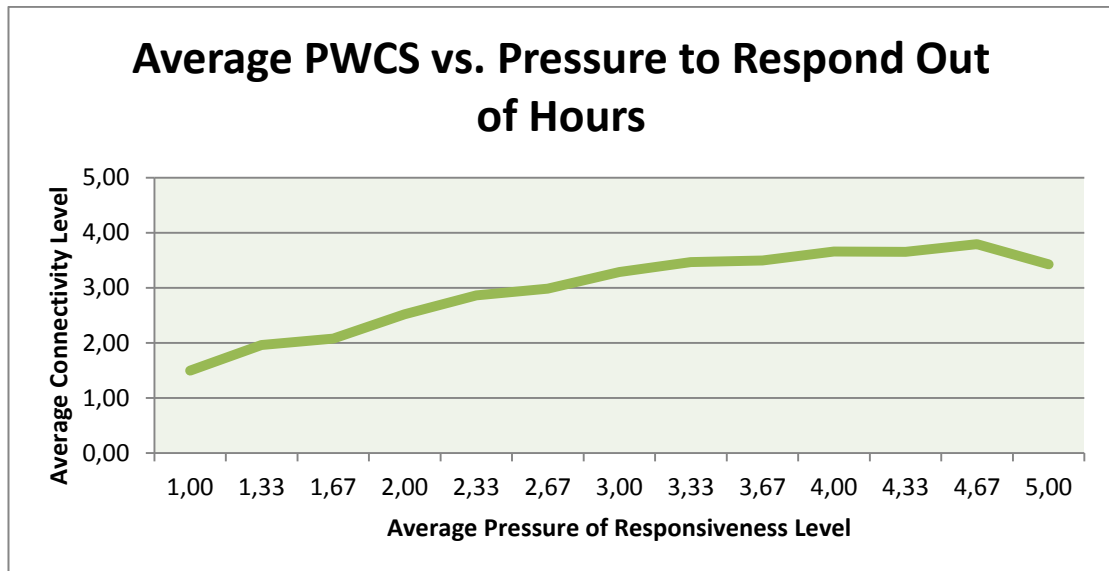


Figure 28 – Chapter 4

#### 4.3.2.6. Work Autonomy

Looking at figure 29 we can also see that at TechComp one's increased average connectivity level was linked to increased average work autonomy.

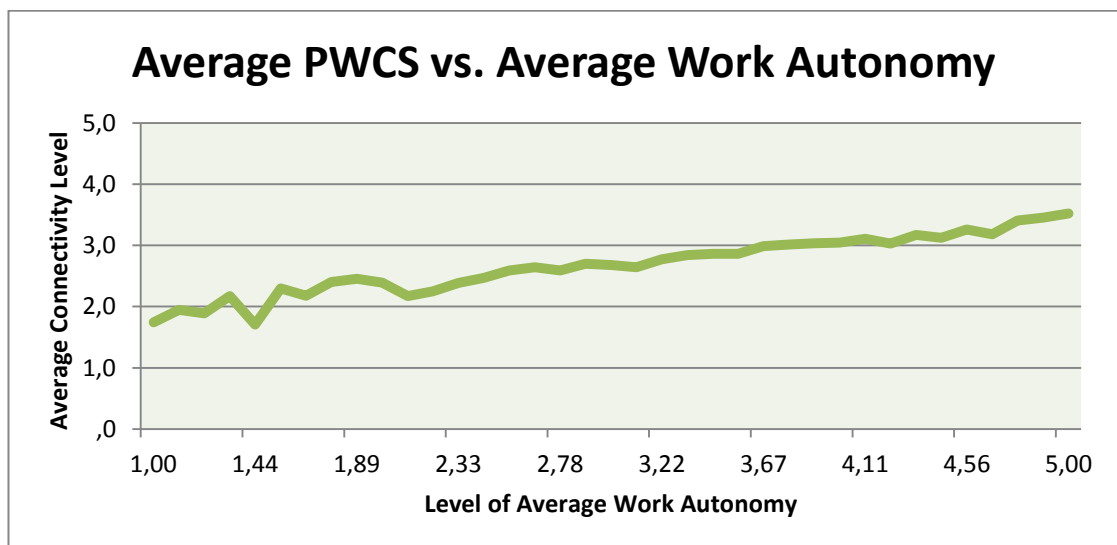


Figure 29 – Chapter 4



However, the predicted decrease in work autonomy at ever higher levels of peripheral work connectivity could not be observed. Instead it became clear that for TechComp employees high work autonomy inherently came with high peripheral work connectivity. This positive linear relationship therefore highlighted again that high connectivity was a privilege of those that enjoyed high autonomy over their work and most likely held a highly ranked position within the organization. This demonstrated furthermore that existing structures of power within TechComp were reinforced rather than challenged by peripheral work connectivity. Unsurprisingly, the variable of perceived work autonomy was identified as significant predictor of PWC. The variable was consequently included in the model (Work Autonomy:  $B_{HC} = 0.066$ ,  $\text{Std Error}_{HC} = 0.009$ ,  $P < 0.01$ ), meaning that for every unit of work autonomy, employees are predicted to show a 0.066 units higher level of peripheral work connectivity.

\*\*\*

To sum up, in addition to gender, country of residence and number of children, work related factors played a crucial role in shaping one's connectivity level at TechComp. Job level and type, degree of global collaboration, work mobility, autonomy and perceived pressure of responsiveness were all found to add significantly to the predictive capacity of the model.

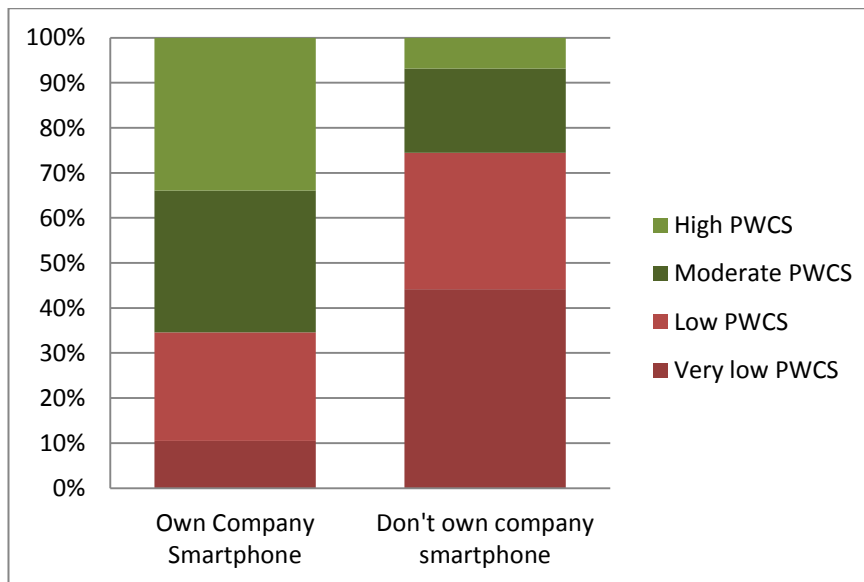
### **4.3.3. IT Related Variables**

#### **4.3.3.1. Company Smartphone Ownership**

As we have heard earlier, at TechComp the availability of certain technologies such as smart mobile devices of a certain brand (i.e. Apple products) was intertwined with hierarchical position level and status. The more managerial responsibility employees had, the more likely they were connected to their work outside of office hours. Clearly, technology availability, status and degree of responsibility at work mutually shaped each other, underlining the importance of both social and technological aspects.

Furthermore previous studies have found that as employees start to use smart mobile devices that allow them to be connected to work outside of their office, they tend to be available more often e.g. via email and in this way increase pressure of responsiveness outside of office hours (Duxbury et al., 2014).

In this way initially anticipated employee "empowerment" through more temporal and spatial flexibility and the ability to stay on top of one's work, can get replaced by feelings of "enslavement" and "dependency" (Jarvenpaa & Lang, 2005), which can even culminate in mental illness (Barley et al., 2011). Despite such dual effects it is clear that owning a company smartphone drove connectivity at TechComp (see figure 30).

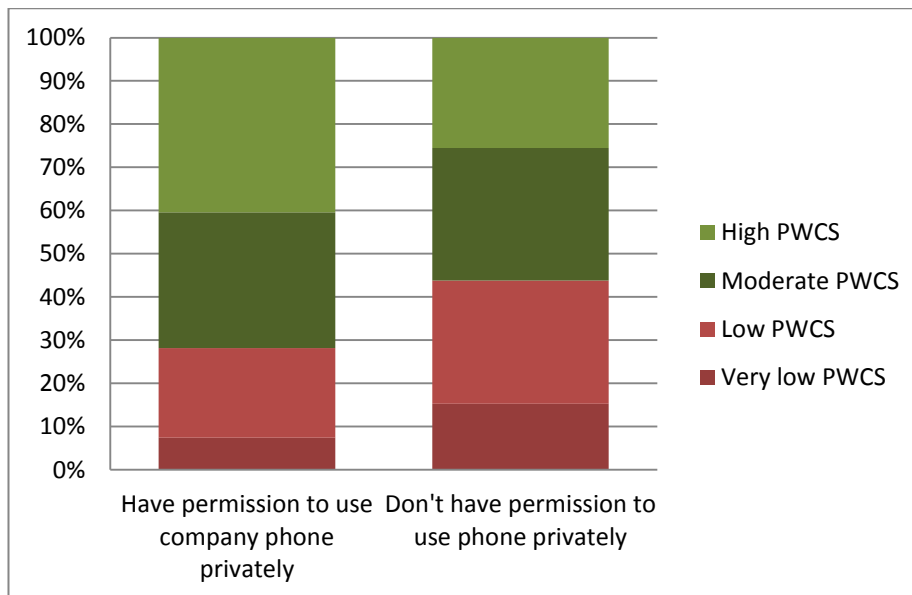


**Figure 30 – Chapter 4**

This variable significantly added to the predictive capacity of the model (Own Company Smartphone:  $B_{HC} = 0.53$ ,  $Std\ Error_{HC} = 0.017$ ,  $P < 0.01$ ). This means that employees' predicted peripheral work connectivity level increased by even more than half a unit (0.53) when they were given a company smartphone.

#### **4.3.3.2. Permission to Use Work Phone Privately**

A further factor that seemed to affect connectivity level with work was the permission to use one's company phone privately. Among all employees with company phones 41% indicated that they were allowed to use their work phone privately, 24% said they didn't have such permission and 35% didn't know (figure 31). When comparing the group that did have permission with the one that didn't, a clear and significant difference became apparent. While 40% of employees who were granted the right to use their work device for private purposes showed high levels of connectivity with work only 26% of those in the "no permission" group demonstrated such a high degree of connectivity. The variable was furthermore identified as significant predictor of connectivity level at TechComp ( $B_{HC} = 0.087$ ,  $Std\ Error_{HC} = 0.019$ ,  $P < 0.01$ ), meaning that employees who had permission to use their work phone privately had a 0.087 units higher predicted level of peripheral work connectivity.



**Figure 31 – Chapter 4**

Over the last decades mobile devices have become an extension of ourselves (Turkle, 2008); many of us carry them with us at all times. Carrying two phones, a private one and a company phone, is perceived as very inconvenient by many. If company policies allow employees to use their work phone privately many give up on their private phones, meaning that they now depend on their work phone for all private matters that would usually have been dealt with via a private phone.

This also means that employees carry their work phones with them around the clock, including weekends and holidays. And, as the figures above have shown employees who now had the possibility to be connected to their work from anywhere, at any time, also tended to be more available. Yet it could also mean that employees considered this work availability as an acceptable trade-off for having the right to use the phone privately and for not having to maintain two phones.

This highlights that the private use of one's work phone is a dual-edged sword. On the one hand it allows employees to manage work related and private matters via one single device. On the other hand, such private use often leads to employees having higher levels of peripheral work connectivity. This, however, facilitates the blurring of boundaries between work and non-work spheres and can fuel expectations of availability. So what has initially been perceived as a benefit for better management of work and non-work, allowing for more autonomy and flexibility over where and when to work, may have become a source of pressure and intrusion.

#### 4.3.4. The Regression Model

Based on the above analysis, a hierarchical regression model was run for which the quadratic effects of perceived responsiveness pressure, mobile work and telework have been assessed. All three have shown significant quadratic effects (see appendix for chapter 4) due to which I added squared variables for each. These variables have been centered on the mean, to avoid multicollinearity. Next, a linear regression was run to predict the peripheral work connectivity level with the variables displayed in the table below. The assumptions of linearity and normality of residuals were met and are specified in the appendix for chapter 4. Outliers have been tested for, subsequently leading to the removal of four cases that showed deviating more than 4 standard deviations from the mean. Upon removal a new regression was run. Initially the assumption of homoscedasticity was not met. To address this problem, following Hayes and Cai (2007), heteroscedasticity (HC) adjusted standard errors have been used in the model instead. All variables included were found to add statistically significantly to the prediction at a significance level of  $p < 0.05$ : HC adjusted peripheral work connectivity,  $F(50, 18220) = 434.953$ ,  $p < 0.01$ , HC adjusted R Square = 0.544.

The summary of the model is presented below:

| Model | R     | R Square | Adjusted R Square | HC Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------|----------------------------|
| 1     | .738a | .544     | .543              | .544                 | .81645                     |

**Table 23 – Chapter 4**

| Anova – Dependent Variable Peripheral Work Connectivity |            |                |       |             |         |      |
|---|------------|----------------|-------|-------------|---------|------|
| Model   |            | Sum of Squares | df    | Mean Square | F       | Sig. |
| 1   | Regression | 14496.675      | 50    | 289.934     | 434.953 | .000 |
|   | Residual   | 12145.193      | 18220 | .667        |         |      |
|   | Total      | 26641.868      | 18270 |             |         |      |

**Table 24 – Chapter 4**

The following variables have been included in the model:

| Variables (Heteroscedasticity HC adjusted)                                 | Coefficient B (not HC adjusted) | Coefficient B (HC adjusted) | Standard Error (HC adjusted) |
|--|---------------------------------|-----------------------------|------------------------------|
| <b>Constant</b>  | 2.218***                        | 2.2183***                   | 0.0609                       |
| <b>Company smartphone ownership</b>  | .530***                         | 0.5303***                   | 0.0174                       |
| <b>Permission to use company smartphone privately</b>                      | .087***                         | 0.0872***                   | 0.0197                       |
| <b>Amount of Telework</b>  | .228***                         | 0.2282***                   | 0.0067                       |
| <b>Amount of Telework Squared (centered)</b>                               | -.036***                        | -0.0364***                  | 0.0013                       |
| <b>Amount of work in third space</b>                                       | .109***                         | 0.1094***                   | 0.0079                       |
| <b>Amount of work in third space squared (centered)</b>                    | -.013***                        | -0.0126***                  | 0.0014                       |
| <b>Perceived level of Work Autonomy</b>                                    | .066***                         | 0.066***                    | 0.009                        |
| <b>Perceived Level of Responsiveness Pressure</b>                          | .441***                         | 0.4405***                   | 0.0077                       |
| <b>Perceived Level of Responsiveness Pressure squared (centered)</b>       | -.103***                        | -0.103***                   | 0.0054                       |
| <b>Position Level (No managerial responsibility as reference category)</b> |                                 |                             |                              |
| <b>Middle Management</b>   | .212***                         | 0.2119***                   | 0.0165                       |
| <b>Senior Management</b>   | .329***                         | 0.329***                    | 0.033                        |
| <b>Job Family (Manufacturing as reference category)</b>                    |                                 |                             |                              |
| <b>Audit</b>   | .217*                           | 0.2172*                     | 0.1312                       |
| <b>Strategy</b>  | .303***                         | 0.3031***                   | 0.0819                       |
| <b>Procurement</b>   | .009                            | 0.0092                      | 0.0526                       |
| <b>Sales</b>   | .202***                         | 0.2017***                   | 0.0495                       |
| <b>R&amp;D</b>   | .018                            | 0.0185                      | 0.0516                       |
| <b>Real Estate</b>   | .118                            | 0.1176                      | 0.1461                       |
| <b>Quality Management</b>  | -.047                           | -0.0467                     | 0.0542                       |
| <b>Project Management</b>  | .034                            | 0.0338                      | 0.0514                       |
| <b>Product Management</b>  | .124**                          | 0.124**                     | 0.0678                       |
| <b>Marketing</b>   | .174***                         | 0.1743***                   | 0.0605                       |
| <b>Internal Services</b>   | -.159***                        | -0.1585***                  | 0.0518                       |
| <b>Legal</b>   | .199***                         | 0.1985***                   | 0.0726                       |
| <b>IT</b>  | .002                            | 0.0018                      | 0.0515                       |
| <b>HR</b>  | .121**                          | 0.1212*                     | 0.0636                       |
| <b>General Management</b>  | .097*                           | 0.0968*                     | 0.0596                       |
| <b>Finance</b>   | .081*                           | 0.0808*                     | 0.0504                       |
| <b>Health &amp; Safety</b>   | .078                            | 0.0775                      | 0.0713                       |

|   |         |           |        |
|---|---------|-----------|--------|
| Engineering   | -.016   | -0.0163   | 0.048  |
| Customer Service  | .079*   | 0.0794*   | 0.0498 |
| Communications  | .154**  | 0.1539**  | 0.0744 |
| <b>Degree of global collaboration (No global collaboration as reference category)</b> |         |           |        |
| Infrequent collaboration  | .062*** | 0.0621*** | 0.017  |
| Frequent collaboration  | .133*** | 0.1333*** | 0.0165 |
| Constant collaboration  | .246*** | 0.2462*** | 0.0196 |
| Male  | .098*** | 0.098***  | 0.0147 |
| <b>Country (Brazil as reference category)</b>   |         |           |        |
| USA   | .315*** | 0.315***  | 0.0246 |
| UK  | .240*** | 0.2401*** | 0.0284 |
| Denmark   | .255*** | 0.2546*** | 0.0348 |
| China   | .151*** | 0.1508*** | 0.0268 |
| India   | .116*** | 0.1156*** | 0.0309 |
| Russia  | .240*** | 0.2402*** | 0.0495 |
| Saudi Arabia  | .225*** | 0.2254*** | 0.0638 |
| UAE   | .329*** | 0.3289*** | 0.0544 |
| <b>Number of Children under 16 (no children as reference category)</b>                |         |           |        |
| 1 Child   | .069*** | 0.0691*** | 0.0149 |
| 2 Children  | .119*** | 0.1195*** | 0.0184 |
| 3 Children  | .091*** | 0.0913*** | 0.0349 |
| 4 Children  | -.006   | -0.0061   | 0.0636 |
| 5 Children  | .206    | 0.2062    | 0.2087 |
| 6 Children  | -.249   | -0.2491   | 0.1867 |
| More than 6 Children  | -.077   | -0.0773   | 0.1449 |

**Table 25 – Chapter 4**

\*p ≤ 0.1 \*\*p ≤ 0.05; \*\*\*p ≤ 0.01.

#### **4.4. Conclusion: Predicting Connectivity – What Does High PWC Look Like?**

So there is a combination of ICT related, job related and demographic factors that all influence one's level of peripheral work connectivity. This shows that there is no simple explanation as to what drives people to connect with their work outside of their normal work hours. Yet when trying to predict what profile a very highly connected employee may have, based on the above presented regression model it would look as follows:

*A male senior manager most likely based in the Middle East or in the US, in a senior corporate job function, such as strategy, with 2 or 3 children. He has a high level of work autonomy including a fair share of flexible working, e.g. home office, and frequently collaborates with colleagues across different time zones. This person is equipped with a company smartphone, which he can also use for private purposes and he faces a fairly high level of pressure of responsiveness outside of office hours.*

When looking at this predicted profile, the notion of Nigel Thrift's (2000) fast subject comes to mind immediately: A career driven knowledge worker who can never stand still in a globally connected and fast paced business environment. This profile speaks of intensive and long work weeks as well as of temporary assignments abroad in fast-paced, heavily growing markets e.g. the Middle East, but it also speaks of professional and financial success. The fact that having children is linked to more peripheral work connectivity appears peculiar initially. Yet since this fast subject is most likely going to be a man, this curiosity is rectified and illustrates the sexual contract (Wajcman, 1998) that still rewards men career-wise for having children and disadvantages women for the same.

This profile moreover tells us something about the great potential of new information and communication technologies to make work more mobile and connected by enabling international collaboration on a daily basis without major obstacles, or at least on the surface of it. Yet, it also shows that the beneficiaries of these new opportunities – in terms of career progress and personal manifestation of status – are the same sort of people that have always been successful, namely educated men in highly regarded professions.

And it illustrates that the promises of more flexibility have not been fulfilled, for instance, by failing to make senior corporate roles more attractive to women. Instead, the possibility of 'constant connectivity' – and with it the expectations of it – seem to have turned into exclusive forces that may manifest existing structures and hierarchies. In this sense connectivity has become a space where power relations such as inclusion/exclusion are negotiated. The

employees that have always worked long hours continue to do so but from different places than before, enjoying ever greater levels of autonomy. In contrast, those that would have liked to work more spatially and temporally flexible can now, in theory, do so. Yet, in the TechComp case they have to deal with a company culture and management style lagging behind their own policies (as could be seen in chapter 3), paired with an increase in pressure to be available for work around the clock. This is then effectively compromising the reliefs that these ICT had promised.

So there is an interesting dynamic between autonomy and pressure of responsiveness with dual effects. While greater peripheral work connectivity is linked to greater levels of autonomy on the one hand, pressure of responsiveness has also been identified as crucial predictor in shaping one's peripheral work connectivity level. Employees who experience great pressure of responsiveness are significantly more likely to have high levels of PWC than employees without such pressures. So, expectations and norms of connectivity have clearly shifted. Yet at the same time these employees report great levels of work autonomy and they are effectively left to regulate and discipline themselves in their responsiveness behavior.

In Foucault's terminology this means that they employ techniques of the self to discipline their behavior as to conform to normalized ways of working and practicing connectivity. It is this self-discipline through which the possibility for constant peripheral work connectivity becomes an active agent, a panoptic agent, reminding employees of the uncertainties of not being connected and the expectations and norms that surround their work role. So, greater work autonomy comes with greater levels of pressure, which both are facilitated by and contribute to increased peripheral work connectivity. These results highlight again the paradoxical effects that ICT can have and they exemplify the sociomaterial forces that shape work practices and the outcomes of technology use, reconfiguring power relations.

In the following chapters I will now dig deeper into the question how power negotiations that are entangled with peripheral work connectivity come about, arguing that connectivity is both a space or platform as well as an agent in such power negotiations.

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In conclusion, this chapter has provided a backdrop to the two more qualitative empirical chapters that will follow, as it has spelled out the form and extent of PWC at TechComp as well as the variables that shape it. It has thus illustrated the underlying power relations of hierarchy, status and exclusion that were rendered visible in the space that PWC provided.



How exactly these power relations became contested in the realms of gender and global work will be the topics I turn to next.

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## **5. Chapter 5 – The Genderedness of Peripheral Work Connectivity**

In chapter 4 we have seen that one significant predictor of connectivity is gender and this is so across all countries that participated in the survey. Women are significantly less likely to show very high levels of peripheral work connectivity than men, although there still is a large amount of women who do so, as the general peripheral work connectivity level at TechComp is high. Yet, in every single country that participated, a clear and significant gender gap became visible (see figure 32).

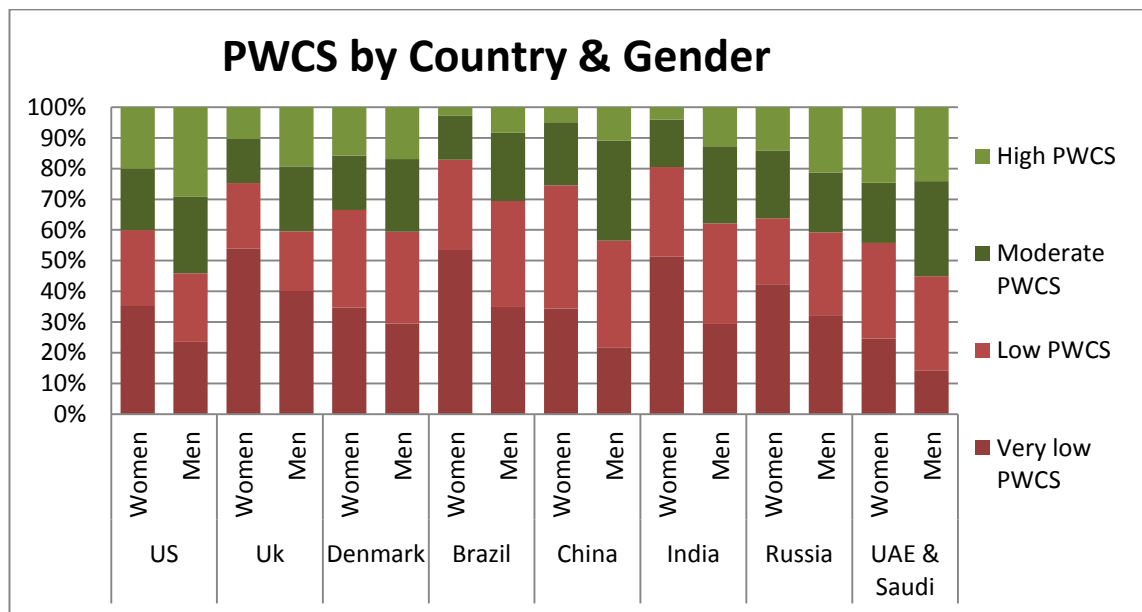


Figure 32 – Chapter 5

This gender gap remained noticeable, though gradually reducing, even when controlling for level of seniority (see figure 33), showing that there was more to the genderedness of peripheral work connectivity than a mere discrepancy between female and male representations among management.

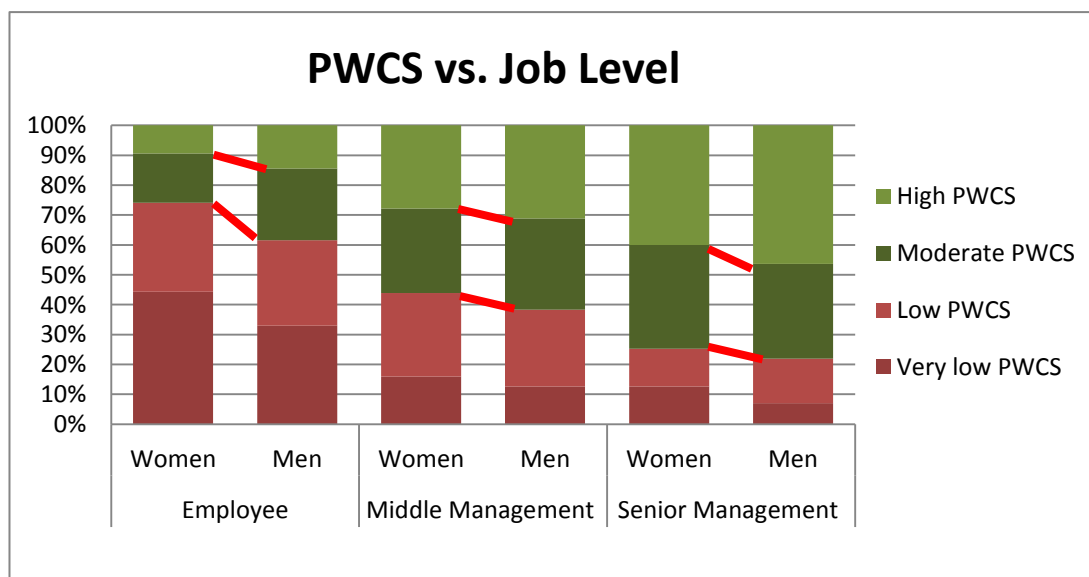


Figure 33 – Chapter 5



At the same time, however, we have seen in the previous chapter that high peripheral work connectivity seems to have emerged as a new marker of status and power within TechComp and highly connected individuals tend to hold important positions within the organization. In this context, paired with very low numbers of females among the workforce of TechComp, it becomes clear that gender needs to be discussed in this thesis. Official statistics at TechComp state that there are 22% of women working for TechComp and only 12% of all leadership positions are filled by women. Hence, we cannot overlook this heavy gender imbalance at TechComp.

Moreover, ICTs, and connectivity in particular, are often heralded for their potential of making management of work and family easier, especially for women, precisely through connectivity's cross-domain nature that allows to determine flexibly when and where to work. It may then appear surprising to see that more women than men show lower PWC scores. Such expectations all share the deterministic assumption that technologies which enable PWC will automatically lead to greater flexibility and autonomy, allowing women to be careerists, mothers and wives simultaneously.

Yet, if we follow Mazmanian et al. (2013) who state that peripheral work connectivity shifts norms of availability for professionals, the question is then why women tend to negate the new expectations and norms of high PWC much more often than men. Or in other words, where is this significant gender gap coming from and how do women negotiate their own peripheral work connectivity? This chapter aims to answer these questions by showing that peripheral work connectivity is more than a driver of norms of availability.

Drawing on the sociological and organizational literatures on gender, family and work, I will first discuss key issues that women encounter in their daily lives, including both their paid and unpaid work. It is these often structural issues that play a key role in women's negotiation of their work – non-work boundary. I will then go on to describe the data that this chapter is based on, including an introduction to the country specific contexts of the participating women. This will then directly lead me into the discussion of my findings.

Here we will see that despite significant cultural and contextual differences within which the female participants of this study live, the similarities of the challenges they face are striking. In particular, we will see that there are two main areas of contestation in relation to PWC. The first one is the negotiation of gender identity through emotions. Here I will show that women encounter a variety of frustrations, fears and feelings of guilt all related to their gender

identity and PWC. These discipline them on a daily basis due to rendering visible their failure to comply with expectations. They respond to these expectations by constantly up or down regulating their PWC, either giving in to disciplinary norms or challenging them but in both cases responding to them, thus regulating their emotions.

Secondly, we will look at the contested domain of performing one's gender role. Here we will see that women deal with multiple expectations of how they should perform, all arising from several competing highly gendered roles. In an attempt to fulfill all expectations placed on these women, including those they place on themselves, these females again regulate their PWC in certain ways and respond to the disciplinary reign of their gender role.

Many of the challenges these women face do not arise from PWC alone, as they are structural issues. Yet, they are potentiated by the ever greater expectations of having high levels of peripheral work connectivity, caused by its attributes of latent potentiality and cross-domain nature; or in other words its potential to connect from anywhere, at any time. PWC thus blurs the boundary between work and private life. It is this peripheral work connectivity though which also provides a new space to negotiate and perform one's gender identity and roles through the regulation of emotions and expectations.

In addition to these challenges, we will also see that PWC is not just a space where emotions and roles are negotiated. Rather, peripheral work connectivity is also an agent in these negotiations by functioning as a disciplinary mechanism itself. It leads women to self-control and self-regulate in a certain way, either by increasing or by decreasing their PWC. As we will see, in many instances, these women choose the latter option, which in return erects a new digital or rather offline hurdle these female TechComp employees find hard to overcome in their attempt to have successful careers.

Nonetheless, as we will also see, these women are not passive victims of structural conditions or a deterministic technology. Rather, they use individual strategies that allow them to utilize some of the affordances of new ICTs to their own benefit. So, while deterministic promises of technology ending work-life conflict have clearly not come true for these females, they can influence, or in other words, have the power to shape the outcomes of their own connectivity levels, emotions and gender role performances.

## **5.1. Women in the Workplace**

For decades now gender studies have looked into the issues of gender discrimination across all spheres of life, including the workplace. These efforts have sparked a general societal debate around the challenges women face in the workplace and the question whether women “can have it all” (Slaughter, 2015). In these debates, since the 1980s the “glass ceiling” has become a very popular metaphor for describing the invisible hurdles that stop women from reaching the top at work, both within academia (Wajcman, 1998; Faulkner, 2007; Ryan & Haslam, 2007; Hoobler et al., 2014) and outside (Quast, 2011; Sandberg, 2013; Martin, 2015).

From these discussions we have learned that there are a variety of structural barriers that women face, such as the ongoing unequal division of unpaid work in the home and in particular housework and childcare (Bianchi et al., 2012; Cotter et al., 2011; Abbott et al., 2005) as well as direct and more indirect forms of discrimination (Hoobler et al., 2014).

### **5.1.1. The Second Shift: The Division of Unpaid Work in the Home**

The issue of the division of work and responsibilities in the home is one crucial and persistent barrier to women’s progression in the workplace. There are generally two streams of explanation that try to address the question why there are still so few women at the top and why so many women still pull a second shift when they reach home after work, while their husbands come home to relax (Hochschild, 1990).

The first one, exchange bargaining theory, argues that because women still often don’t participate in paid work to the extent of men this leaves them with fewer financial resources and hence with less bargaining power as to who does what in the home (Hiller, 1984; Sanchez & Thomson, 1997; Baxter et al., 2008; Bittman et al., 2003). And while this theory has been useful in explaining some of the processes going on in negotiating housework and childcare responsibilities, a purely economic perspective cannot capture all the issues that shape gender differences.

The second one, the gender lens, is looking at the issue beyond economic considerations. Instead, this view includes the consideration of socialization processes and the performativity of gender. In particular, this perspective argues that individuals learn to enact their gender role on a daily basis, or, in other words, daily engage in “doing gender” (West & Zimmerman, 1987; Butler, 1990; Baxter et al., 2008; Bittman et al., 2003). In addition, gender as a social construct and power relation is created in form of a binary between male and female, in which the latter

is usually viewed as inferior to the former, clearly demarcating a hierarchy of gender relations (Wajcman, 2000; 2010; Faulkner, 2000).

In the context of work this means that women as well as men are implicated in performing their own gender through the clothes they wear, the language they use, the jobs they choose, and the amount of work they take on in the home. Individuals learn their gender from the day they are born, through the interactions they have with others and through the material objects, including technologies, of which our world is made up and which are deeply gendered (Wajcman, 1991; Kirkham, 1996).

For these reasons it is part of this performance of femininity that mothers tend to retain the main responsibility and organize and plan everything, while fathers help by executing as delegated (Craig, 2006; Allen & Hawkins, 1999; Abbott et al., 2005). In fact, women are often torn between wanting help but at the same time not wanting to lose control over what is done in the home and how, a phenomenon that has been called “maternal gatekeeping” (Allen & Hawkins, 1999, Bianchi et al., 2012).

In a recent popular Huffington Post article, writer and blogger M. Blazoned (2014) aptly calls the issue that women take on the majority of all parenting responsibilities the “default parent”, meaning that almost by default it seems that women find themselves managing their own, their children’s and their partner’s lives.

This means however that women are constantly transitioning between often competing roles, that is, their parent role, their role as housekeeper and their work role, often experiencing great levels of role conflict. Hence, some women choose to segregate their work and their private life very strictly (Duxbury et al., 2014).

Furthermore, in recent years a new ideal of what it means to be a good mother has formed – the intensive mothering ideal – which expects mothers to dedicate ever more time to their children to prepare them for an ever more challenging and competitive world (Hays, 1996; Cotter et al., 2011; Chesley, 2011). So, while more and more time is spent by women in paid employment, the time they spend parenting has also gone up (Craig, 2006). This means that additional pressure is put on mothers, which leads many to feel guilty when they can’t fulfill these expectations (Chesley, 2011).

In addition to the socialization of roles and resulting gender performance, other related structural hurdles persist. Most workplaces are still generally modelled on a male single breadwinner ideal (Prince Cooke & Baxter, 2010). And, while more and more “family friendly” policies are forming part of corporate workplaces in the West today (McGovern, 2007), the world of work is still fundamentally gendered male, where women can only succeed if they behave like men (Wajcman, 1998).

### **5.1.2. Biases and Discrimination at Work**

In addition to these structural issues, women, not just mothers, have to deal with a whole other set of challenges in their day-to-day lives at work, namely overt and explicit and more covert, implicit and sometimes unconscious forms of discrimination.

In the academic literature this phenomenon has often been called gender stereotyping (Cunningham & Macrae, 2011; Tartaglia & Rollero, 2015; Bobbitt-Zeher, 2011). According to Tartaglia and Rollero (2015: 1103) gender stereotypes “are a set of beliefs concerning attributes that are supposed to differentiate women and men.”

Psychological research has found that people tend to categorize others into groups based on categorical cues (e.g. color, hairstyle, clothes), which trigger certain stereotyped behaviors and the association of certain cues with gendered expectations is already entrenched in childhood where children are exposed to a highly culturally gendered environment (Cunningham & Macrae, 2011). Bobbitt-Zeher (2011) describes further that together with structural and cultural aspects, such interaction based gender stereotyping creates a system of gender discrimination, usually with negative consequences for women.

Such gender stereotyping becomes particularly difficult in the realms of work where women are usually constructed as the other (Wajcman, 1998; Powell & Sang, 2015). Indeed, this othering has been found to operate across all aspects of work, from selection and hiring, training and development, over promotion and evaluation, to wages and sexual harassment (Bobbitt-Zeher, 2011) and has become routinized and essentialized. Due to this women often don’t recognize or even apologize it, as they consider it as natural and as given (Powell & Sang, 2015; Dryburgh, 1999).

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To conclude this section, while it is known that women face major challenges in the workplace arising from structural issues of a male work environment, the division of labor in the home, as

well as discrimination based on gender-stereotyping, still relatively few studies exist that investigate the social processes and mechanisms that take place, which lead to women's disadvantaged position in the workplace (Hoobler et al., 2014; Powell & Sang, 2015; Bobbitt-Zeher, 2011).

In addition, while there is a substantial body of literature on gender and technology and some studies address the question of gender in the use of ICT (e.g. Duxbury et al., 2014; Faulkner & Lie, 2007), most of the advances that have been made in relation to gender and technology were primarily focused on non-digital technologies. In fact, to date very little is known about the gendered implications of connectivity with the workplace and particularly, the gendered issue of rejecting to connect to work 24/7. Furthermore, in such studies it is particularly important to investigate women's own interpretations and agency in the negotiation of their own work connectivity, as to avoid a passive and victimized representation of women. This is what I set out to do in the remainder of this chapter.

## **5.2. Analysis**

### **5.2.1. The Empirical Data**

The data I utilize in this study are drawn primarily from 69 interviews I conducted with female employees from 5 different countries: the UK, Denmark, the UAE, Brazil and India. The diversity of backgrounds is particularly useful to account for the multiple gender-related issues that exist in our world, going beyond a Western-centered idea of gender and femininity that have to date often dominated research agendas.

In addition, I conducted 7 interviews with male employees from the UK, in order to contrast some of the findings from the interviews with a male perspective. Finally, I also utilize some data drawn from the large quantitative connectivity survey I discussed in chapter 4 as a quantitative backdrop to this chapter. For more details on the methods used please refer to the methodology chapter.

The remainder of this chapter is structured as follows. Based on previous research and insights gained from the informants, I will briefly outline the cultural, structural and organizational contexts in which each of the interviewed women lived and worked. Next I will use the insights gained from the interviews to answer the questions that guide this chapter, namely, where is the gender gap in PWC coming from and how do women respond to it? Here we will see that it is again a mix of structural, cultural, technological and individual factors that shape the

boundary negotiations of these women and with it their gender identity in the space that peripheral work connectivity provides, however, with striking similarities across the different countries.

In particular we will see that there are four different types of issues to be considered, 1) multiple competing workloads 2) fear of judgement, 3) feelings of guilt, 4) frustration. These themes all overlap and interact and together explain a great deal about why women regulate their PWC in a certain way. Here we will see that peripheral work connectivity is primarily a space where gendered power dynamics are rendered visible and secondarily, an agent in these power negotiations through its disciplinary power.

In addition, and to emphasize the aspect of female agency or “power to” further, in each section I will outline some of the strategies that the different women used in order to navigate through the many work related and private demands the interviewees faced on a daily basis. The multitude of solutions the participating female employees found then highlights again that individuals, and in this case female employees, are not passive victims of an exploitative employment relationship and a deterministic technology. Rather they are active agents in determining the outcomes of their own connectivity levels, although circumstances and their own decisions may sometimes reconstitute existing hierarchies of male dominance in the workplace.

### **5.2.2. Cultural Contexts**

Most research relating to corporate life, information and technology use and last but not least gender that is published in international English journals is situated in Western countries. While we have gained great insights into gender discrimination in the workplace across these societies (see Prince Cooke & Baxter (2010) for an overview), gender related issues in the Middle East, India and Latin America remain widely unexplored (Luke et al., 2014; Al-Jenaibi, 2010). Since TechComp is a global organization and has important sites in these areas this research project offered the ideal opportunity to investigate the gender question inherent in discussions of work connectivity through a cross-country comparison. This allowed me to gain an as complete understanding of the issue as possible, while attempting to fill the gap of non-Western research settings.

Nonetheless, the majority of employees at TechComp work in Western societies, due to which I also included two European countries in the study, namely the UK and Denmark, which both

play important roles within TechComp in terms of employee numbers and for business reasons.

#### **5.2.2.1. United Kingdom**

I started out interviewing women from the UK as I anticipated interviewing to be the smoothest in terms of language and cultural barriers. Getting a good understanding of the issues facing women in the UK, I hoped, would allow me to better spot country related differences when interviewing women from different cultural backgrounds.

In general a standard UK work week entailed 40 hours of work by contract with the possibility to take overtime back through a “Time off in Lieu” (TOIL) system, allowing employees to work flexibly when necessary. Furthermore, company smartphones and laptops were widespread among professionals, enabling employees to connect to work from home. In addition home office policies were in place as well as the opportunity to work part-time. However, these policies were not available to everybody but were offered at individual managers’ discretion. This meant that some women, who wanted to work more flexibly e.g. through more home office days, couldn’t do so, while they knew of other colleagues who could, sometimes leading to anger and frustration.

Nonetheless, especially part-time work was a wide-spread phenomenon amongst mothers with small children at TechComp even though many feared being stigmatized because of it. It was common in the UK though that women felt generally stigmatized for having childcare responsibilities. This led many to avoid talking about family while at work and they tried to uphold a clear separation between work and private contacts.

Childcare in the UK was usually available through nurseries and all-day schools, including wrap around care at fringe hours. However, it was very expensive and often women felt judged by childcare providers when they didn’t attend all parent-teacher meetings or other childcare related activities. Nannies and maids were not affordable for most despite being professional workers and family support (e.g. from grandparents) was only partially available due to many TechComp employees having been nationally and internationally mobile for their careers or relationships and hence not living close to family anymore.

In the home (i.e. childcare and housework) men seemed to take on more and more work, but women clearly retained the lion’s share of domestic tasks and responsibilities. Men merely supported. While some women mentioned that they wanted to stay in control, reflecting



earlier discussed phenomenon of maternal gatekeeping (Allen & Hawkins, 1999), others heavily questioned this situation, due to a long tradition of feminist movements in the UK. In fact, quite a few women I interviewed talked about feminist ideas without explicitly calling it as such. In addition, it was only in 2015 that the parental leave policy in the UK had been altered so that now men could take up to 3 months of parental leave, when it had previously been limited to 2 weeks plus any add-on of annual leave. How this would be taken up by men was still to be seen at the point of this research.

#### **5.2.2.2. Denmark**

In Denmark governmental high quality childcare provision was much more widespread than in any other country that participated (Prince Cooke & Baxter, 2010). This meant that even for single mothers, a few of which I interviewed during this study, it was comparatively easy to manage family and work. Such widespread childcare also meant that not a lot of additional support was necessary from extended family such as grandparents unless business trips were planned.

In addition, the standard contractual work week at TechComp Denmark was comparatively short with 37 hours, with a short Friday and was complemented by home office possibilities, which were widespread enabled by policies and sufficient supply of laptops and company smartphones. According to the informants there also seemed to be a great level of understanding that parents had to go home at fixed hours to take care of children and this and other family related issues seemed to be openly discussed at work.

Nonetheless, the fast growth of TechComp in Denmark meant that many employees worked overtime and no TOIL system was formally in place to take the hours back. Frequent weekend work was also a shared experience among the participants in this study. Yet, despite the great workload that many TechComp employees based in Denmark encountered, they cherished the flexibility that home office and parental leave policies granted them.

Part-time, on the other hand, was not regarded well in Denmark as women were expected to return full-time after parental leave (which was usually around a year) due to the pervasive supply of good quality childcare.

Parental leave could be claimed independent of gender in Denmark and could be shared equally between the parents. Nonetheless, it was still women who took on the lion's share of parenting and household management, especially organization and planning. Men would

merely execute as delegated, although they generally seemed to accept that they had to pull their weight in the home as well. While the women I interviewed accepted their roles, they did question the level of involvement of men in parenting and housework and desired more equally shared responsibilities.

#### **5.2.2.3. Brazil**

In Brazil women were confronted with a very different situation than in Europe. This started with a much longer standard work schedule paired with very long commuting times. The typical contracted work schedule at TechComp Brazil was 44 hours excluding a one hour lunch break. This meant that most Brazilian employees spent at least 10 hours at work every day on top of which at least 2 hours of daily commute (i.e. return) had to be added. This meant that employees at TechComp were easily away from home anywhere between 12, 13 or even 14 hours a day just to fulfill their standard work contract and commute between their home and their workplace. Due to these reasons, frequent home office days were a widely accepted and practiced alternative among professional women.

Despite these work related demands, family seemed to be very important for all Brazilian employees I spoke to and they openly shared details of their private lives with their colleagues at work. As one participant explained most colleagues knew each other's families in person which established a climate of understanding when childcare demands required a woman to work flexibly, a phenomenon that I could not observe to the same extent in any other country that participated and especially not in the UK and the UAE.

Nonetheless, the many hours away from home put a lot of emotional pressure on women who had to organize childcare and remained the main person in charge even when absent, while having to prove a lot in the workplace where they were still a highly visible minority. However, the company supported mothers financially during the first 3 years after giving birth to a child in order to pay for a nanny or a nursery. This support was a fixed amount for all TechComp mothers independent of professional status. In addition, corporate employees usually afforded domestic help easily through maids and full-time nannies, which was further complemented by a strong network of family support particularly from grandmothers. These older women had been part of a generation that rarely worked outside of their homes due to which they were now ready and available to take care of grandchildren.

Regarding the egalitarian sharing of childcare and household chores however, it became clear that many women still held internalized views that it was their responsibility to take care and

to manage their children and their homes, while the fathers were asked to support but not get involved in organizational matters. So, maternal gatekeeping seemed to play a major role for these Brazilian women but accompanied by an image of masculinity that still viewed housework and childcare as primarily female work.

These idealized roles were reinforced by organizational policies that only allowed maternity leave for women, which had recently been upped from a maximum of 4 months to 6 months. Fathers on the other hand were only granted 5 calendar days upon the birth of a child and financial assistance was not available to them either. This meant that organizational policies further manifested the ideal of the female caregiver and the male breadwinner. So, as other studies have also found, while educational levels of women now matched or even exceeded those of their male peers, women shouldered the majority of any kind of unpaid work in the home as well as now having to or wanting to contribute to the family income, leading women to be time poor compared to men (Agénor & Canuto, 2015; Ribeiro & Marinho, 2012).

#### **5.2.2.4. United Arab Emirates**

The United Arab Emirates, and more precisely Dubai in the context of this study yet again presented the participating women with a very different work and family context, which was particularly influenced by the diverse workforce at TechComp UAE made up of many expatriates. In fact, according to a recent Economist report (2014), expats make up more than 90% of the workforce in the UAE bringing together people from Western, African and Asian societies. Yet, according to quite a few interviewees, the collaboration of these different groups was heavily influenced by a hierarchy of nationalities, which saw Emiratis and Westerners at the top, Middle Eastern non-Emiratis in the middle, and Indian and Filipinos at the bottom. This hierarchical setup was reflected in how open positions were filled and how much money could be earned.

This highly diverse workforce brought with it another major implication, namely, that Dubai was a very transient place for many TechComp employees where they came to work hard and grow quickly in their careers, not necessarily bringing their families along during this time. Coupled with a fast moving, aggressive market in the Middle East and a widespread availability of mobile technology, the workload and expectations of availability in the UAE were very high. In contrast, possibilities for flexible working and home office were typically absent, part-time was mostly unheard of and parental leave was limited to 45 calendar days for women, while men had no leave entitlement at all. In addition, with Dubai being a major TechComp hub for

the Middle East, a great level of travel in the region was generally expected from employees based there, presenting another major obstacle for many women.

These very inflexible work conditions made it very difficult for women in the area to progress to senior management levels, without having to make major family-related sacrifices. Nonetheless, the ethnic differentiation in the area meant that supply of affordable nannies and maids, primarily from the Philippines was abundant, relieving some of the pressures women at TechComp UAE dealt with, albeit at the cost of women of marginalized groups.

Due to the great variety of nationalities that worked in the area no easy conclusion could be drawn about childcare and household division between men and women but the interviews in this region also revealed that there was a general tendency that the woman remained the main person in charge with varying degrees of male support, depending on cultural background of the family.

Finally, and as previous studies have found, in the workplace itself the traditional values of the UAE shaped by Islam meant that tensions between a Western corporate work culture and local norms and values were unavoidable (Crabtree, 2007; Sikdar & Mitra, 2012; Ahmad, 2014). In particular, the Middle Eastern taboo that women speak with non-family males was challenged by cross-gender collaboration in the workplace and women were generally received with great suspicion when they performed roles that were not considered feminine.

In addition, comments that would be classed as sexual harassment or discrimination in the UK or Denmark would remain unpunished in the UAE. For instance, women I spoke with reported that they had been asked about family planning during job interviews, a practice prohibited in the UK, Denmark and Brazil. Despite the challenges these women encountered in the region, many still enjoyed the quick growth and good and safe living standard that the UAE generally provided.

#### **5.2.2.5. India**

India yet again presented the women I interviewed with a very unique work context with different challenges. While India is still a very patriarchic society, where the male breadwinner, female homemaker model continues to dominate (Luke et al., 2014; Desai et al., 2011), the informants I encountered at TechComp were all full-time career oriented women, despite shouldering the majority of parenting in the home in many cases.

TechComp India provided a variety of flexibility policies that allowed these women to manage these multiple roles though, with the possibility to start work at three different times of the day (i.e. either 7:30 am, 9 am or 10 am) and the option to end flexibly (i.e. either at 4:30 pm, 6 pm or 7 pm) as well as the chance to work from home through the widespread supply of laptops (i.e. company smartphones were rare due to Indian employees generally utilizing their private phones for work purposes).

These fairly standardized yet flexible work hours were primarily shaped by a dangerous and heavy traffic situation surrounding the TechComp sites in India due to which the company provided company buses at fixed hours. In addition, it was generally considered unsafe for women to travel at night rendering it widely accepted that women left on time to reach home safely. It was then expected of some of them to reconnect from home to finish work or to attend meetings with colleagues abroad. This meant, however, that networking events, which were usually held in the evenings, so that alcohol could be served, excluded women from participating.

However, while long yet flexible work hours were common in India, all women I spoke to greatly cherished this flexibility and most were happy to log on again from home as it allowed them to manage competing demands much better even though they could not be as visible in the workplace and at work related events as their male counterparts.

Furthermore, most women I interviewed held deeply internalized views that they were to be the main responsible in the home and while they asked their partners to support when needed, they didn't question the general domestic division of labor.

In addition, the traditional family setup in India expected that newly married couples would move in with the parents of the husband. This meant that while family support of the in-laws was a valuable resource available to married women, bringing some relief in terms of household and childcare responsibilities, additional expectations of elder care arose. Among the well-off families though, duties in the home, particularly household work, were frequently outsourced to maids.

In the workplace, women were also generally expected to step back once they got married due to which they were given less responsibilities and opportunities for growth compared to their male peers, as was described by one informant. While paid maternity leave was only 6 months, it was common that women would drop out of the workforce for a few years after giving birth.

Finally, many informants spoke of a general confidence issue many women dealt with in the workplace, originating from a traditional upbringing which forbid women to speak up or challenge their elders. This norm however greatly conflicted with Westernized ways of working. Women who behaved unexpectedly by being outspoken or direct were viewed as deviant, as two informants told me, who were themselves confronted with such stigmatization.

### **5.2.3. Doing Gender: Regulating Peripheral Work Connectivity**

So as we have seen in the previous section, the women I interviewed worked in greatly varying workplaces and cultural contexts, presenting each interviewee with a diverse set of challenges depending on their context and family circumstances. What was striking however and what we will see next was the enormous similarity of the issues many women encountered. This demonstrated that high expectations of availability for work and with it peripheral work connectivity, fueled by the latent potentiality of connectivity and its cross-domain nature, were a general hurdle for women at TechComp. Yet, at the same time PWC provided a space where these women encountered and negotiated their own gender performances as well as a variety of gendered emotions that arose due to the roles these women occupied.

#### **5.2.3.1. Negotiating Gendered Roles**

The first aspect all interviewees wrestled with in one way or another was the double and sometimes triple workload these women were dealing with on a daily basis. Many of the female informants had children (75%) and most were married or in a relationship (79.4%), which meant that they were dealing with three competing demands, their role as employee, sometimes even as main breadwinner, their role as “default” homemaker and their role as “default” parent (for descriptive statistics of the sample, please refer to the methodology in chapter 2).

These multiple roles reflect the often cited second shift by Arlie Hochschild (1990), although I would side with critiques of the second shift thesis (Bianchi et al., 2012), that point out that childcare and housework shouldn't be classed as one type of work as the former is arguably more pleasurable and women are less likely wanting to get rid of it. For these reasons I differentiate between three types of workload 1) being the primary caregiver in the home for children (and elderly), 2) being in charge of homemaking and 3) being a corporate employee at TechComp. All of these roles put demands on women that shaped their availability for work and their peripheral work connectivity. However, as we will also see in the final theme of this section, these women were not just subjected to external pressures as described above, but

they put even more pressure on themselves through their own career and family aspirations. They effectively “did gender” by constantly regulating their PWC level, thus engaging in disciplinary self-management by submitting to the norms of the multiple roles they inhabited.

#### **5.2.3.1.1. Being the Primary Caregiver**

While many women who participated explained that their husbands helped with childcare and that they shared responsibilities, all mothers I interviewed (51 out of 69 or 75%), across all countries reported that they remained the primary person in charge of managing their children at all times by organizing, planning and delegating. Husbands would be advised on what to do. Some British informants, who had read the earlier discussed Huffington post article and who had recommended it to me, even called themselves sometimes humorously at other times more critically the “default parent”.

This phenomenon was a shared experience across *all* countries and *all* mothers, even amongst the ones that were the main breadwinner. So while fathers brought relief by taking on caring work, it was mothers who assigned this role to fathers when they needed help or considered it appropriate. So for instance, if a child was ill, nurseries usually called the mother first, who then contacted the father, if she couldn’t attend to the child.

Among these female “default parents” or primary caregivers there were two extreme groups, the ones that accepted and embraced this role and the ones that questioned it. Take for instance the case of one finance employee based in the UK, who had decided to work part-time to be available for her children:

*“I’m happy that he [husband] is pursuing his career and I am happy with the situation I am in. I want to be the one that fetches the children on time, I want to be the one that does that, I don’t want it to be my husband, I feel that it is my responsibility, it is something that I want to do and I have to fit my work around that.”* (Female employee, Finance, UK)

Her responses stood in sharp contrast to the story of another informant from Denmark, who had divorced her husband because he just wouldn’t pull his weight. Now, being a single mother, she felt she was better off than before:

*“Even though there was conversation and talks on how to improve, nothing ever happened so in the end I actually decided, instead of being a single mother of two children and a teenager at 35 I decided to just be a mother with two children...It is the same amount of work, but now I don’t have to get annoyed because I expect someone else to help me.”* (Female employee, Support, Denmark)

However, most women constantly moved along the continuum of embracing and rejecting this role, in one moment wanting to retain control and in the next desiring to get rid of it, reflecting the conflicting aspects of performing their gender identity.

For instance, one woman from Brazil talked about the stress she sometimes experienced when one of her children got sick, as she felt she was the one who had to take the child to a doctor's appointment because, as she explained, her husband was just not asking the right questions. However, upon being asked whether she would like to share this responsibility more she immediately rejected the idea of it:

*"No! I always say governance is mine, haha. I want to be there, I want to know what happens to my children, how sick they are. So I want to be there. I want to know what medication she [her daughter] takes...I am the primary responsible for them."* (Female employee, Finance, Brazil)

Another Brazilian woman described a very similar conflict when talking about her being the "captain of the family":

*"Interviewee: He [husband] is the one who prepare[s] eh the snack he [son] is going to take to the school every day, but I am the one who decides, I am the one who does everything else. Haha.*

*Interviewer: Are you the one who decides what the snack is going to be and he just prepares it?*

*Interviewee: Haha, yes, the range of snacks, which school, which time he is going to sleep and when to take a shower...*

*Interviewer: Is this a role you like? Do you want to be the person in charge of everything?*

*Interviewee: It is exhausting, time consuming...I try sometimes to be...rational, because it is a mixed feeling...obviously, he is fine with his father, obviously he is fine, but it is something beyond the understanding. Is it the best option possible? Is it the best thing that can be done at this time for him? I think this is a kind of a woman concern, definitely not a man concern. I don't know if it has to be all women, I don't know, but this concern about every detail is exhausting, it is very tiring but not possible to give up, I think...We have a joke in Brazil, the kid asks everything from mom and when mom is not close, he asks dad where is mom. Haha."* (Female employee, HR, Brazil)



Women from very traditional cultural backgrounds, such as India and the Middle East, did complain about the intense workload they were facing, but they generally didn't question this division of labor. For them completing their duties in the home was a given part of performing their gender, thus submitting to its norms and consequently disciplining their own behavior accordingly.

One Indian woman described to me how she hurried home as to immediately reconnect to work in order to meet work expectations, while taking care of cooking, cleaning and watching her child. She didn't question this setup at all:

*"For guys, if you compare, they are more flexible in the sense, they don't have the direct responsibility. Women they feel, ok, they feel home is their first priority and especially in India."*  
(Female employee, IT, India)

However, considering her immense workload this informant had reached a point where she couldn't spare her husband's help any longer, which left her with an uneasy feeling:

*"Initially I was hesitating to delegate responsibilities to my husband, because I was thinking, ok, it may not be up to the mark... I don't expect him [husband] to come and ask for something [he can help with], but if there is a need I explicitly request his help."*

A female employee at TechComp UAE with a Middle Eastern heritage similarly didn't question her role as main caregiver, when describing her husband's involvement:

*"He is supporting, but it is up to him, if he is in a good mood he will support...but you have the biggest responsibility and it is different, this is my role, this is my responsibility towards my kids."* (Female employee, Sales, UAE)

These examples show that there were different levels of acceptance and rejection of women's role as primary childcare provider, but the majority of women constantly moved between the two extremes, although with varying motives. While some (primarily Western women) outright rejected the idea of being the default caregiver due to having been exposed to feminist ideas that challenged traditional norms of doing gender, women from more patriarchic societies such as India and the Middle East tended to leave the internalized status quo unchallenged and only sought help when their workload really required it. Nonetheless,

the great level of responsibility for children meant that many women wanted to or didn't have a choice but to disconnect after work in order to fulfill their parent role. This showed how structural forces trumped organizational heavily gendered male PWC norms, as this final example illustrates:

*"My husband also has teams in South America and Columbia and the US, so he also takes a lot of calls from home, late night calls or odd timing calls, but it is possible for him to sit alone and take the calls not being interrupted, but the same thing is not possible for me, because I have to prepare dinner, I have to take care of my son, see that he eats, he doesn't leave me alone."*  
(Female employee, Engineering, India)

While the husband engaged in uninterrupted connectivity, submitting himself to the disciplinary reign of displaying high PWC levels as to fulfil one's work role satisfactorily, the wife could not fulfil these high expectations of PWC to the same extent. For her gender norms dominated in this context to which she conformed, disciplining herself accordingly.

#### **5.2.3.1.2. Being the Primary Homemaker**

In addition to childcare, women tended to be exclusively responsible for managing their household, even though nearly all male partners seemed to participate. Nonetheless, 19 out of 69 (28%) women explicitly addressed this as an issue in the interviews. While many women from non-Western countries (Brazil, UAE and India) mentioned that they outsourced quite a few household tasks to maids, women in the UK and in Denmark, where prices for outside help were much higher, were generally left to shoulder most or even all of these tasks. These additional duties had to be completed after work, due to which many women chose to disconnect and focus on their "other job", as one woman from the UK called it:

*"That is the thing as well, that I perceive the different bits, just as another job to do, I do my job at home and I do my job at work and I get on and I do them and yea, if I don't do them nobody else will...I need to sort of do one thing or another thing."* (Female employee, Engineering, UK)

A very similar comment was made by another UK informant:

*"And the reason I think for me to put boundaries at the end of the day, is because I leave work to go home to another job. I don't go home and put my feet up. I go home to the children...doing the washing, the ironing, the cleaning and then I go to bed at 11 o'clock. If I said to my husband I have got to work tonight, that wouldn't be acceptable. He comes home and he has leisure time. So I think, you know in general in my experience, it is ok for men to go*

*home and keep working if it is expected of them, but I can't go home and do that because it is hard enough working full time anyway.”* (Female employee, Finance, UK)

The situation of not being able to afford external help was particularly painful for one woman based in Denmark, who came from a country with a still strong ‘maids culture’. So she knew that outside help was affordable in her home country, but not in Denmark where she currently lived and worked. She responded to this by reducing her peripheral work connectivity in contrast to her husband:

*“I also need to do my housewife duties...So, if it is a number [ringing on her corporate phone after core work hours] that I don't recognize I will not pick up the phone, unless I am not involved with home activities, on the other hand I can see my husband, he would pick up the phone no matter if he is cooking, cutting the grass, he will stop what he is doing, so I think it is a choice we make that is different.”* (Female employee, Project Manager, Denmark)

These additional burdens put many of my female informants under a lot of pressure and some spoke about the feeling of never being finished nor ever being able to just relax:

*“[There is] not enough hours in the day to be able to manage all the work and household and everything. I just need a few more hours during each day to make ends meet. I am always behind at some point, is it laundry or something at work, yea. I am always behind on something with something.”* (Female employee, Support, Denmark)

These experiences showed that women at TechComp, particularly those who couldn't outsource household duties, faced another job at home on top of already discussed childcare responsibilities. The many chores that were still to be done after work meant that they could only handle these tasks by solely focusing on one job at a time. This meant that many disconnected from work, while male employees were much freer to respond to work related queries after hours. In this sense peripheral work connectivity became a space where gender roles and associated expectations were rendered visible and enacted. Reducing PWC was these women's response to the competing demands they were facing and their way of performing their gender. Downregulation of PWC was their coping strategy and the demonstration of conforming to normalized gender roles, although often consciously hampering their career progression.

### 5.2.3.1.3. Being a Good Employee

In contrast to the previous two issues, which generally contributed to decreased peripheral work connectivity, many women felt great pressure at work to be available when needed or sometimes even around the clock. In fact, 47 out of 69 (68%) women discussed this issue with me. This was due to high expectations of responsiveness and connectivity that had developed with the ever greater pervasiveness of connectivity enabling technologies (Mazmanian et al., 2013) and which now represented a norm in the Foucauldian sense, for which compliance or deviation from the norm could be examined easily by the display of high or low PWC. Yet, as we will see, conformance or non-conformance to this new norm was not an absolute. Rather, a constant movement between rejecting and submitting oneself to the disciplinary reign of connectivity seemed to be the case.

So for instance one Brazilian middle manager had stopped sending emails and instant messages (i.e. Whatsapps) after hours to her team, because she didn't want them to feel pressured to respond, clearly negating high PWC norms, but at the same time she felt obligated to respond to her boss until late at night, submitting herself to PWC's disciplinary function.

*"The latest one [message from boss] is sometimes 10 o'clock but the earliest one is at about 4 am. So, yes, it is tough, we are facing a tough time here in Brazil because of the market and political situation...the team is very reduced...It has been like this, it has been very tough. I understand [why her manager sends her messages out of hours] because of this...period that we are facing here in Brazil."* (Female employee, Engineering, Brazil)

Or consider a similar experience by an informant from the UAE, who told me that during weekends she frequently received instant messages from her boss in the middle of the night:

Interviewer: You really receive Whatsapps at 3 am and then there is an expectation that you reply?

Interviewee: Yea, yes. And I do. It is not bothering. At the beginning it seems shocking that somebody is in the bar and messaging you and asking you a question in the middle of the night, wanting to follow up on this and that, but then you will answer, you will get used to that." (Female employee, Engineering, UAE)

However, while some women considered it necessary to be connected around the clock, others did this more on an off-and-on basis, depending on the current workload.

*"I am not in a moment that eh like a big offer is going to be released or a visit from [the headquarters] is coming and there might be something that we do need to do now. In those situations I would easily do that [connect outside of work hours] because our mobile is just there, it is just having a look and giving an answer but in the normal days I don't do it."* (Female employee, Finance, Brazil)

In fact, most women told me stories of starting out with very high levels of PWC when they first got a smartphone. They initially embraced the technology afforded possibility to stay on top of their work and up to date at all times, which allowed them to reduce uncertainties, hence submitting to the new disciplinary reign of PWC. Yet, most women had quickly reached a point where this constant checking had become overwhelming and disruptive. As one UK informant described, she felt she was never "clean" due to unread or unanswered messages awaiting her on her technology devices.

Some women responded by significantly reducing their PWC or they found other means to handle the continuous inflow of messages:

*"I am not really freaking too much about them [work messages]. In the beginning, I must admit I used to do much more, I was...not only checking but I was answering most of them, I was able to do [that], I was checking them in the phone...I believe that now I have a system that will do and I will really answer the ones that I consider important, that the person on the other side...would not be able to proceed with their work...and today I have this, beside the phone, I have an i-Pad because of a project I am working with, so that is giving me a little bit more extra flexibility to answer emails directly."* (Female employee, Project Management, Denmark)

This quote illustrates that the informant felt initially empowered by the possibility to use mobile technology but then quickly conceived of it as having become overwhelming, reflecting Jarvenpaa and Lang's (2005) empowerment/enslavement paradox of mobile technology. She responded by continuing to read emails, while changing her replying behavior. This way she still knew what was going on, reducing uncertainty arising from the unknown pervasiveness of incoming messages. Yet, she had freed herself from the pressure to respond, having negotiated a way of practicing connectivity that worked for her creating a new sociomaterial work practice, while still conforming to the norm of displaying high PWC levels.

Another middle manager from Denmark responded to work related peripheral connectivity expectations by disabling her email account on her smartphone and making herself go through a lengthy process of connecting to the company VPN via her laptop, if she wanted to check emails outside of her work hours:

*"If I see an email on my phone I will look at it...you know at TechComp you have to go through VPN and dadada, it is not just a flick of a button to get in, so having to actually sit down and spend 3-4 minutes logging onto my computer...means I consolidate. I only do it once when I am home and that has actually, that gives me this breathing space from when I leave the office until I log on again. And if I know there is nothing urgent...I will not look at my computer at 9 o'clock. Then I will rely only on getting calls if anything urgent is coming in."* (Female employee, Sales, Denmark)

This comment illustrates that this interviewee had turned the constraints of one technology, that is, the long time it takes to log on to the company network via a computer, into a virtue that allowed her to manage her own PWC level. She had utilized the technological means available to her in a way that suited her own preferences, while still being able to attend to emergencies through phone calls. This had allowed her to reduce uncertainty arising from the unknown pervasiveness of connectivity and respond to the disciplinary reign of peripheral work connectivity in a way that worked for her, again creating a sociomaterial work practice that utilized technological affordances and constraints in new and creative ways.

So the above examples demonstrate that these women did in many instances encounter expectations of being available outside of their work hours, yet they found strategies to cope with these expectations, actively shaping and negotiating their peripheral work connectivity and balancing the competing gender roles they inhabited. And interestingly, when women had finally worked up the courage to reduce their PWC or at least manage it differently, they realized that the world did not stop because of it:

*"Interviewer: How was this change in your attitude and behavior perceived by your colleagues and your management?"*

*Interviewee: That is the funny part, nobody noticed...Haha. So, yea, at least nobody told me!"* (Female employee, Support, Denmark)

#### **5.2.3.1.4. Being Perfect or “The Nice Girl Syndrome”**

Finally, the women I interviewed did not just deal with work related or family related burdens, but they faced great pressure from pushing themselves to be perfect in all aspects of their lives, a phenomenon that was observable among a great majority of women from all participating countries (45 out of 69 or 65%). In fact, one informant from Denmark called this “the nice girl syndrome”, an apt description of the perfectionism and the high expectations many women placed on themselves. These pressures were shaped by career ambitions, the desire to retain an already obtained level of work autonomy and control, feelings of responsibility towards one’s work and the deeply internalized feeling of wanting to please:

*“I have always been like that. I don't like leaving anything unfinished and I am not very good at relaxing to be honest. Yea, I really take pride in what I do and always try and eh make things better for myself and for the company.”* (Female employee, Support, Denmark)

*“As women we need to be best in class. We need to deliver the highest level of cooking. We need to have the nicest house, the cleanest house. We need to be slim and look like models and whatever, and it is just not possible. I mean why? It is not as if our [male] counterparts are doing that.”* (Female employee, Sales, Denmark)

The expectation of having to excel in the roles they held, led many women to put limits on their own careers, as they felt they couldn’t take on any more responsibility and still perform 100%. One Indian woman told me about her own experience when she was offered an opportunity at work that would radically alter her current daily routine due to having to collaborate with colleagues in different time zones, requiring late hours and very high PWC. Initially she was very reluctant to take this step due to still having to fulfill her role as mother and as wife but then she decided to step out of her comfort zone and embrace the new challenge although by means of cutting back on her personal time.

*“[Prior to accepting new role] I had my personal life. I used to go to get my exercise, come back and cook everything, and then this proposal came up. But internally I wanted to move, I wanted to take up this challenge. So I think this is a place where women have to be strong and see how they can come out of their comfort zone.”* (Female employee, IT, India)

So in this example, the informant had opted for a career related opportunity, which increased her PWC, however, she continued to fulfill her remaining roles, that is, the gendered expectations of caring and housekeeping. She effectively engaged in doing gender and

connectivity at the same time at the cost of her personal leisure time, demonstrating how the competing norms of the roles she inhabited disciplined her to conform.

In relation to family and their household, women also wanted to stay in control or wanted to please by performing expected gender roles. And even if they reflected critically upon this fact, it was a feeling that was there, that they had been socialized into and that they couldn't get rid of easily:

*"Sometimes if I am really stressed, I might say to him [her partner] I am very sorry I haven't cleaned the bathroom this weekend and he will be looking at me: 'Why are you saying sorry?' And then I wonder, why am I saying sorry? And the longer I think about it, it is what my mom used to."* (Female employee, Support, UK)

So, these women all dealt with external pressures such as housework, childcare and paid work, but at the same time many of these TechComp employees held themselves to the highest performance standards in all aspects of their lives. These internalized expectations of having to give 100% every single time functioned as incredibly strong mechanism to discipline behavior. They shaped work practices during the day (e.g. through "smarter working" as some women put it) as well as peripheral work connectivity once the official workday had ended. They either kept PWC at a high level to fulfill work related expectations or they reduced it to compensate for not being available to their family the whole day. Effectively, they constantly moved along a continuum of low to high peripheral work connectivity, negotiating their boundaries, their work and private roles and with it their gender identity. PWC provided a sociomaterial platform upon which these negotiations took place.

#### **5.2.3.2. Negotiating Gendered Emotions**

The above section discussed the general roles the participating women inhabited, the associated norms and their own attempts at disciplining their behavior as to conform to these norms. The next section, however, will describe the mechanism through which these women measured, or examined to put it in Foucault's terminology, their own level of conformance to or deviance from the norms they encountered, namely through the emotions they experienced.

##### **5.2.3.2.1. Fear of Judgment**

One important theme that became visible in this study was the feeling of fear of judgement that many of these women encountered. Across all countries which participated, many informants told me about different levels of fear that they would be judged for a variety of



reasons. These were 1) anxieties that they were not as capable as others in performing their job, 2) fears that people would think they were not as committed as their colleagues, and finally 3) worries that their behavior was not seen as appropriate either because they displayed too much ambition or too little. These fears were heavily linked to normalized gendered expectations of how women should be (Bittman et al., 2003) and functioned as a disciplinary mechanism triggering women to respond to their experienced deviation from the norm. Hence, following Foucault (1977) these women measured their own deviation through the level of fear they felt and negotiated these emotions by self-regulating their behavior through the adjustment of their PWC level.

Many of these fears of judgment were directly linked to becoming a parent, but not all of them. Women without children were also affected by such concerns. These fears played a significant role in shaping women's individual PWC, either contributing to higher peripheral work connectivity levels or lower ones.

#### 5.2.3.2.1.1. *Capability*

A large number of 38 out of 69 (55%) women from all participating countries told me about incidents in which they felt they had to prove more at work than their male colleagues and they tried to do so by demonstrating high levels of PWC.

For instance, one senior HR manager from Brazil told me that it was typical for early career professional women in Brazil to pull 13, 14 hour days, because they felt they had to prove that they were as good as men. In addition, pointing to the numbers of female leaders in Brazil, she said that the few women that were currently at the top demonstrated to all the young women starting out that females did generally have to work harder than men to get there. In recent years, however, so she went on to explain this extra work had become increasingly invisible due to the possibility to connect and work from home. Nonetheless, women still ended up working more while men were socializing in a bar.

*"You can get your laptop and go home but at the end of the day we talk to people and, you know, whilst the guys go to the bar drinking beer with say his colleagues, the woman goes home for dinner, to the kids, and later to finalize or do a revision of a presentation."* (Female employee, HR, Brazil)

While men were out networking, women were taking care of children and preparing for the next day in order to prove their worth. Clearly, for these women, having a career had become

an important part of their social identity. Especially the Brazilian women I interviewed believed that in order to succeed in this domain they had to work much harder than men. PWC allowed them to do so, while still fulfilling their caring roles, although they remained much less visible than their networking male colleagues.

Yet, doing both was not easy. In fact, the fears of being seen as not good enough and the feeling of having to prove more were potentiated for some women by self-doubt after the birth of a child, revealing the conflicting elements of identifying both as a careerist and a mother:

*“After both births it was very difficult for me, the first time I thought from now on I will only be able to change diapers, I am no longer capable of carrying out an analysis.”* (Female employee, Finance, Brazil)

In India, as I outlined earlier, women faced additional confidence problems resulting from their upbringing. They were expected to be quiet and accepting. These females were aware that in a heavily Western world of work, being quiet and reserved was not going to get them anywhere. However, they struggled with their own confidence to become more outgoing.

*“I can tell you, it is in the kind of Indian culture, women still, I don't see that women are perceived as so much outgoing. Ok. So it is a big challenge for women, they feel is it ok for me to do this, is it ok for me to present myself this way. A lot of doubts within ourselves.”* (Female employee, IT, India)

One other Indian employee from the finance department then told me that she noticed that women in her office just wouldn't ask for help, when they didn't know how to proceed with their work and this could be a direct consequence of women fearing being judged for “not knowing their business”, as the informant put it. This was further supported by another Indian employee who said that she worked really hard and was available for work very long even after leaving the office in order to show that she can deliver as much as or even more than a man, despite being a mother. Nonetheless, women in India had to deal with expectations that they were not as mobile as male colleagues due to family commitments and safety issues when travelling alone at night.

In some instances fears of not being capable enough or having to prove more had become manifest in the minds of these women, because of real life experiences they had in which

responsibilities were taken away as soon as they had given birth to a child, as one senior manager from Denmark told me:

*"We were doing all the things that all the people in Denmark had said were undoable and then I had a child and then I was actually, all my responsibilities were taken away from me and the same happened to my other colleague because in that business the second you get a child you are worth nothing because you are not flexible any longer."* (Female employee, Operations, Denmark)

Another story was told by a Scandinavian senior manager working in the UAE, who had been directly approached by a male colleague, who wanted to know how she managed to be available for work as often, while still taking care of childcare, cooking and cleaning at the same time. In addition, this informant told me about the many instances in which her presence as the only woman in an all-male meeting was met with hostility as well as the nagging feeling that many of her male colleagues shared the assumption that she was only there, because the TechComp board wanted to see more women in senior management roles.

Another Western employee based in the UAE, who worked in Sales, told me about her own experience of having to prove more than her male colleagues, as acceptance of women in technical roles was low, especially in the Middle East. Due to this she had to work hard to convince her customers that she was qualified to deal with them.

One UAE employee encapsulated it by describing her own experiences as a mother in the world of work in the Middle East as follows:

*"I realized that it is really seen as a disability [having children] in this part of the world and whatever you do, you need to make sure that you are committed to your job and you need to make sure that people don't see this disability. So I need to make myself available because the culture doesn't allow us to really, I mean, not to be able to respond or not to read and accept this thing [an invitation to a meeting], it is really a luxury not to respond to your emails, because then people will say why are you not doing it, all the males in the organization will be able to respond."* (Female employee, Sales, UAE)

Finally, a very similar comment was made by a UK employee:

*"There are always issues with childcare, prioritizing work over the child and particularly when you are in a management position where there is an expectation for you to be at meetings or staying up and working till late and I think, I think, the whole gender balance, it is hugely male dominated. There is always that expectation that the woman, my personal feeling was that I had to prove myself, I had to prove them that I could be as good as them if not better than them."* (Female employee, Communications, UK)

These statements clearly showed the extent to which women were pressured by fears of judgment to be available and connected in order to prove that they were as capable as men in fulfilling their work role. As we have seen in chapter 4, at TechComp wide-reaching PWC had become a marker of status and power and in these women's cases of capability and worth.

Dealing with gendered expectations that they were less capable than men, these women tried hard to prove that they had a right to be there. The anxiety not to live up to these expectations, although it did not always derive from explicit experiences, acted as a disciplinary mechanism shaping women's availability and with it their peripheral work connectivity. More precisely, the fear they encountered allowed them to measure to what extent non-conformance would lead to a deviation from the norm and these feelings regulated their behavior. This explained to some extent why many women did show a high PWC score, despite the many challenges and role conflict they faced on a daily basis.

Nonetheless my informants had developed ways of dealing with such high pressures of availability that allowed them to combine both family and work related responsibilities to the best of their ability. So for instance, due to presenteeism at meetings still being valued at TechComp, quite a few women told me that they were open to travel for work but tried to limit it to a minimum, e.g. by taking a night flight and returning the same night, effectively sleeping on the plane two nights in a row. Thus, they were able to demonstrate to their organization that they were capable to travel, while minimizing disruption caused to their family life, as a variety of informants from the UAE told me.

Others accepted new roles and responsibilities by getting their mothers to move close to them or come with them on delegations or travels in order to care for their children, as women from India and Brazil explained to me. No matter what situation, women came up with creative coping strategies, showing their agency in determining work related and family related outcomes as well as allowing them to perform the competing and conflicting roles that together made up their gender identity.

#### 5.2.3.2.1.2. Commitment

A very similar theme was that of commitment, although this one was usually linked to being a mother and in some countries, like India, also to being a wife. Again, across all participating countries 24 women (35%) told me about their worry that their commitment to work was questioned after childbirth and / or marriage. These fears of not fulfilling male norms of displaying commitment and consequently what it means to be a good worker also functioned as a disciplinary mechanism in the Foucauldian sense by again providing a means of measuring one's level of deviation and thus triggering a response.

So, for instance, one senior manager in Business Development from Brazil told me about her experiences in the past, when her children were still much younger, that she used to try to show how committed she was to work despite having children by always trying to schedule family related appointments outside of her work hours, while remaining available via her company phone, so that her commitment wouldn't be questioned. She had developed a sociomaterial repertoire of work practices, mixing non-technological strategies (i.e. timing of appointments) with technological ones (i.e. availability over phone) as to display commitment to her work role and thus submitting herself to normalized ways of working.

Another woman from Denmark, with two small children and who currently strictly regulated her PWC, told me about her own engagement to further her education during the time her children were still small, so that her ambitions and her commitment wouldn't be questioned later on when her children were a little older and she could return to focusing on career progression much more fiercely than presently.

*"I hope, that I will not be evaluated as one who didn't bother, because look at the equal aged men, they have a different career path already, so I will be 40 in 5 years, that is a long time but I will be let's say 38, and a 38 year old man, what career level you can reach at 38. Women who have to feed and give birth to kids cannot reach 38 with the same level and it is not because I don't care...so I manage this by developing myself in this period consciously, collecting, you can say, the evidence for my surroundings. And I think if I come into a male dominated management environment I am pretty sure I will need it."* (Female employee, Operations, Denmark)

So despite her current decision to step back a little, to lower her PWC and to focus more on her children, she had a plan to manage her career, namely, that she put a lot of effort into her

personal development now to avoid the impression that she was not committed to her profession. Impression management was her survival strategy.

In India, the commitment issue was not just linked to motherhood, but started already with marriage, when Indian women were expected to shift their focus to the family. This had direct consequences as the following informant explained:

*“Once you are married, after your marriage they think you might have kids, you go on leave or if your husband is relocating you may leave, so along that way you lose some opportunities...I have seen that one of my colleagues, I was on a similar level at a certain point in time but after my marriage I certainly stopped getting opportunities that we were both getting earlier, so they were promoting him more than me, so eh, yea, I mean somehow it affects my growth.”*  
(Female employee, IT, India)

In general women feared that as soon as they had to attend to a family issue they would be severely penalized for it, due to which they tended to hide their private commitments as well as possible in some countries and / or they remained connected to work very long. Sometimes they even prioritized work despite of being emotionally torn between their role at TechComp and their parent role, as the following example illustrates:

*“We have this meeting next week in Abu Dhabi everyone is attending. I cannot say no, it has already been scheduled, it doesn't matter if my son has a parent teacher meeting on that day or something else, I cannot go and ask for a favor...but even for certain events, when your kid is sick and you cannot be there it is not really nice and nobody really understands this, like the day when my son broke his arm and I had to go to Saudi, next day I was in Saudi but my mind was completely with my son and nobody understands this one and I made this clear to my manager that I am committed to my job but sometimes it is too much.”* (Female employee, Sales, UAE)

A similar story was told by another informant from the UAE whose commitment had been explicitly questioned by her manager, who complained about frequent absences due to illness of the employee's children, despite these leaves all being taken from the informant's annual leave entitlement. This issue culminated when she was denied the right to take sick leave during a period of 3 consecutive days when her little son was in hospital.

Yet, an entirely new dimension was given to this issue by a variety of women in the UK, who contrasted the reactions of colleagues when they had to take care of family related issues with the reactions to male colleagues with similar private commitments.

*"If you think of the difference between men and women, I have always noticed this, if a man says this, oh no I'm leaving today because I'm going to pick up the children, I'm leaving earlier because I am going to see my child at sports day, then it is like ahh, he is a good father, what a nice guy. But if a woman says this, she's not that committed to her role, haha, because she is focusing on the family more than her job."* (Female employee, Finance, UK)

*"You are judged, I feel I am judged more harshly for my family than my male colleagues...I also feel that if I have to leave to pick up the children, people then expect me to be there...I have a male boss, if he needs to leave to pick up his children then he would be unavailable. That is what it was, whereas I think when I leave to pick up children, people are still sending me emails even though they know where I am, they send emails and call me...I think people are more understanding of these boundaries when it is men. And I think with the women they are just expected to be available regardless."* (Female employee, Legal, UK)

These statements showed that quite a few women in the UK felt that fathers were treated differently than mothers and that there was even a reward for fatherly parenting, while women felt penalized. In some instances, this did not remain a mere feeling but manifested itself in a concrete situation. One senior HR employee from the UK told me about one incident where her child, who was generally very healthy, got ill and she tried to reschedule a meeting because of it. The resistance and anger she encountered in the workplace was enormous:

*"In this exchange of should we say phone calls and texts and emails, trying to organize a replacement I was judged, I was told I was out of order for not changing my diary accordingly and I was told that this was outrageous that I left it to the last minute because, of course, your children give you a month notice when they are going to be sick."* (Female employee, HR, UK)

The worst part, however, was not the reactions she received at work, but the lack of or even positive reactions her husband received, when he left work to attend to their child:

*"I rang my husband and I was very upset, I was absolutely livid and he left work there and then and he says not an issue [name of informant], he left work and he came to attend to [child's name] and I went to that meeting...If a man rings and says he has to pick up a child, they are*

*considered like a national hero, and if a woman does it, it is like we are punished, and punished by verbal abuse or punished by the fact that you are made to feel so horrendously guilty about the situation, either by your child who clearly wants mommy or you are guilty about leaving work.”*

Despite this experience, this same informant had made a conscious decision to significantly reduce her peripheral work connectivity after her daughter had requested to “book some time” in her mom’s diary, accepting the consequences that her commitment to work would be questioned.

This story illustrates particularly well the severe discrimination and the double standard that women were still dealing with across all of these countries, which triggered a variety of fears signifying to them that they were violating normalized expectations. These feelings led many of them to make themselves available in even the most unbearable situations such as when a child was sick in order to prove that questioning their commitment to work was unfounded. Yet, some women drew a line at one point beyond which they fully switched off and were no longer available to work, conscious of the fact that their commitment would subsequently be questioned.

So these examples showed that women’s fears and actual experiences of being judged shaped their peripheral work connectivity in a certain way by functioning as a disciplinary mechanism, a consciousness that low PWC would lead others to question their commitment to work. They were a measurement of their own deviation from the norm and their PWC level a means to self-regulate this deviation.

Yet as we have also seen from the importance of impression management as survival strategy as well as the case of the woman who reduced her connectivity for the sake of her daughter, despite risking to encounter negative reactions in the workplace, these women did not allow organizational expectations of PWC to dictate their behavior or externally determine the outcomes of their career progression. Instead, the informants were agents actively shaping their own peripheral work connectivity level, their work – non-work boundary as well as how the discrimination they encountered affected their lives and their careers. By making conscious choices over their level of PWC they tried to balance the competing demands of their work role and their private role which both formed part of their gender identity.



#### 5.2.3.2.1.3. *Deviant Gender Performance*

The final dimension of fear of judgment was that of inappropriate behavior, referring to women fearing being judged for not conforming to accepted norms of behavior. This issue came up in conversations with 21 women (30%) again with all countries being represented. Here I identified two conflicting subthemes that showed that women often encountered resentment no matter what strategy they chose in managing their peripheral work connectivity.

The degree of ambition women displayed in relation to their careers seemed to be considered as problematic by others regardless of the route they chose. So there was fear of being judged for either being too ambitious, while neglecting one's family, as well as fear of not being career driven enough, as one employee from Brazil summarized:

*"Sometimes the general society blame[s] the woman who wants to come back to work because they could stay at home and then we also have to deal with society that says oh you could go back to work, why do you want to stay at home...If you have children you have to deal with this kind of common sense of the society that will never be happy with the decision that you take for your life."* (Female employee, Finance, Brazil)

This seemed to be a shared experience across all countries regarding being too career driven. Women's fears of judgment for not being career driven enough were exclusively reported by women from Western countries and Denmark in particular, where childcare facilities were abundant and of high quality and gender roles most fluid.

In India on the other hand there was clearly a tendency in the other direction. As one informant told me, women who were unmarried and without children or working mothers with small children were seen as greatly deviating from the norm and often had to deal with hostility, especially from their own family:

*"There was a random question [from the informant's in-laws], when are we having a second child, so me and my husband we were really clear that we are not going for a second child...but they labelled me as being too career-oriented, so they are not having a second child, that is the impression that is created in my family."* (Female employee, Engineering, India)

Yet Western women also feared that they were judged as too career ambitious, such as one UK HR manager who just couldn't seem to find any other women like her in her professional

life, women who had both children and a high position in a large corporation. And yet, at the same time she felt excluded from the circles of the moms of her daughter's friends.

A similar situation was described by another UK informant whose query whether after-school-clubs were available at the new school of her daughter, was met with a mere *"it is the mother's job to drop off and pick up their children, we don't need after school clubs"* by the principal of the new school, so she reported.

Finally, one childless senior woman from the UK told me that, although she had never been explicitly challenged in the workplace why she didn't have children, she often explained it to others even without being asked, as the question was hanging in the air anyways.

In Denmark on the other hand, quite a few of the women I interviewed explained that women who chose to stay at home full-time were looked down upon greatly by Danish society, as childcare facilities and family friendly policies made it very feasible for mothers to manage both work and family as the following quotes demonstrate.

*"Practically all women work...very few actually decide to stay at home with their children...when they finally do, then they are also looked at in a weird way, you need to make a career...being at home as a mom...will just ruin your brains or something like that and you will never become anything. That is the mentality."* (Female employee, Support, Denmark)

*"There is...a lack of understanding if you choose to put your career on hold and concentrate on the children...because there is this career drive, you must make something of your life, but I can make something of my life even if it means that I am not working for a period. It doesn't make me a lesser person, or less ambitious person, it just means I have concentrated on something different for a period of my life. I mean, I think that definitely that is there, there is a lack of understanding of that, as there is a lack of understanding for people who choose not to have kids."* (Female employee, Sales, Denmark)

These fears of being seen as either too ambitious or not ambitious enough led many women to respond in a multitude of sociomaterial ways, shaping their peripheral work connectivity level.

For instance, the childless woman from the UK I talked about earlier had determined clear limits to her PWC logging off at certain hours, also because she didn't want to be seen as too ambitious and had sought external coaching to achieve greater balance:

*“I don't want anybody to feel as though my career development and my successes have been because I am single with no children and willing to commit my life and soul to my job. I really don't want people to think that, because I don't do that.”* (Female employee, IT, UK)

Again, the fear to deviate from the norm and not conform to gendered expectations of behavior, had led her to shape her PWC level in a certain way.

Another British woman with a part-time contract regularly worked long hours in the evenings from home and checked emails and messages to prepare well for the next day as to reduce uncertainties of not knowing what had happened after she had left work. Yet, she made this extra work invisible by only sending out emails, which she had prepared the night before, the following morning. This showed that while she utilized the possibility for PWC to fulfill her work role, she also negated the new norms of displaying high PWC by hiding her activities. She did this to respond to another seemingly dominating norm of displaying femininity by regulating her ambitions, thus performing her gender identity. PWC, as disciplinary mechanism, had nonetheless triumphed, as she considered it necessary to connect in the evenings to fulfill her work role.

Finally, one Indian woman explained to me that she went home fairly early as to reduce fears of being seen as too career-focused but then immediately logged on to her laptop and left it turned on the whole evening, in case something important came up that she had to attend to and as not to appear unfocused. In this case connectivity emerged once more as disciplinary mechanism, albeit allowing women to fulfill and perform both their work role as well as their family role.

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All of the above examples show that women at TechComp were dealing with a great variety of fears, be they related to capability, commitment or ambition, and these fears played a great role in the space PWC provided and where gender performances took place. The ones who feared not being taken seriously at work anymore spoke of the ways in which they increased their availability for work beyond core work hours. This meant they effectively increased peripheral work connectivity, making use of the possibilities afforded as well as submitting to the disciplining reign imposed upon them by connectivity and associated norms.

In contrast, the ones that feared being seen as too career-driven or those who had had negative experiences that challenged their caretaking identity, such as the instance of the child wanting to book time in mommy's diary, tended to set clearer boundaries, with the result of lower peripheral work connectivity. Here the traditional caring part of her gender identity trumped organizational expectations. In both cases though, the worries of being judged functioned as means to measure and control one's deviation from the norm in the Foucauldian sense and through these behaviors women tried to perform their gendered identity as well as exert control over their situation.

No matter what experiences women had or what sociomaterial strategies they chose though, they were encountering a variety of ideological hurdles that they had to overcome and which quite often made their male colleagues look more capable, more committed and more career oriented as they were more likely to fulfill normalized male work related expectations, including those of high PWC.

#### **5.2.3.2.2. Guilt**

Another very important theme that came up in almost all conversations I had with the women across all countries was that of guilt, reflecting previous research that found that women often feel guilty when work and family roles overlap (Galvin, Schieman & Reid) and for not fulfilling their parental role as fully as they would expect of themselves (Chesley, 2011; Allen & Hawkins, 1999; Desai et al., 2011). As we will see, similar to fears of judgement, feelings of guilt strongly disciplined these women by allowing them to measure their own failure to comply with norms and hence regulate accordingly by disciplining their own behavior.

What I have furthermore found in this study is that women feel guilty for different reasons and country of origin seems to play a role in these women's feelings of guilt. Across all countries the strongest feeling of guilt was that towards one's children, followed by feelings of guilt towards work, highlighting the conflicting roles and parts of these women's gender identity as well as competing societal norms that aim at imposing their disciplinary reign.

However, especially in India, where the norms for a woman's role in the family are particularly strong, guilt towards one's environment – predominantly the immediate family – was another key theme. Although this feeling was linked to childbearing, what distinguishes this dimension from the first one was the source of the feeling of guilt originating in the immediate family environment of the informants.

Finally, there was the theme of guilt towards oneself, meaning that the women felt sorry for having invested substantially in their careers early on and then having stepped back for the sake of their family. These women were confronted with a severe identity conflict. They wanted to be careerists but having complied with gendered expectations of caring, they felt they had let themselves down. They hadn't lived up to normalized expectations of what it means to have a good career.

This last theme was neither an issue for women in India, where informants seemed to have internalized their maternal and domestic role the most, nor was it a problem in Denmark, where females had the best possibilities to combine both family and work, due to which they didn't have to mourn their own career. In Brazil, the UK and amongst the Western women working in the UAE, this theme turned out to be important though.

#### 5.2.3.2.2.1. *Guilt towards Children*

As mentioned, the well documented feeling of guilt towards one's children was also a widespread phenomenon amongst the women in this study. In 35 out of 69 (51%) interviews we came to discuss this issue.

One interviewee from Brazil described these sentiments as *"confusion in our mind and feelings that I should be with them but I am working."* (Female employee, Finance, Brazil)

These women struggled with their choice for a career that stood in contrast to their internalized feeling of having to or wanting to parent. While having a career had become the norm, the expectations for being a good parent had not lowered, but even intensified as the trend for intensive mothering suggests (Mun & Brinton, 2015; Cotter et al., 2011; Chesley, 2011), leaving women with highly conflicted feelings.

Another woman from Brazil, who described loving her work very much, just couldn't get over the fact that she had missed important moments in the life of her daughter:

*"My daughter is 5 and a half years old and she already lost 2 teeth and I was not with her in these moments. I was not there. I was not there."* (Female employee, Finance, Brazil)

These feelings of guilt put great pressure on these mothers due to which they went to great length to be with their children as much as possible, while still fulfilling their work roles. For

many this meant that they suffered from stress, as the finance employee who felt sorry for missing out on the teething experience explained further:

*"I thought to myself, I am not there to take them to school. What kind of mother am I? I have children but I am not there when they go to school. So I would drop them at school and pick them up, every day, I would arrive at work already totally stressed. It was crazy."* (Female employee, Finance, Brazil)

Recently, she had decided to pay a driver to drop them and pick them up.

And while new technologies enabled work connectivity from anywhere, at any time, allowing these women to stay home with a sick child while still working, provided an adequate policy was in place (which wasn't in the UAE) and management accepted it (which wasn't always the case), this was not enough to get rid of the nagging feeling that one was not fulfilling one's parental role very well:

*"Interviewee: I have the opportunity to say my child is sick and I can work from home and that is probably the biggest danger here, yes we can stay home with our sick kids, but we are also available on emails and stuff like that and we might be able to do a conference call...you are home with your kids but you are still kind of at work."*

*Interviewer: But you said it is a danger, why is that a danger?*

*Interviewee: Because then your kids are sick, but you decide you are home with them but you might not be able to give them the care they need because you are also focused on your work."* (Female employee, Support, Denmark)

One strategy some women used to manage this feeling of guilt was to share their experiences with others, allowing them to support other mothers who went through similar emotions, while not feeling alone with these challenges anymore and as the informant below put it, "consoling" herself:

*"It was a difficult phase. It is very hard to leave the kids at home, they will cry when you go out, but it is a phase, I keep telling all the ladies [her co-workers with similar situations] at least that these are not specific problems that they face; these are general problems."* (Female employee, IT, India)

Based on these experiences of guilt, many women then decided to segregate very clearly between work and private life. They aimed to work as efficiently during the day as possible in order to get done and to log off when at home as to be fully with their children, but even within this same overall approach, they drew on different strategies to manage the situation:

*"I think, you need to define some things and to put some stops in your life in general. So, as I said, I don't check emails, I don't actually, in general I don't work during the weekend, because then I need and want to be with them, fully dedicated to the maternity, to be with them. So the time that I am with them, it is 100% dedicated to them, the time that I am working I am 100% dedicated to my work."* (Female employee, Business Development, Brazil)

*"When I used to work a lot, my daughter would say you don't have anything but your work...So that also matters for the fact that at least when I reach home I do not open [the laptop]."* (Female employee, Communications, India)

*"I usually tell them [her kids] that this is part of my job and I need to respond to my emails as well, but when it gets to the point that they really need my attention and I am not really able to help them, I just stop. I just say it is your time now and I won't be able to read and do things."* (Female employee, Sales, UAE)

In the first example from Brazil, the informant was absolute in that she decided to completely segregate through total disconnection on weekends. In the second case from India, the interviewee let her children determine the boundary, by continuing to focus on work until they complained. In the final case of the Sales employee from the UAE, the participant used a mixed approach by focusing on work until the children required her attention, but at the same time she managed her children's expectations by explaining to them the importance of availability for her job. These different examples highlight to what extent different sociomaterial work practices were used by these women and that each one found an individual answer to navigate through the constraints they encountered. In each case the technology which enabled PWC in the first place was the platform upon which such practices became devised and enacted.

Yet another example was that of stepping back or opting out of employment entirely, only returning to corporate life when the children were older:

*"Interviewer: So what made you leave employment back then?"*

*Interviewee: Just feeling guilty about not being with the kids and you know my husband might be going off with them in the holidays ...to go on a daytrip or something and I was missing out on all that, so I wanted both, I wanted to keep my brain active and do the things with the family as well. And setting up my own business allowed me to do that.”* (Female employee, Finance, UK)

These feelings of guilt stood in sharp contrast to what their husbands felt, as many women described. The fathers didn't see themselves as primary caregiver.

*“I think the men believe that the kids, especially young kids they need their mother...so they are quite confident that eh, that since they need their mother, even if they were available to be with them, it will not make a big difference because anyway they ask for their mother. So that is why they don't feel guilty.”* (Female employee, Sales, UAE)

Another telling story was that of a senior engineer from the UK who had been invited to give a prestigious keynote at a European conference one day before her son's birthday, a once in a lifetime opportunity, as she described it. Despite feeling incredibly guilty for not being there for her son, she accepted and informed her husband well in advance so that one parent would be there. Her husband however was then also asked to give a presentation at a conference and accepted immediately without thinking about their son's birthday and ignoring the fact that his wife was due to be away on that day. She just couldn't believe he had accepted. While she did attend the conference, she felt incredibly guilty about it. Her husband on the other hand didn't:

*“This bothers me because I think this is because men are not brought up to feel guilty about these issues, because they are taught it is not their business even though it should be.”* (Female employee, Engineer, UK)

This male absence of guilt, which has also been described as the guilt gap (Hays, 1996; Sutherland, 2010), was furthermore confirmed by the discussions I had with the male interviewees from the UK, who generally didn't question their time at work and while they enjoyed the time with their children and sometimes would prefer to spend more time at home, they didn't express any feeling of guilt about this.

So to conclude, it became clear that the majority of women had a constant feeling of guilt towards their children arising from deeply gendered expectations of good parenting. This



feeling played a major role in determining how available and connected these employees were outside of their core work hours, usually with the consequence that they reduced peripheral work connectivity to focus on their children while at home. This feeling of guilt thus acted as a very strong mechanism by measuring one's level of failure to fulfil gendered norms of parenting, controlling these women's thoughts and behaviors and disciplining them so that they reduced their PWC level. For many of these females, structural and individual factors trumped organizational expectations of high PWC that men tended to subscribe to more often, not least due to the guilt gap. PWC in this sense was a platform where gender identity was enacted and negotiated particularly in relation to private roles and conflicting emotions.

#### 5.2.3.2.2.2. *Guilt towards Work*

In addition to the constant perception of these women that they were neglecting their children, many felt equally guilty towards work (21 out of 69 women or 30%). In fact, it appeared as if these women were constantly moving on a continuum between guilt towards work and guilt towards children, showing the tension between competing norms and roles that made up their gender identity:

*"I worked in a team where there weren't many parents and a lot of the people were single. So the idea that at half past 5 I had to leave, nobody ever said anything but everybody was still there and I was the first person to leave but when I got to my daughter's nursery, I was also the last parent to be picking up their child. So all the other children would have gone home and my daughter would be the last one. So I felt like I wasn't doing good, a good job at work and I also wasn't doing a good job as a mom, because I was the last one to pick up my child and that is a terrible place to be in."* (Female employee, Finance, UK)

The perception that they couldn't do their best in either role put many of them in great distress and under a lot of pressure due to which a few told me about longer timeouts they had to take from work because of stress and burnout symptoms. And while many put in extra work hours from home, they felt this was not recognized and they themselves thought it was not right to leave work when "the day is not done yet", as one informant put it.

*"On the other day I had a series of meetings that ended at 3 and I said instead of going back to my desk for two hours it is easier if I could just log on from home, because I had lots of catching up to do. The thing is that I do feel guilty when I do that, because the perception is that I'm just gonna go and pick up my children from school, call it a day and go to the park."* (Female employee, Finance, UK)

This feeling was independent of seniority, as one top senior executive woman from the UK, who had returned from maternity a year before, described a very similar experience to that of lower ranked females within the company:

*"I was used to a very different way of working [prior to giving birth]. It is really difficult. I felt really guilty to leave the office so early (at 5 pm) without the people thinking...I always thought people think that I am only working part-time now."* (Female employee, Business Development, UK)

However, the seniority allowed this particular manager to introduce a variety of means to make it easier for herself and other women in similar situations such as a "Baby Buddy" system that brought together new mothers with experienced mothers in a mentoring relationship.

Yet, because many women required a certain amount of flexibility in their job to manage private matters, like children's doctor's appointments, they felt that they couldn't demand any more from their employer and didn't dare to use their children as an "excuse":

*"I think we are not so good when negotiating our salaries. I think because sometimes I feel like, oh I am negotiating that I should work 3 days from home, so I should not negotiate my salary, but I am always available, from home or not, I am doing extra hours, so I am always available and I am doing the same work, why should I not negotiate my salary."* (Female employee, Finance, Brazil)

Another woman, whose strategy was to work hard during the day to get as much done as possible so that she could log off and focus on her family while at home, had recently attempted to negotiate a promotion but only received a slight salary increase by one grade. She felt she deserved more but didn't dare to ask, because she couldn't take on any more responsibility.

*"I showed him [manager]...the big project I did...I got promoted last year, but not by position, just one grade. That is why I was not very satisfied, I would like to have a complete promotion...I feel that you shouldn't ask this...you can't be so demanding."* (Female employee, Sales, UAE)

These stories illustrate that many of the informants had internalized their work role and had accepted the associated demands such as long hours and constant availability and peripheral work connectivity. They left the status quo that is work becoming more and more demanding and parenting remaining the mother's primary responsibility unchallenged.

Many of the interviewees had come up with strategies to manage work and family though, for instance by "working smarter" as a variety of participants described it, whose meaning ranged from not taking many breaks during the day, over detailed work planning on Sunday evenings, to intense focusing during the day in order to leave early. In addition, many women, as well as the fathers I interviewed, used early mornings and late evenings when their children were asleep in order to work in this case greatly making use of peripheral work connectivity and disciplining themselves in a way to fulfil all competing expectations. However, quite a few women described situations where they operated at their limit:

*"I think also because that is also part of the reason that eh you see that most women only advance to a certain level because you simply cannot cope with more and you just don't want to take any extra work or a higher degree of responsibility in your work, because then the whole card house is gonna fall apart, because you have your home life as well. So you are the glue in the family and if you are not there with at least that minimum time, then there is no glue."* (Female employee, Operations, Denmark)

These women were clearly torn between societal and personal expectations of being productive at work and their traditional role as mother that they had been socialized into in all of the countries that participated in this study. These competing demands led many to put ever more on their plate, in an attempt to meet all albeit conflicting expectations until they inevitably hit the organizational and their personal health-related glass ceiling.

In terms of peripheral work connectivity, this meant that many women simply couldn't be as connected around the clock as they were working hard at home to make up for the feeling of neglecting their children while at work. At the same time, many women connected again later at night, after their family duties were over for the day, at the expense of their personal recreation time. Otherwise, they felt, they couldn't fulfill both roles. Here the disciplinary mechanism of PWC shone through by highlighting how the possibility to work early or late had led to expectations to do so. The fact that the technology now afforded such connectivity, hadn't freed them, but had enabled them to get ever more work done both at home and for TechComp and had led to an intrusion of male norms of work availability into the home.

Nonetheless, moving along the connectivity continuum enabled them to negotiate their feeling of guilt towards work as well as towards their children, reacting to the disciplinary reign of work and family norms.

#### 5.2.3.2.2.3. *Guilt towards Environment*

Another important, albeit less prevalent theme was that of guilt towards their personal environment, particularly their families. 13% or 9 out of 69 women discussed this topic with me and primarily women from India seemed to suffer greatly from this phenomenon.

As was explained to me by a variety of Indian interviewees upon marriage most Indian couples move in with the parents of the husband and are expected to care for them as well as for their own family. In the past, women would not go out to work and would dedicate themselves full-time to such caring tasks. However, in recent times educated women in India were usually also working outside of the home and wanted to find fulfillment in a meaningful career. This put a lot of these women in deep conflict as the following story illustrates:

*“30 is a tricky age, you are growing in your career but at the same time you are growing personally as a mother or as a family person and balancing these two again becomes a priority and maybe in some households which are very family oriented the women come in late and are not able to spend time with their children, then it becomes a really big issue to get support from the family...In fact I was, me personally, I was expected to take a break after my son was born but yea, I did not opt for it, so there was some dissatisfaction in my family [her in-laws]. Fortunately my husband is very supportive, so I could do what I wanted, otherwise there was a lot of dissatisfaction because I had to leave a 6 months old baby at home and go to work, yea, and being away from your child for at most 11-12 hours, so this was not received well in my family...So they would not talk to me, they would be very indifferent. Yea, they would directly say I am being not a very good family person or a mother and they would say the baby cries, he is calling for you, when are you back? Giving such pointers.” (Female employee, Engineering, India)*

Another Indian woman, who had encountered similar pressures in her life, had given in to the demands of her family and had stepped back from work while her child was still small:

*“I think I could have seen myself in a better position in my career but...I had taking the call, that I would go slow with my career, in fact I have taken a break during my daughter, when she was*

*in the first 2 years, I had taken a break in my career. So this is one reason why my career has grown slow but now since my daughter has reached, she is already a teen, 14 years, so now I am doing more towards my career aspirations and I can make my family understand, now that my daughter is a teen.”* (Female employee, IT, India)

These examples show that in addition to their own feelings of guilt towards their children and towards work, which stemmed from internalized ideals of how women should be, especially for women in India the traditional family setup of living with the woman’s in-laws coupled with traditionally held expectation of having to care for the entire family put even more pressure on these women and made them feel guilty, which in return shaped their PWC.

They did not just have to please their children and their colleagues and management but also their other family members who, through their attitude and behaviors, exerted great influence over the feelings of these females. So while the subject of guilt still remained the child, the source where the feeling of guilt originated differed in this dimension. In this case it was direct family expectations, rather than more abstract societal and internalized expectations that triggered self-discipline by demonstrating to these women when they violated norms.

Nonetheless, these women didn’t passively let others decide for them what to do or how to behave. While they were influenced by family expectations and traditions, they negotiated their own careers, either directly returning to work after giving birth, or a little later. They neither allowed others to fully control their careers nor their boundaries by choosing themselves whether to make or not make themselves available to peripheral work connectivity.

#### *5.2.3.2.2.4. Guilt towards Oneself*

Finally, the last guilt related aspect was that of guilt towards oneself that 12 out of 69 women or 17% came to discuss with me. These were mainly from the UK and the issue seemed to be related very much to the education and ambition of these women. While in non-Western countries the ideal of finding fulfillment in work was a more recent phenomenon, in the UK, a country with a long tradition of feminism, these women had grown up believing they could have it all, now finding that this promise hadn’t come true for them. In Denmark, a country where many more childcare facilities were available already, the women I interviewed didn’t seem to wrestle with this issue as much.

While all of these participants had a fairly high level of education, as they all held professional roles at TechComp, for some women this meant that they had anticipated great things for their future and now found themselves in the role of a mother, which forced them to compromise on their career aspirations. This meant that many thought that they hadn't lived up to their promises and they felt frustrated and guilty towards their own earlier efforts of getting a good education.

This struggle already started prior to having children. One woman who had not yet started her own family was debating the idea whether she should do so at all due to all the efforts she had already put into her career:

*"It is a dilemma really. I am probably at an age where I kind of need to seriously make a decision, if I am going to have kids or not and I just don't feel that you know I will have the same level of support that I need...I have really worked very hard for a career and to be independent. For me it has not been easy because I had to immigrate and leave my family, all of that has been quite a big step in my life and I do feel if I actually start a family I am not going to be. I know once I have a baby I wouldn't want to work, because I wouldn't feel that it is right for my baby to give it second priority over work and I just feel it is not fair to all the struggle I have done in the last 10-15 years to come to where I have come. I just don't want to throw it all away. It is a very difficult decision. It is not easy, for all women."* (Female employee, Engineering, UK)

Another woman who had children and who greatly struggled with the demands placed on her in the home due to an unsupportive husband told me about how she felt when she realized how her life had turned out:

*"I never expected this to happen, I suppose because I was always brought up thinking I will go to university and I was quite clever and I never thought I would become a mother and then everything was turned around, I was quite surprised I think."* (Female employee, Finance, UK)

This was not a singular experience as these statements from two more informants show:

*"I think going to work keeps me sane. If I had to stay 5 days at home I think I would be a worse parent than I am now because, I actually go to work, I have adult conversations, I am doing something. I studied for 7 years to become an accountant. I don't want to spend it sitting at home."* (Female employee, Finance, UK)

*“Particularly, if you have pushed yourself within your career to achieve quite a high role within a career then it is very difficult, if you are a late mom and I have seen this with a lot of my friends, to then take a step back and realize that you know you have been a career woman and in your mid to late 30s, you have to take the back seat and you progress more slowly going forward.” (Female employee, Engineering, UK)*

These examples show that many women, particularly those working in the UK, wrestled with their own ambition and dreams of a successful career. Their upbringing and education had formed certain career expectations of themselves and the nagging feeling of guilt towards oneself highlighted that they had failed to comply with these expectations. Decades of talk about women having both family and career (see Slaughter, 2015) had led them to believe that they could do whatever they wished for, but they had now hit a structural glass ceiling of a demanding and uncompromising work environment coupled with societal expectations of motherhood and good parenting. In their struggle to fulfill all of these expectations, they got frustrated over their own inability to live up to their own promise. This nagging self-imposed guilt continued to discipline them, to spur them on and kept the wheel of trying to do both spinning, constantly forcing them to balance family demands with peripheral work connectivity expectations and their own ambitions.

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So in conclusion, the stories of these women demonstrated to what extent feelings of guilt, no matter what source this guilt originated from, played an active role in determining women’s daily routines, their boundaries and with it their level of peripheral work connectivity. On the one hand, many women clearly segregated. This meant that their time at home was work – and hence peripheral work connectivity – free. They did this to make up for the perceived negligence of their children while at work, a feeling that was even more pronounced for women in India who had reproachful family members.

At the same time, many women wanted to do well at work and made themselves available as often as possible to avoid being seen as using childcare responsibilities as an excuse, submitting to new norms of peripheral work connectivity. So, these women constantly moved along a guilt continuum that influenced their peripheral work connectivity, which they up and down regulated accordingly. However, these competing roles put women under a lot of pressure due to which many told me about times when they had gone down with stress, which

in return forced them to reduce their work hours and hence their peripheral work connectivity.

Finally, many women from the UK felt sorry for their own career aspirations and for having put a lot of effort into their education. They felt that due to their own shortcoming of not being able to fulfill both their family and their work role equally well, they had not lived up to their own expectations. In order to prove to themselves that they still had a career and to mitigate their feeling of guilt, these women used their upward regulation of PWC as a means to do so.

So, all of these feelings of guilt arose from the construction of an ideal type woman who could please everybody: their family, their children, their work organization, and themselves. When reality didn't reflect this ideal type many of the women I interviewed felt like they were failing on all fronts, a mechanism that nonetheless continued to spur them on to do more and to be ever better at everything. The technology that allowed them to connect from anywhere, anytime, in this instance, had become a tool to keep this "card house", as described by one informant, shaky but momentarily stable, being both one of the causes as well as a solution to their struggles.

#### **5.2.3.2.3. Frustration**

Finally, another emotion I was confronted with directly from the start was the frustration that some women (8 out of 69 or 12%) felt, due to a variety of issues they were dealing with in the workplace. Interestingly, almost all remarks that related to experiences and feelings of frustration came from UK participants with two exceptions from the UAE. This could be a sign that women in the UK, a country in which the question of gender has for decades formed part of political, academic and general societal discourse, were most aware of the many difficulties and disadvantages women were still dealing with in their daily lives. In countries such as India, Brazil and the UAE, gender debates were in a more nascent state, while Denmark was a much more egalitarian society in the first place, where many of the structural issues women dealt with in other countries had been addressed by state intervention.

The frustration these mainly British women encountered could be classified into two different groups, the first relating to frustration born out of having to deal with inadequate equipment for work as well as policies and the second one relating to a general hostility women encountered in the workplace. In both cases though these women had internalized different expectations of how the workplace should be and when they still encountered structural and social hurdles, they used their own feeling of frustration as a measurement of what they still



wanted to accept and at which point they started to revolt. Regulating their own PWC level in this instance became a reaction to norms and expectations they did not accept, showing how these women could also actively and consciously negate societal norms, highlighting the productive aspect of power Foucault repeatedly stressed.

#### 5.2.3.2.3.1. *Equipment & Policy*

Many women I interviewed, especially mothers, had to permanently deal with a multitude of different demands on their time. In particular, the biggest challenge was to organize childcare, attend work related meetings, trips and events, as well as align with their partners as to who would be available and responsible for children at what time. Consequently, many women I spoke to shared their calendars with their partners and wanted to make this time-consuming process as simple and convenient as possible. For these reasons, one informant told me about her request to receive an i-phone for work which would have allowed her to sync private and work related calendars easily:

*"I had requested...we were having new smartphones and I wanted to know whether there was an option to have an i-phone because my husband uses i-phone and I wanted to have my calendar to sync, the work calendar to sync with my husband's calendar. Because trying to manage who is picking up tonight... You are in Manchester, I am here, who is picking up our son...It is impossible trying to merge all the calendars and I have to cut and paste. And I spoke to my manager and said it would be really good to have the right tools for the job, this phone. And we were told we could and then we were told we can't, it is a Samsung Galaxy and that's it...I was like very, very, very angry about this because it wasn't what I had been led to believe...I said that's it. I'm gonna get my own i-phone and I'm gonna put my work phone away at the weekend. Because if you don't let me use the tools the way I need to manage my time, you are not gonna get my time at weekends. So, that was a trigger. It made me think, how much do I give and they are not prepared to give back. And just listening to me as an employee saying it would really help me if I could use this particular media, it would help me to do my job better and they didn't listen, so I got angry."* (Female employee, HR, UK)

So, it became clear that the interviewee, who used to be available whenever needed for work including weekends, had experienced such great levels of frustration due to the company not being willing to help her accommodate her competing demands that she had decided to respond with disconnecting. This was her individual strategy to cope with the demands placed on her while protecting her own interests. She had the power to disconnect and segregate her work – non-work boundary, negating the expectations placed on her and relieving her own

frustrations. She had broken out of the disciplinary reign of constant PWC expectations since her own level of frustration had allowed her to measure to what extent she was willing to accept these new norms of connectivity.

In addition, women at TechComp were generally equipped less with mobile devices than their male colleagues (e.g. only 35% of women possessed a company smartphone compared to 43% of men), even though their work was more likely to depend on communication (i.e. for 51.4% of women communication made up at least half of their workday compared to only 33.5% of men) and technology mediated communication in particular (i.e. 61.3% of women used technology to communicate for more than 50% of their entire communication activities for work in contrast to 50.4% of men). This showed the gendered nature of how technology was made available at TechComp highlighting the power relations at play. The often heralded benefit of connectivity of being able to manage family and work better by being able to work more flexibly (Wajcman et al., 2008) was thus much more often available to men even though women faced much greater demands of having to manage both domains.

Yet, it was not technological equipment alone that led employees to experience frustration. In another instance, it was the absence or discretionary application of policies, an elsewhere documented structural hurdle women deal with (Bobbitt-Zeher, 2011), that fueled negative feelings, leading to less engagement and lower PWC. For instance, in another example one woman told me when talking about sometimes having to leave early due to childcare responsibilities that she found it incredible how inconsistent policies were applied to different people, creating animosity among colleagues and triggering frustration:

*“My manager is quite understanding about that [sometimes prioritizing family] and I generally make up the hours anyway. It is not consistent though. So for example I might make up the hours but my colleague probably wouldn't, so you have got 2 part-timers sitting next to each other and one will just stay at home...there is no consistency and no rules there around when that happens. It is the manager's discretion. If the manager says oh don't worry, you look after the children then ehm yea, that is fine but you know, I think it does need consistency. It can create animosity...and it is unjust to do that.”* (Female employee, Business Development, UK)

Again, as this employee told me later on she responded to these feelings of frustration with a clear separation of work and private life entailing a strict logging off after work. This highlights to what extent frustration shaped employees' willingness to be available when needed and it greatly influenced their peripheral work connectivity. In these cases maintaining clear

boundaries by regulating PWC were survival strategies for these women and their responses to the frustrations they felt. In this way the adjustment of their PWC level provided them with a space to negotiate their feelings and they demonstrated their agency by negating the generally high norms of PWC at TechComp.

#### 5.2.3.2.3.2. *Hostile Work Environment*

Finally, there was a great level of frustration born out of gender-stereotyping and othering at work that especially women in male dominated professions such as engineering encountered, who have been found to be the group most likely to suffer from gender-related discrimination in the workplace (Bobbitt-Zeher, 2011).

So for instance, one female engineer working in the UAE, who, as she told me, had operated under a great deal of pressure pulling long work hours and being connected to work literally around the clock while sensing that she constantly had to prove more, had recently reduced her general availability to work, as well as her peripheral work connectivity more specifically to live a more balanced life. Her husband continued to be connected to work 24/7 though, which now greatly frustrated her:

*"It is not easy and it goes way deeper into the issue, I think for myself when I was younger I used to identify myself first with my studies and then with my job. So I was [her name]. I was the top student of mechanical school and then I was the engineer from TechComp, but I guess like the more I gained experiences the more I learned and I studied and I don't identify myself with my job anymore. But in my husband's case it is not the case, to him his job is him. So it is his life and that is why he is devoting all he has to his life and on his mind is always work. Always. So you are sitting in a nice restaurant having a conversation and out of a sudden he says why did he write an email like that? So even when he is not directly connected to his work on the phone, on his mind he is connected 24/7 to work."* (Female employee, Engineer, UAE)

Another female engineer with a Middle Eastern background, who now worked in the UK, told me about the heavy discrimination she had encountered in her first role at TechComp UK:

*"The first place where I started working, it was very hostile, but it was a very un-accepting environment anyway, because I had other colleagues who were not from the UK and also it was a boys club basically and it was a bunch of guys who had been together for 20 years or so in a literally closed environment in a lab and basically, they were un-accepting, from day one...Because back in Iran I was working with a manager that his motto was 'I don't want to*

*work with women'...I worked with such depressing people and I survived, and I have come here and I found [myself] working with this bunch of people."* (Female employee, Engineer, UK)

To make things worse, when making this discrimination known to her superiors it was she who was removed from the team without the men in question suffering any disciplinary consequences. While she had encountered a much less overtly discriminating work environment in her new role, it was work she didn't particularly enjoy due to which she wasn't very engaged and felt that she hadn't given it her all also in relation to how often she was available to work and what effort she expensed:

*"Part of it is what has happened; the rest of it is me. I'm trying to be fair here, the rest of it is me, I didn't put the effort that other people would have done, so I didn't excel quickly but the fact around my case, I was promoted to senior engineer later than all the other people around me and I am pretty certain that I am paid at the lower margins of my pay grade."*

Segregating more strictly between work and private life due to the hostility she encountered at work and thereof resulting frustrations, led again to accusations from part of her management that she didn't try hard enough to integrate and meet expectations. To demonstrate willingness to conform she recently had started attending company internal events, although these sometimes put her in awkward situations.

These accounts of her experiences showed that her engagement at work and her willingness to participate and be available when needed or wanted was heavily shaped by the great level of discrimination she had experienced during her professional life to which she responded with reducing her own efforts including her level of PWC. While her colleagues and management had the power to discriminate against her, she had the power to regulate her efforts and her availability, negating expectations and norms of peripheral work connectivity.

Thus, PWC became a space where expectations of connectivity clashed with other structural and social issues that led to great levels of frustration for some of these women. Their level of frustration allowed them to measure to what extent they were willing to tolerate this combination of high PWC norms and structural discrimination. Once a tipping point was reached they started revolting, disconnecting and thus consciously failing to comply with PWC expectations. This act of disconnecting was a way to demonstrate agency and show that they could reconfigure power relations by breaking out of normalized ways of "doing" PWC.

Yet, by doing so these women othered themselves in relation to their male colleagues. They failed to behave like them, reconstituting the existing gender hierarchy in the workplace.

### **5.3. Conclusion**

So what can be said about gender and peripheral work connectivity? As we have seen PWC at TechComp is greatly gendered. If you are a male employee in this organization, you are more likely to show high levels of peripheral work connectivity than if you are a female employee and you are more likely to be equipped with the technology enabling PWC in the first place. This tendency was visible even when controlling for status level of employment. At the same time we have previously seen that high levels of peripheral work connectivity are associated with high profile work roles. It can hence be viewed as both a prestigious symbol as well as the result of holding such senior positions.

Yet, if women do not live up to organizational, collegial and managerial expectations of being available for work around the clock to the extent their male colleagues do, it is likely that their careers may not progress as quickly as those of their male counterparts, who more often subscribe to high levels of work connectivity at the periphery of the workday. As has been demonstrated by earlier studies (e.g. Mazmanian et al., 2013; MacCormick et al, 2012) as well as this study, peripheral work connectivity has become a key feature and an expectation of professional life in global corporations of today and this was visible in all countries that participated in this study.

In this context the question was then what mechanisms shape women's PWC scores at TechComp? Why do they subscribe to high expectations, why do they reject them and how do they manage them?

We have seen that at TechComp PWC had become a space where women negotiated gendered roles by up and downregulating their PWC level as to cope with the many expectations and norms of how they should perform. The roles they inhabited and the expectations they were confronted with were often heavily conflicted due to which many reduced their peripheral work connectivity in an attempt to fulfill all expectations and to live up to the ideal of the perfect employee, mother, wife or simply woman. Thus, PWC, through its cross-domain nature between work and private life as well as its role in creating new norms and expectations through its latent potential to connect from anywhere, anytime, had become a platform where male work norms and gendered roles clashed and new sociomaterial strategies became negotiated in an attempt to resolve this conflict.

In addition to providing a space, new norms of peripheral work connectivity also had a stake in these negotiations by acting as a disciplinary mechanism, leading many informants to regulate themselves in order to reduce uncertainties and fulfill expectations. Here, emotions such as fear of judgement, guilt and frustration became mechanisms of examination that allowed these women to measure their own deviance from the norm and discipline their own behavior accordingly.

So, PWC was the reason why negotiations took place as well as an agent in these, shaping outcomes. However, connectivity was not the sole agent in such negotiations. Instead, cultural, organizational and individual aspects also played a major role in shaping gendered performances.

Previous research has been very successful in laying bare many of the obstacles women face in the workplace, including additional burdens in the home (Bianchi et al., 2012; Prince Cooke & Baxter, 2010) as well as overt and covert forms of discrimination through gender stereotyping (Bobbitt-Zeher, 2011). However, not enough is known yet about the actual mechanisms that operate to erect or retain the glass ceiling (Hoobler et al., 2014). Particularly in the context of a world of work increasingly marked by high expectations of peripheral work connectivity, it is important to identify what mechanisms exist and what role women's own agency plays in these processes. As we have seen, up and downregulating PWC is one mechanism to conform to gendered norms of doing gender and connectivity; experiencing and responding to emotions is another mechanism to measure one's own deviance from these norms triggering reactions. Describing these mechanisms is what this chapter tried to achieve.

As we have seen at TechComp, there was in fact no singular cause that stopped women from being as connected to work as their male colleagues were. It was a multitude of different aspects that together shaped women's peripheral work connectivity and each individual PWC score was a woman's response to the demands and challenges that she faced and the outcome of her gender performance.

More precisely we have seen that structural aspects such as shouldering work, family and household, unsurprisingly and in line with previous research, played a major role in shaping these women's availability to work. It is particularly important to note here though that women were not passive victims of unhelpful and unsupportive family members and organizations. Instead they were implicated in putting career and family related pressures on

themselves by wanting to be perfect in all domains. Nonetheless, many women had found sociomaterial strategies that worked for them, which usually included an up or down regulation of peripheral work connectivity as well as additional non-technology related activities such as asking their mothers to provide childcare.

In addition to these general attempts at performing gendered roles, we have seen the emotional processes that took place which heavily disciplined behavior. I showed that societal, organizational and family expectations of having to fulfill certain roles, led to both fears of judgment as well as feelings of guilt towards a variety of groups including oneself.

In addition, we have seen that frustration born out of ignorance or discrimination led some women to respond with disengagement from work, which resulted in lower peripheral work connectivity and represented a form of rebellion, a rejection of normalized ways of displaying PWC or simply an enactment of power. These emotions, depending on their source and extent, triggered women to deal with the expectations placed on them through managing their work – non-work boundary in a certain way, involving the individual negotiation of peripheral work connectivity.

What was furthermore striking about this study was the great similarity of challenges women were dealing with across multiple and highly diverse cultural backgrounds, while their responses to these challenges were multifaceted. This shows that women have a great deal of agency in negotiating their PWC, their career and their family responsibilities even though operating within the constraints of their particular cultural, technological and circumstantial contexts. In some case this even meant that technological constraints such as long log-in times were turned into a virtue, consolidating and regulating one's individual peripheral work connectivity.

So, in conclusion, this chapter has demonstrated that the potential to connect from anywhere, anytime created a new space where negotiations over identity, emotions and roles took place. In addition, it became clear that for many of these women peripheral work connectivity did not just provide a negotiation space but often had a stake in these negotiations through its disciplinary qualities. However, my informants actively responded to their feelings and their roles by regulating their connectivity level, often reducing it. This meant that many women consciously or unconsciously disadvantaged themselves career-wise as their male colleagues were freer to fulfill ever growing expectations of peripheral work connectivity and availability.

Yet the responses of these women were creative and productive, highlighting their agency. And it is this theme of agency that I will pick up again in the following chapter.



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## **6. Chapter 6 – Global Work and Peripheral Work Connectivity**

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So far in this thesis we have seen how work connectivity has enabled spatially and temporally flexible ways of working but at the same time, especially in the case of women's participation at work, these new potentials have often failed to make the management of work and family easier. Instead, particularly peripheral work connectivity has in some cases turned into an exclusive force that hinders women from breaking through the glass ceiling. At the same time we have seen that peripheral work connectivity has become a space where women negotiate their roles as well as their gender identity.

In this next chapter I want to look again at the aspect of spatial flexibility afforded by PWC, yet from a different angle, namely that of global work teams. The possibility to connect to work from anywhere, at any time, has opened up new opportunities for collaboration across national boundaries and time zones. This was also confirmed by the findings of the survey, which showed that collaborating with colleagues in different time zones is a strong driver of peripheral work connectivity. In addition, peripheral work connectivity is a constant companion for at least some team members when they interact with their colleagues, while it may be a situation of non-peripheral work connectivity for other team members. This unequal situation makes global teams especially interesting to study in relation to PWC.

While it is clear that this connectivity enabled globality of work may have many benefits for innovation and productivity (Collins & Kolb, 2012), at the same time I will argue that new challenges surface that are related to aspects of hierarchy, exclusion, intensification and extension of work. These power relations are rendered visible and opened up for contestation in the space that connectivity provides.

To demonstrate this I will start out delving into the literature on global work. Here I will show that much is known about how globally distributed teams differ from teams that are spatially collocated and what challenges such teams face in terms of productivity, but little has been said about the effects of global team work beyond the actual work task. It is here where I want to contribute with empirical findings, addressing the question of how power dynamics become reconfigured in ICT enabled global work teams that heavily rely on PWC and what this means for individuals at TechComp.

I will present findings from the study of one global team that is spread across four continents: Europe, America, Australia and Asia. For this purpose I conducted 11 in-depth interviews with members of this team. These findings are further complemented with insights gained from my

interviews and discussions with other TechComp employees, who also collaborate frequently with colleagues abroad.

From these data it became evident that many employees cherish the spatial autonomy they have gained through global work, allowing for greater independence of work in many ways. Yet, at the same time three themes emerged in the space that PWC provided that rendered visible the contested nature of power relations at work: 1) Headquarter-centeredness, 2) work conditions, and 3) exclusion. It is these 3 themes which structure the empirical part of this chapter and which will illustrate how peripheral work connectivity provides a space for global teams where power relations become negotiated.

## **6.1. Global Work**

Global work, which can be defined as “situations in which workers are collaborating across national boundaries” (Hinds et al., 2011:136), becomes more and more relevant in the context of large international corporations. These companies deal with ever more global topics within their organizations that can only be tackled in global work teams, operating across national boundaries and cultures (MacDuffie, 2007).

Information and communication technologies – and hence connectivity – play an important role in such work setups, as this kind of collaboration is inevitably often mainly virtual in nature due to the spatial distribution of team members. For this reason, global teams are usually also virtual teams, which are defined by their geographical dispersion and dependency on technology (Gilson et al., 2015). In fact, as Gilson and colleagues (2015) found in their recent meta-analysis of virtual teams, already 66% of multinational organizations utilize such teams to some extent.

While virtuality, enabled by connectivity, is a pre-condition for global work, bringing with it its own challenges, it is the collaboration across national boundaries and cultures that adds another crucial dimension to global work, creating ever more benefits yet also issues and potential misunderstandings.

So, on the one hand, global work has a variety of benefits. For instance, as has been put forward by Gupta (2009), global work spread across different time zones can lead to productivity enhancements through the possibility to work on one project 24 hours a day. Furthermore, cultural diversity can lead to greater plurality of opinion and hence better solutions for global problems and demographic markers such as gender, race and age become less influential (MacDuffie, 2007). Moreover, cultural diversity is not the only form of diversity global teams often benefit from. In fact, Griffith and Neale (2001) suggest that there are three

types of diversity within such teams: 1) Informational diversity (e.g. expert knowledge), 2) social category diversity (e.g. age, gender, etc.), and 3) value diversity (i.e. when members differ with regard to their belief of team goals, targets and mission). In addition, members of global work teams are often more spatially independent and can, for instance, work from home more often, which can reduce distractions (MacDuffie, 2007).

Yet, on the other hand there are also challenges that arise from working across geographical and cultural distances. Hinds and Bailey (2003:616) have identified three types of conflict that surface in such global work setups and that may have much worse effects on overall team performance than in geographically collocated teams, where conflicts can also arise: 1) Task conflict (i.e. disagreements relating to work content), 2) affective conflict (i.e. emotional conflict related to feelings of anger and hostility towards team members), and 3) process conflict (i.e. disagreements over team approaches, methods and group processes).

These types of conflict stem from difficulties of coordination and the sharing of information, which are potentiated by the need to communicate using technology, a lack of shared context, and reduced group homogeneity, familiarity and friendship. In addition, the lack of face-to-face communication and dependence on technology can often lead to time lags of information exchange and incoherent messages (Gilson et al., 2015). And while some technologies, e.g. instant messaging, have been found to provide a feeling of presence (Nardi & Whittaker, 2002), they can never fully replace proximity (MacDuffie, 2007).

In this context, it is also important to mention that often global team members live and work in different time zones than their colleagues due to which a certain degree of peripheral work connectivity is often necessary in order to collaborate at all. Yet, as Collins and Kolb (2012) pointed out, in such team setups it is very difficult to strike a balance between being over (hyper) and under (hypo) connected. In fact, they propose that a high level of connectivity is a prerequisite for such collaboration to be possible but at the same time it is crucial to leave team members with a sense of choice regarding how connected they want to be.

In addition to such practical issues, cultural differences have furthermore been found to lead to trust issues and misunderstandings due to different approaches towards control and authority, diverging interpersonal communication styles and different ways of tackling problems (Cramton & Hinds, 2014). For these reasons, it is no surprise then that global teams made up of members who have worked abroad themselves, are more likely to be understanding of different cultural contexts and work styles, leading to better team outcomes (Subramaniam & Venkatraman, 2001)

Finally, another very important yet often unaddressed aspect to consider in global team work is that of power relations. Hinds and colleagues (2011) found that there is usually one high status group and one of lesser status. It is also very common that subgroups form within global work teams and such formations can lead to practices of exclusion (Gilson et al., 2015). In such subgroups, determining factors of inclusion are then often ethnocentrism (Cramton & Hinds, 2004) and a shared language (Chen et al., 2006), meaning that speakers of the same native language and cultural background tend to form closer relationships with one another. Furthermore, power dynamics may arise through the use of certain technologies that usually have been developed in the West for users with Western backgrounds, disadvantaging team members who may not interpret the technology in the same way as Western colleagues (Hinds et al., 2011).

So, as we have seen, a lot of research has been done around the question how global work teams can function and what challenges they face. Yet, as Hinds and colleagues (2011) have pointed out, not enough is known about truly global work, where employees collaborate across national boundaries, cultural contexts and time zones. To date, most studies have focused on problems of global teams and how to overcome these from a management perspective, but not enough is known about sociological aspects such as power and existing structures. Especially in relation to peripheral work connectivity, we don't know yet how power relations may become reconfigured in global work teams and what this means for individual team members. Filling this gap is what I aim to accomplish in this chapter.

## **6.2. Analysis**

### **6.2.1. The Empirical Data**

During my time at TechComp the company was going through a fundamental reorganization, which entailed a complete breakup and new formation of many teams across the organization. One of these newly formed teams was a senior corporate HR team that was supposed to develop global concepts for global HR problems. The new team members were spread across four continents (i.e. Europe, America, Asia, and Australia) and this setup had been deliberately chosen in order to develop better global solutions.

Nine months after the team had formed I had the opportunity to interview 11 team members out of a team of 15 including the team leader. These interviews form the empirical basis of this chapter, complemented by some quantitative data excerpts from the large connectivity survey I conducted (see chapter 4 and methodology chapter for more details). In addition, during other interviews I conducted with employees from different teams, the topic of global work

came up as well. In particular, I will be drawing on 4 additional interviews with 2 women from the Middle East, 1 from India and 1 from Denmark. These interviewees did not form part of the global HR team mentioned above, but they also worked in global teams facing similar issues. For a more detailed discussion of the methods used, please refer to the methodology chapter.

### 6.2.2. Global Work at TechComp

At TechComp global collaboration was an important part of daily work for many employees. In fact 41.3% of employees had indicated to frequently or even constantly collaborate<sup>1</sup> with colleagues abroad as can be seen from figure 34. Such high levels of global work then illustrate to what extent technology mediated communication played a role for conducting daily business at TechComp.

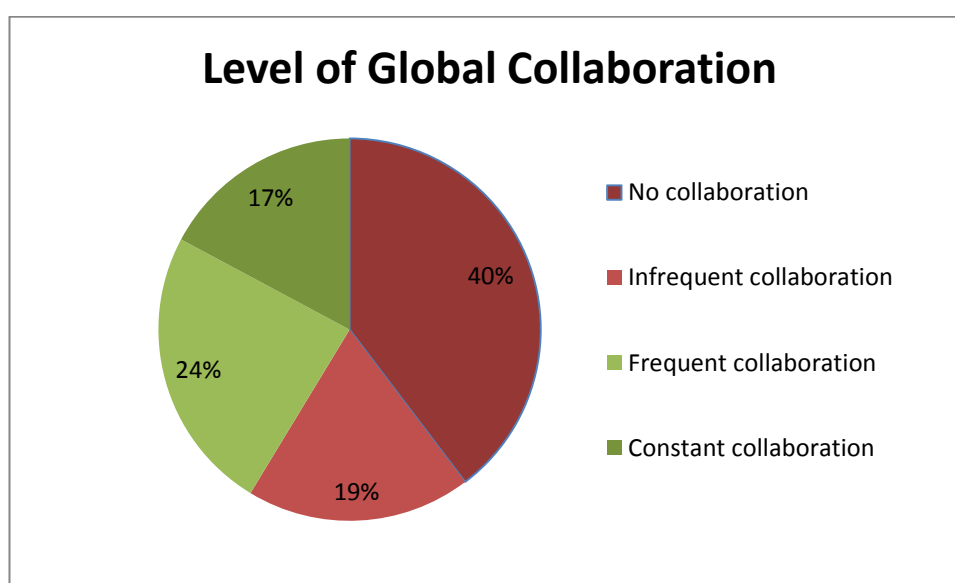
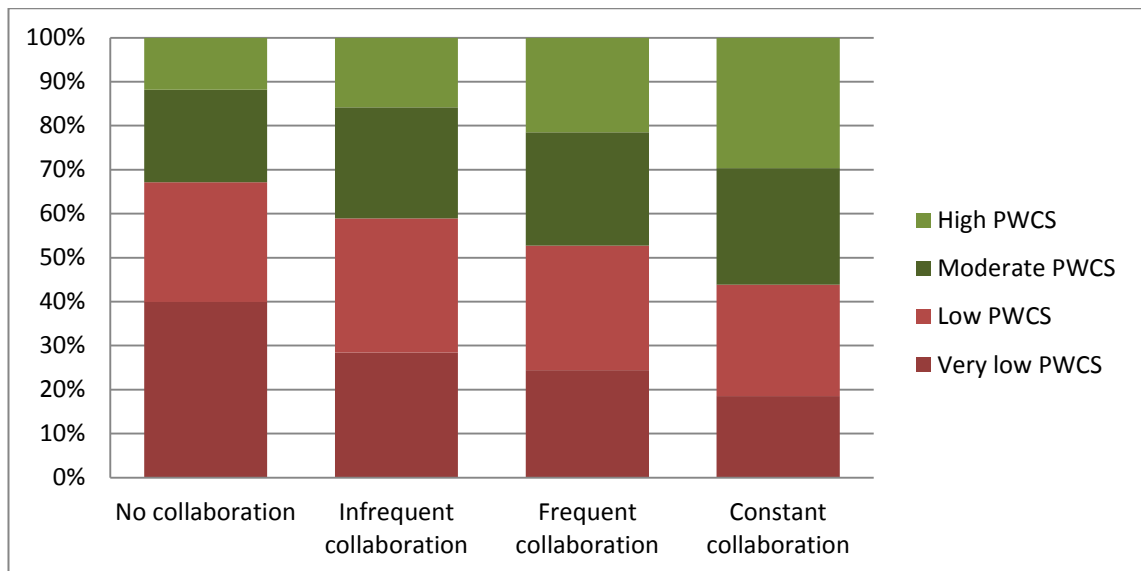


Figure 34 – Chapter 6

As we've seen in chapter 4, when linking the level of global work with work connectivity, it was further demonstrated that there was a significant relationship between work connectivity and degree of global work (i.e. Cramer's  $V = 0.128$ ;  $P < 0.01$ ;  $N = 19075$ ), showing that the more frequently employees collaborated with colleagues abroad, the more highly connected they were with their work at the periphery of the workday and week (see figure 35).

<sup>1</sup> Degree of global collaboration was determined using a 7-Point Scale from Never to Daily. Constant Collaboration = Daily; Frequent Collaboration = Once a week to a few times a week; Infrequent Collaboration = A few times a month to once a month; No Collaboration = Less than once a month to never



**Figure 35 – Chapter 6**

These figures raised the question how employees in such global work teams dealt with such high levels of PWC and formed the basis for further qualitative investigations (i.e. interviews) in earlier introduced global work team.

From these interviews three themes emerged that will be discussed in the rest of this chapter. These were (1) headquarter-centeredness, (2) work conditions, and finally (3) exclusion. These themes all showed one crucial commonality. On the one hand peripheral work connectivity enabled new work practices and often fundamentally changed the way employees conducted their daily work, but PWC also provided a space where power relations such as hierarchies, work conditions and exclusion became renegotiated, going beyond the idea of connectivity only changing work practices.

### **6.2.3. Negotiating Hierarchies: Headquarter-centeredness**

As I noted earlier there is often one high status group in a global team and one of lesser status (Hinds et al., 2011). This was also the case at TechComp, though nobody explicitly stated this in the interviews. Yet, this became most visible through the timing of work and expectations of travel. It was the possibility to connect from anywhere, anytime that enabled such teams in the first place and consequently this affordance of PWC provided a platform, where team hierarchies became contested and in some instances renegotiated with unusual outcomes.

#### **6.2.3.1. 24 Hour Workdays and Desynchronized Social Lives**

In the case of the HR team, the team leader was located in South East Asia, which was unusual for a TechComp corporate team, yet deliberately chosen in order to make this particular team truly global. He and some of his team members, who were also based in the Asian/Australian

time zone, found this situation incredibly useful and beneficial to their productivity. Due to the majority of the team as well as other stakeholders being mainly located in the European time zone, the Asian colleagues with global responsibilities had the entire morning to themselves, without having to attend virtual meetings or conduct calls with the European headquarters. In addition, some felt that the overall productivity of the team was increased by effectively “longer” work weeks.

As one team member stressed:

*“I have a great advantage due to the time difference. In the mornings I have a reasonable amount of time to work, to work conceptually, to work things off, before I start with meetings. In terms of meetings, sending and receiving information, my workday only starts at 2-3 pm South East Asian time, when Europe wakes up...I view this [time difference to Europe] as huge advantage. If you plan your work reasonably well and you have a team that works across different time zones, and I mean really, you have somebody in Europe and somebody in South East Asia, then your weeks and days become longer and I can pass the baton on.”* (HR Professional, South East Asia)

Yet, this benefit was greatly compromised by the drawback of having to extend work hours long into the evening in order to align with the colleagues in Europe and the Americas. While this was a problem for all TechComp employees situated in Asia, this was even worse for the colleague based in Australia. This team member often had to stay up very late, even beyond midnight, to join global calls that required attendance of team members from Asia, Europe and the Americas. However, as this informant explained employees based in this part of the world generally seemed to accept this as a given due to their location.

*“I also think that people in Asia, we are used to this, there aren't many international organizations that are headquartered in Asia. There are lots of subsidiaries and lots of companies who are present in Asia who are headquartered in Europe or the US. It is just part of our life. It is like, I know where I live you just have to travel 24 hours on a plane to get somewhere. This is just what you do. It is the same thing. It is just what you do. It doesn't mean it is good, haha, it just means that is what you do.”* (HR Professional, Australia)

In fact, it seemed to be a shared understanding that employees across the globe would have to adjust to the European headquarters' time:

*“It is always a question of where the key decision makers are based. In a European company such as TechComp, many of these decision makers are located in Europe...If the key decision maker was based in Australia, despite this company being a European-centric one, then my life*



*would be different. I would try all day long to accommodate the Australian time zone, as I said where the key decision makers sit, and in a large company this is usually pretty centralized and cannot be changed. This means there will be a dominant time zone; it is as simple as that.”* (HR Professional 1, Europe).

This statement indicated that, in theory, employees from Europe would be willing to adjust their own work rhythms, depending on whom the decision maker was and where he or she was based. Interestingly though in this case the team leader was not based in Europe but in South East Asia, yet he still accommodated the Europeans’ workday, without them having to start very early in order to reach their Asian colleagues. In fact, as he and many of his team members stressed throughout the interviews, they all viewed Europe as being located “*in the middle of the world*”, making it appear natural that Europeans would “*get the normal workday*” and that “*the natural timing of phone calls*” should not depend on location.

This was amplified by the fact that the team manager himself was connected and responsive about 20 hours a day, due to him not needing a lot of sleep and it set the tone for the rest of the team. This showed that despite the technological possibility for all team members to connect to the rest of their team at any time, it was the Europeans that could regulate their own peripheral work connectivity fairly easily, independent of who the key decision maker was. Their colleagues in different time zones, on the other hand, had to make themselves available much longer and more flexibly.

Looking at this from the perspective of disciplinary power, it became clear that Europe’s standing as the “middle of the world” had been normalized and had even become something essential that none of the team members across the world seriously questioned. In fact, the newly technologically afforded potential to connect from anywhere, at any time, made such a questioning appear even more absurd.

*“Actually my workday starts before I arrive at the office precisely because there is connectivity, but we are a global team...it is our daily practice.”* (HR Professional 2, Europe)

So it was again the afforded potential to connect from anywhere, anytime that led to the establishment of disciplining group norms of availability all team members adhered to but that primarily affected the non-Europeans negatively in terms of having to be available at unconventional work hours. In this sense, connectivity provided a space for more than just availability negotiations. Instead, team hierarchies were rendered visible and negotiated.

While the world’s time zones played a significant role in the routines and norms this team had established, there seemed to be other factors shaping the global work practices at TechComp.

These could also be observed during the interviews with other global workers not part of this particular HR team. Again echoing Hinds et al. (2011), it appeared that there was always one group that had better chances of protecting their work hours and who dominated the other team members. This dominance originated in the norms and the degree of protectiveness of work hours these employees experienced in their local workplace as well as the hierarchical relationship they had with one another in the global teams.

This was particularly well exemplified by the response of one Europe-based HR team member who said it was a “no go” to schedule a meeting at 8 pm Central European time, despite some of his non-European colleagues having to be available even long beyond 8 o’clock at night as well as by the cases of some other global workers I interviewed.

In the case of Denmark, my interviewee was pretty frank about who would get it their way in her global team:

*“I would say I use that [others’ increased flexibility] a bit consciously, in the US you don't have the same attitude to work and life differentiation, I see a much bigger flexibility towards being available to work and I use that...they [non-European colleagues] don't invite for a meeting on Friday at 5, they don't even think of it.”* (Operations Manager, Denmark)

In the case of India, an additional dynamic of dominance became apparent that originated in a service provider – customer relationship:

*“80% of the time we made it. There were few partners [based in the US] who were also understanding, but it was like 80 % 20 %. Most of the time it was us, who were trying to adjust to their timings. I think we have not even made an attempt to request them [to be available earlier]. In my opinion, if you ask me, I don't have the right to request something. It is me who makes the effort; it was always, we were open to stay back...It was a customer relationship. We didn't want to ask the customer, that was the only fear we had.”* (IT Professional, India)

So it appears as if a variety of aspects contributed to the respective level of availability and hence peripheral work connectivity. These were the location of decision makers, the complexity of global time zones, the dominance of certain protective work cultures in the face of more accommodating and flexible work cultures and finally the power enacted through being a customer. Yet, in the context of TechComp, all of these aspects formed the picture of 1) a strong headquarter-centeredness, followed by 2) Western-centeredness visible through

e.g. the service-provider – customer relationship, where the customer always seemed to come from a Western country and the service-provider from a non-Western country like India. Viewing these findings through a Foucauldian lens, it became clear that the centralistic tendencies had been normalized and internalized by most employees, so that they viewed them as given and understandable and they disciplined themselves accordingly.

Yet, such centralism came with the consequence that in Asia and Australia long work hours often led to desynchronized social lives. So for instance, HR team members situated in these locations frequently had to give up their evenings in order to attend a call with their global team. Especially at the end of the week this meant that the weekend was effectively shortened. So, Friday evenings in Australia or Asia, which should have marked the start of the weekend by traditional Western standards, were early mornings in Europe with a full working day ahead and the Europeans possibly required input from their Asian or Australian team members.

The affected team members tried to accommodate this situation by displaying extremely high levels of connectivity afforded by their smartphones throughout all weekdays including Friday evenings. This enabled them to still leave the office while being available to their team members, should they require help. Yet it also meant that one team member decided to block her calendar for a couple of evenings a week, including Friday, so that her colleagues would think twice before sending her a meeting request. This was a “drastic step” she had recently taken due to an instance that was, as she put it, “the straw that broke the camel’s back.”

*“I think it was, it was just enough, what happened was, I have been trying to go out for dinner with a friend of mine for about a month and we were putting in dates and dates and we settled on Friday the 26th and I booked a restaurant and then I got this urgent meeting from someone who had seen that my calendar was clear and just booked it in. And I could go back to that person and say, sorry I am not available, but it has taken ages for them to get a time to have this meeting with all the other people and if I say no, everyone else will have to reschedule. In the end I thought, ok, I will accept it, but from now on there will be no more meetings on a Friday.”* (HR Professional, Australia)

While she had tolerated such situations for nearly 9 months, showing how the PWC-enabled group norms shaped her perception of possibilities for action, her decision to set clear boundaries also exemplified that the power relations at play in this team were not set in stone and could be challenged and reconfigured by the team members.

In the case of employees working in the Middle East, the whole HQ-/Western-centeredness took on yet another dimension, further contributing to a partly desynchronized social life. Within TechComp Dubai was the central hub for the entire Middle East. And while TechComp was a European company, Dubai, as part of the Middle East, followed a non-Western work week of Sunday to Thursday with Friday-Saturday making up their weekends. Yet, as I pointed out earlier, the dominant time zone remained that of the European headquarters including the distribution of “normal” workdays and this was even materialized through the MS Outlook calendar configurations that these employees used, where the Western work week was the default setting.

So for instance, as I was told by one finance employee from Dubai, the closing dates and times for monthly, quarterly and yearly reports were based on the headquarters’ calendar and time zone and applied worldwide. This meant that in the instance that a closing fell on a Friday, Middle Eastern employees either lost an entire day for preparation or had to be prepared to work on their weekend. While this would play to their benefit if the closing fell on a Monday, it still illustrates that the entire company often had to adhere to centralized decision making and norms, regardless of local conditions and routines.

In the case of global teams, the problem of Friday became even more visible. Since the majority of TechComp employees operated in countries that followed a standard Western work week, the awareness of alternative arrangements simply did not exist amongst most Westerners. This meant that employees from the Middle East would frequently get invites to conference calls with their Western colleagues on Friday afternoons.

However, the longer such a global collaboration continued the more aware and sensitized Western colleagues became. This was especially visible in the global HR team where global interaction was a daily bread and butter activity. Yet, in other teams this awareness was very much absent and some employees found it necessary to react drastically to such invites and make a point by breaking the Western taboo of Sunday work:

*“Previously I was childish enough to accept everything but now when they are sending a meeting request for Friday afternoon I will propose a new time for Sunday morning... they know the Friday is off and they keep sending meetings for Fridays. If it is an urgent project I will tend to accept it but when not I will try to propose a new time for Sunday...Sometimes I do*

*answer, and then they say you know Sunday is holiday in Europe and I say ditto, it is the same in Dubai on Friday and you know that.” (Engineer, Middle East)*

This shows how this employee attempted to protect her weekend by challenging her Western colleagues and breaking a taboo. This didn’t always work, leading to high PWC, but it created awareness and reduced the amount of unwanted invites, effectively rebalancing the Western – Non-Western power relation somewhat. Yet, while some had the courage to reject such invites or at least challenge them, this was simply not always possible:

*„Well, sometimes you have to accept the invitation, because I have an empty calendar [on a Friday] and all others are available and I have to say, it is true, we often actively use this day to work here...I mean certain things have to get done, it doesn’t help to make myself unavailable.” (HR Professional, Middle East)*

All employees from the Middle East I spoke to, who were involved in such global work, were equipped with a laptop and more often than not with a company smartphone, meaning that the technology was in place to connect from anywhere, at any time, including weekends. So, being at home was not an excuse as not to participate in a global conference call. It was again the afforded potential to connect that had created norms and expectations of connectivity many employees followed and sought to fulfill.

In addition, as the quote of the HR Professional illustrated, it was not merely the potential to connect but the goal “to get things done” and progress that further drove this connectivity. It was the personal sense of wanting to deliver, the desire to meet team expectations and the technology affording PWC that together shaped levels of peripheral work connectivity and configured power dynamics. In this case, it meant that the non-Westerners complied with Western norms albeit within the boundaries that some non-Westerners had defined for themselves.

Nonetheless, while employees from the Middle East found it difficult to fully disconnect during their weekends due to the domineering Western work routine, their Western colleagues fared much better at protecting their weekends and especially their holidays:

*“You can totally write off Christmas, because we continue as normal here, but nobody [from the Western world] is reachable, for weeks. It is just unbelievable. However, the pressure*

*remains high from HQ when we have a local holiday in our region.”* (Project Manager, Middle East)

This demonstrates again that connectivity expectations were one-sidedly Western-centered at TechComp, often leaving employees in the Middle East frustrated. Yet they found ways to regulate their own PWC, showing that the Western norms were not ubiquitously accepted but contested. Nonetheless, while the example of the global HR team showed that open dialogue could create awareness, mitigating some of the problems and rebalancing power relations to some extent, still too often non-headquartered, non-Western employees had to compromise, not the other way round. What we have also seen here however is that the regulation of PWC in such global work arrangements provided a space where not just norms of availability were negotiated. Rather, hierarchies of work cultures were rendered visible and became contested, highlighting the relation and productive aspect of power as described by Foucault (1977).

#### **6.2.3.2. Amplified Mobility Expectations**

A final illustration of how PWC became a space where hierarchies got negotiated and headquarter-centeredness became visible, was the degree of mobility expectations that came with ever more global work teams. While the global team members I interviewed all emphasized that the technology they used (i.e. Microsoft Live Meeting, Microsoft Communicator, Email, Instant Messaging apps), was enabling them to collaborate successfully across time zones and distances, precisely due to PWC and technology mediated communication, many also felt that face-to-face meetings were missing and could not fully be replaced by ICTs.

*“You have to be able to just walk into a room and quickly discuss something with a colleague without having to use a phone...Some things cannot be done virtually.”* (HR Professional, South East Asia)

*“It is more distanced [virtual collaboration]...often it is also the danger that only 30% of the people are mentally present in the call...You are stressed, have another meeting coming up and then you type away on your keyboard writing some emails.”* (HR Professional 5, Europe)

This meant that the team members of the global HR team had to travel at least twice a year to meet the entire team face-to-face and in one place. These trips were further complemented by more individual travelling with the aim to meet only a few colleagues in person. Usually the global team meetings intentionally took place somewhere where everybody had to travel to in

order to rebalance the headquarter–non-headquarter relationship. This was important to the team leader and his team members as to avoid a too strong headquarter-centeredness.

Yet, the individual trips usually meant that employees who were not based at the European headquarters were the ones that had to travel there to see their colleagues. This was not so much because their European team members were unwilling to travel to other locations but it was a matter of how many people were collocated in one place. And since the majority of the team were based in Europe, it was the individuals who were spread across the world, who had to travel.

So for instance, despite being the manager of this global HR team, it was the team leader who travelled to Europe once a month to see his team members and to meet with other senior managers and board members, who were all based in Europe. In this sense, the traditional superior-subordinate power relation was overrun by the simple power of numbers of people in one place, as well as costs of travel. This illustrated again the logic of headquarter-centeredness at TechComp, which connectivity-enabled global collaboration could not alleviate.

In fact, a reverse logic became visible. It seemed that rather than mitigating it, the possibility for peripheral work connectivity, hence being spatially and temporally distant from colleagues, increased the need to travel as more and more global collaboration became possible and a lived reality, while the existing ICTs still failed to afford a complete replacement of face-to-face interaction. So in this sense, the affordances of connectivity as well as its constraints became the reason why travel amplified and why hierarchies became manifested or overturned.

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So as we have seen, PWC was a vital enabler of global collaboration in the first place and allowed employees to perform global roles from locations as distant to the company headquarters as Australia. Many employees cherished this spatial flexibility and therefore embraced high levels of peripheral work connectivity at the cost of a desynchronized social life. At the same time though it became visible that PWC provided a space where not only general levels of availability were shaped. In the realms of global work, entire team hierarchies got renegotiated as the Asian-based team leader kept traveling to see his team members as well as making himself available connectivity-wise almost around the clock, while his European team members “got the normal workday”.

In addition, Western work routines such as Saturday-Sunday weekends and Christmas holidays were sacred and protected, while non-Westerners saw their own free time compromised. Nonetheless, these global workers were actively contesting these norms and centralistic tendencies by regulating their own PWC by means of different sociomaterial strategies such as in the case of the Australian team member who utilized the calendar blocking feature of her outlook to alert her colleagues of the time differences. In this sense, PWC provided a platform where team hierarchies were rendered visible and became negotiated with outcomes not yet pre-determined.

#### **6.2.4. Negotiation Work Conditions**

In addition to hierarchies, the negotiation of work conditions, primarily related to the extension and intensification of one's daily work was another field of contestation, enabled by the possibility to connect to colleagues worldwide around the clock. As pointed out in the literature review, extension and intensification have often been cited as consequences of use of new ICTs for work (Barley et al., 2011; Chesley, 2014; Chesley & Johnson, 2015). When looking at levels of peripheral work connectivity, at TechComp this seemed to be especially true for employees who frequently engaged in global work and across different time zones. When addressing this topic in the interviews, it became apparent that there were certain mechanisms at work, which enabled such extension and intensification.

First of all, there was a general increase in workload for those that tried to balance a global and a local role. Then there were general and normalized expectations of work connectivity beyond the core work hours. In addition to this, signs of information overload were also rendered visible caused by PWC enabling a 24 hour inflow of messages. Finally, in order to compensate for PWC's constraint of reliance on technology mediated communication and the associated lack of face-to-face team meetings, there were general expectations of mobility and a willingness to travel, extending workdays into very early mornings, late evenings and weekends.

All of these mechanisms functioned to either extend or intensify the workday, all facilitated by connectivity's potential to connect from anywhere. Yet it was the individuals who negotiated the extent to which they would be dominated by such mechanisms.

##### **6.2.4.1. Negotiating Workloads**

###### **6.2.4.1.1. The Local vs. Global Challenge**

Particularly the global workers who held both a local and a global role faced pressures of intensification, often leading to work extension. First of all, they had to fulfill management



expectations and objectives of both job roles and often these were competing with one another, due to which they felt stretched and even torn. The new HR team had been set up to develop global solutions due to which a very high level perspective was necessary. Yet, at the same time they wanted these solutions to be feasible locally. For this reason, regional speakers had been invited to form part of this global team in order to complement strategic, high level thinking with local expert knowledge. If the different managers were then situated in different time zones, this could mean that an employee received one task in the morning from manager A and a competing task in the afternoon or evening from manager B:

*“I receive calls and ideas from Asia in the morning and more calls and ideas from Europe in the afternoon.” (HR Professional 1, Europe)*

Often these different roles meant that local, operational views clashed with global, strategic perspectives, urging team members with such dual responsibilities to find a balance between their local views and their global objectives. However, while this was a challenge for many, the real issue was the lack of resources and time that had been made available by company management for this additional task:

*“I find this whole topic of resources very interesting, this is where they save. We pretend as if it was no additional burden for the people who already had a job before. I am not talking about the people who work in the global team full-time but about those who have got another job and who work in this new role on top...and it [new role] blocks time...but let's face it, my payroll is paid by my local CEO and for this reason my work here cannot slip; it has to continue as ever and with the same quality.” (HR Professional, Middle East)*

This meant that employees had to find the extra hours for their global role on top of the local business activities, often leading to work after hours and high levels of PWC:

*“I mean we even joke about it, I currently treat my global role like a hobby...If I didn't do that and would make myself unavailable [to local requests] to do global work...then problems would arise...I only manage to make that stretch because I don't let anybody local feel that I have a second task, and of course it is an additional burden, and you often sit down on weekends and during evenings. When else should I do it?” (HR Professional, Middle East)*

Yet, while it was clear that the dual role meant additional work and effort, leading to greater levels of PWC and thus intensifying and extending workdays, it was a shared understanding that local knowledge was crucial to the overall success of the global team. Moreover, team members considered it a great opportunity to advance their careers, highlighting the disciplinary power of their own ambitions to progress:

*"I got an excellent team here ... that helps me get everything done and they realize this unique opportunity, to have this kind of door open, it gives them exposure globally, which they like, so we are all committed to making this a success. So everybody is really working together to make this work. It is hard sometimes; some days are pretty long, with operational problems here and some of the global work at night. It is not easy but it is, I think ehm, you know, positive, challenge and fun."* (HR Professional, Americas)

Yet, despite such positive framing of the dual role work intensification and extension were unavoidable consequences of having to fulfill two roles without extra resources being made available. It was the norm that all local tasks were taken care of during the workday and that global duties were moved to the periphery of the workday. This was further potentiated by the time difference issue which required PWC anyways in order to meet with their global team members.

So, work extension and intensification were shaped by a variety of factors: Managerial decisions of resource allocation, the generally accepted high profile of a global role and even more so of a dual role, employees' individual desire to progress in their careers due to which they disciplined themselves to be available and to shoulder as much as possible, and finally the technologically afforded possibility to connect and hence work around the clock. In this sense peripheral work connectivity provided a space where work conditions such as intensity and length of the workday were negotiated.

#### **6.2.4.1.2. Information Overload**

Another aspect to consider in the context of work extension and intensification was the fact that due to time differences and the possibility for PWC, as mentioned before, there was constant message inflow. This meant that team members would wake up in the morning with a full inbox, which they had to plod through before they had even properly started their day. Many did this, first thing in the morning:

*"My workday starts indeed before I arrive at the office, simply because we have connectivity. We are a global team due to which I usually already have messages or information on my phone from Asia, not just emails, also instant messaging because we use an App for this in the team...I don't sit in the office until midnight everyday but nonetheless messages from the Americas may reach me during or after dinner."* (HR Professional 1, Europe)

This brought with it new challenges and people responded differently to these. The team leader clearly prioritized being on top of his emails by cleaning his inbox as often as possible but he had also become very strict in filtering messages:

*"Of course what happens in my view is with the improvement of technologies you have more access to information and you have to be more ehm, more strict in managing the challenge of information and information you want to invest time with."* (Team Leader, South East Asia)

Others utilized instant messaging to alert their colleagues to important emails that they had sent and that needed attention.

*"What we do fairly frequently, especially with our team lead, is sending a quick Threema [instant messaging app] saying 'I have sent you an important email, please read today'. This is simply to filter the amount of information and to make explicit what has to get done today."* (HR Professional 4, Europe)

Nonetheless, some felt overwhelmed by the sheer endless amount of different messages flowing in through different communication channels and perceived it as an endlessly turning wheel that they all kept spinning faster and faster, if they responded to all of the received messages:

*"I am not very keen on receiving 40 emails and 30 Threema messages, text messages and calls, all while I am absent. I try to reduce it to a minimum...With many of them, if I read them the next day, I haven't missed a lot and I get the feeling that it is a bit like the red telephone, if it keeps ringing it becomes just another phone."* (HR Professional 3, Europe)

So it appears that the global team's dependence on technology mediated communication, the potential for and expectations of high PWC, the multitude of communication channels used and the time difference issue all together had the potential to lead to feelings of information overload and clearly intensified and extended the workday by dictating the communication related workload. Yet, again individuals were not passive victims of the technology and incoming messages. They vigorously managed and hence reduced the resulting negative consequences by developing a variety of information filtering strategies. This exemplified again to what extent the team members had possibilities for action to reconfigure the power relations related to their work conditions in the space that PWC provided. And in this instance this referred to their workload, arising from the sociomaterial interactions between technological affordances, their co-workers' and manager's behavior and their own.

#### **6.2.4.2. Negotiating Connectivity Expectations**

Another interesting aspect in relation to work conditions were the norms of high PWC of this HR team. It was a widely spread practice among the team members of this global team to wake up and immediately glance at their emails early in the morning and they would typically end their night with yet another final look at their smartphone.

This behavior was influenced by a variety of different variables. First of all, the different time zones in which their team members lived, meant that emails and other messages would practically arrive 24 hours a day. This pervasiveness of digital communication, an attribute of connectivity I have outlined earlier, acted as a constant disciplinary mechanism, facilitating ‘constant connectivity’, in order to reduce the uncertainty that something important could or had been missed. In this sense, in addition to being a space for contestation, PWC became an agent in negotiating availability and behavior of these employees.

This uncertainty of unknown pervasiveness in mind it is then not surprising that some considered it more of a relief to be able to reply to messages around the clock rather than being constraint by a traditional office schedule:

*“If I don’t miss out on something personal by shooting a short statement towards the US at 11 or 12 at night, then it is ok. For me this is the lesser burden.”* (HR Professional 2, Europe)

Another factor was the seniority level of all team members. This team consisted of experienced professionals, most of which held a very senior level role in the company, meaning that they were used to long workdays and high norms of responsiveness. Finally, the level of expectations of their management, their peers and of themselves further shaped their level of PWC and availability.

#### **6.2.4.2.1. Management Expectations**

The team leader himself clearly set the tone for high levels of PWC. In fact, he repeatedly emphasized that he always “cleaned” his email inbox when he had a spare moment, be it during breakfast, in the evening or on a Saturday morning, when his family was still asleep. He furthermore stressed that he would normally take calls until 12 at night and even beyond this hour, if it was an urgent topic. So it was no surprise then that to some of his team members, it appeared as if he was never asleep, as he seemed to be responsive 24 hours a day:

*“He is always on and I am sure when you talk to him you get his perspective, he genuinely needs about 4 hours of sleep, he is quite amazing. He is always on. He can be difficult to actually get hold of because he has got meetings all over the place, but if you send him a Threema [instant messaging app], you get a response.”* (HR Professional, Australia)

Yet, while the team acknowledged that he was indeed always connected, they did not feel that it was an explicit expectation put on them to behave in the same way, as the Australian team member emphasized further:

*"He does, how can I put this, even though he is always on, he does make it clear that he doesn't expect us to be always on." (HR Professional, Australia)*

In fact, it seemed that he had a very rounded view when it came to connectivity and global work, and he was eager to promote this within his team:

*"And connectivity is essential to ensure communication and information to keep transfer and availability of information, that is a key to enable that cooperation, but it is the willingness, the openness, it is the, you can have connectivity but if you don't have the soft aspects of willingness and understanding...I always use it in my presentation to my people, when I talk about it, if you google the word listen in Chinese characters, you will see that it is made up of different elements and every one of them means something, which is a very philosophical thing. It means attention, opening your heart not only your brain. People in one cultural background just listen to information only...so there is a lot of soft aspects we need to have in our managers before they can really run global operations using technology." (HR Team Leader, South East Asia)*

It is for these reasons that many team members emphasized their own accountability for managing their boundaries and their PWC and they viewed it as an acceptable trade-off for flexibility and location preferences.

*"You have to take responsibility for yourself...to say no here and now, but he [team leader] also sees if he has got an urgent request, when [exec board member] needs something and he has to respond quickly, he gets an answer quickly, maybe even at an hour when you would not normally work...it is a give and take." (HR Professional 2, Europe)*

*"On the other hand, the flexibility has to be there too. Flexibility has to do with space and time. If my manager expected me to be in the office Monday to Friday from 8-6 or 7, then it would be different...today I feel I have great liberty and I don't have to tell anybody where I am, what I will do tomorrow. I have to deliver and that is probably the reason why it [expected connectivity level] doesn't become a burden for me." (HR Professional 6, Europe)*

*"I think as I said, his attitude is, we are responsible adults, we can make our own decisions and he respects those decisions. Ehm, so it all comes back to a little bit of personal responsibility... And for me it is about give and take. If I am fortunate enough to do this great job and still live where I live, then I don't think it is unreasonable to expect me to work slightly strange hours." (HR Professional, Australia)*

Despite of obvious and highly cherished benefits such as greater spatial autonomy, PWC was very difficult to balance, and greater freedom on one day could quickly turn into concrete expectations on the next, echoing existing research on smartphone usage amongst knowledge professionals (Mazmanian et al., 2013).

So it became clear that high levels of connectivity were highly valued by the team leader, yet at the same time he provided them with great spatial autonomy and it was important to him to make his team members feel that it was their own responsibility to manage their boundaries. This management style made such high levels of peripheral work connectivity an acceptable trade-off, despite the long days and unconventional hours of availability.

Enabled by the possibility of work connectivity from anywhere, anytime, the team leader had effectively instilled a culture of self-responsibility and self-discipline in his subordinates by granting them great levels of work autonomy, particularly over their work location. The team members in return readily embraced this and sought to protect it. They had learned to view the potential of 24 hour work connectivity as an acceptable trade-off for their highly cherished autonomy and were willing to discipline themselves accordingly. In this sense PWC again provided a platform where management styles and work cultures were rendered visible and negotiated. In addition though, PWC did become a sociomaterial actor in the negotiation of these professionals' work conditions, by providing a mechanism for self-discipline.

#### **6.2.4.2.2. Peer Expectations**

These implicit yet high management expectations did however also shape the general expectations of peripheral work connectivity within this global team and enabled a group norm to emerge that was perceived as necessary but also as peer pressure by some.

Especially the global context of the team – being devoid of frequent face-to-face interactions – meant that many perceived high levels of PWC as crucial in order to get this team to function properly.

*“...especially because we are a global team and only all get together twice a year at maximum, it is extremely important to stay adequately in touch with each other in the time in between, and not to solely rely on email but to also use instant messaging and video calls.”* (HR Professional 1, Europe)

There was no explicit expectation of high PWC but it was the observed behavior of others that created expectations of connectivity and a sense of peer pressure, highlighting how a normalization process took place in the space connectivity provided:

*"There are no expectations from the others; it is a bit like when there is a message [via instant messaging app Threema] and 8 people immediately post their own opinion then you wonder, should I also post? It is a bit of peer pressure...it is everybody's own choice whether to respond or not but it is also a mutual understanding that we have to progress with our work."* (HR Professional 3, Europe)

Clearly, there were implicit yet high norms of responsiveness and connectivity. These were additionally potentiated by the visibility of others' responses to communications in instant messaging chat rooms, enabled by technologies such as the above mentioned Threema app. It was the attribute of unknown pervasiveness of connectivity, Foucault's Panopticon, the uncertainty that arises from not knowing how much others know about us (i.e. in this case, whether they would notice that one person had not responded) and the fear of missing out on something important that functioned as disciplinary mechanism, leading to high levels of peripheral work connectivity.

Nonetheless, the team members were not inapt and passive victims of such external powers. Many in the team maintained that there was mutual respect for each other's boundaries and that there was a general acceptance of people logging off at certain times, especially if it had to do with family matters.

*"For our particular group, eh, two of the people in Europe have young children and a family, so it is more difficult for them to meet outside working hours and we don't resent that at all. It is perfectly ok, we completely understand."* (HR Professional, Australia)

So the individuals affected had actively sought to rebalance this power dynamic by vigorously setting boundaries and communicating their availability in order to have certain times off, as to be fully available to their families. This was illustrated by one team member, who explained how she had dealt with the situation when asked about how she balanced the evening routine with her son and her work commitments:

*"I try to avoid it, I have also communicated it like this, that between half 5 and 8 pm I am practically not available at all. I communicated this to my employees [subordinates] and my team members [peers and manager]. It works fairly well and in fact usually I really don't have the time to check messages during this period."* (HR Professional 4, Europe)

Yet, due to the time differences there was a constant inflow of messages and people had to deal with work related requests all day long. If one team member urgently needed input from another team member, they would often still try to contact them, even though it was the middle of the night for the other team member.

So, for instance, it happened that on various occasions colleagues from Asia had been asked to attend a call when they would normally be asleep or had been woken up by their ringing phone because a “forgetful” European colleague, as one non-European team member described it, had not realized how late it was in other parts of the world. Again, through such behavior the earlier discussed headquarter-centeredness became visible, as workdays got extended one-sidedly for the non-Europeans, but at the same time generally high connectivity expectations became apparent. Many considered it necessary to be well connected and responsive out of respect for their team members:

*“We deal with it [expectations of connectivity] like this...we check with each other how the email situation is...is something urgent still pending, if not then there is another day tomorrow, but if there really is something important, then it is out of respect for your colleague that you take action...it is part of working in such a global team and there is no harm done in sending a short statement over to the States at 12 at night, because they can still work on it for another 6 hours”* (HR Professional 2, Europe)

So, it became clear that the connectivity level in this team was greatly shaped by the tone set by management, which translated into high norms of connectivity by the entire team and a sense of peer pressure. Nonetheless, the team maintained a culture of accountability and respect, as well as of mutual understanding of having to work long and unconventional hours in order to reach a common goal.

It was peripheral work connectivity’s attributes of the potential to connect and unknown pervasiveness that had shaped norms of responsiveness and expectations of connectivity by management and peers, creating mechanisms of self-discipline. PWC, while being the reason for power contestations or the space where such work conditions became negotiated in the first place, had also become a disciplining actor shaping these, illustrating the sociomaterial dimension of these power dynamics.

#### **6.2.4.2.3. Self-Expectations**

Finally and in addition to managerial and peer pressures, there were expectations the team members had of themselves, which further negotiated the individual PWC levels of these global workers. These were determined by personal ambition as well as by professional identity, as the following quotes illustrate:

*“I don’t count the hours, this is not how I grew up in the corporate world and it doesn’t reflect my performance and personal ambition. I want to do exciting work and I am aware that if I want to do exciting work I need to invest more time.”* (HR Professional, South East Asia)



*"I don't know what expectations other people have, but it is funny because I have greater expectations on myself. So I expect that I would be available from about 7 in the morning until about 10 at night. And it is stupid, haha, but that is what I expect. Haha...I believe that people value me when I am available and doing stuff and delivering things. And it is just a personal value set that I have... that is how I think I add value."* (HR Professional, Australia)

*"I think at a leadership level, at a senior leadership level like myself, you have to be a little bit more attentive...and I recognize that at my level I need to put in time, I just, I am not just starting my career and I am not at an entry level. I am a seasoned professional, I have been doing this for a fairly long time, I have a fairly large scope of responsibility and it is global and I know it entails hours that I need to work."* (HR Professional, Americas)

Again, it became clear that PWC level was not only shaped by expectations of others. Rather, having a high level of PWC was associated with individuals' feelings of self-worth, professional identities and aspirations. Yet these individual behaviors influenced group behaviors, which again shaped expectations and actual connectivity levels. The result was then that on the one hand, global team work was enabled by the affordances of new ICTs and the resulting possibility to connect from anywhere, anytime. This granted great spatial flexibility during the day. Yet, at the same time it extended workdays well into the evening, night and sometimes even weekend.

So, micro work practices got changed through different places of work and a sense of personal accountability and autonomy. Yet, managerial, peer and individual expectations mutually shaped each other forming new norms of responsiveness and availability that acted as disciplining mechanisms, negotiating the actual PWC level these team members displayed.

#### **6.2.4.3. Negotiating Workdays – Travel**

Finally, the topic of mobility also played a role in relation to PWC-enabled work extension, going beyond the negotiation of team hierarchies. While I have argued before that travel reflected the headquarter-centeredness of TechComp, it became also clear that global roles, which came with heightened mobility expectations, ate into mornings, evenings and weekends effectively prolonging the workday and week precisely because of the constraints of connectivity.

*"I could talk about the trips that come on top of all of this. We travel a lot...I am in one country one day, I arrive back home and then on the same day during the night I will take the night*

*flight to visit another country, because I have a meeting there at 9 am.”* (HR Professional, Middle East)

*“But due to my job I also have to travel frequently and then sometimes over the weekend I have to fly back so you spend some time of the weekend also abroad.”* (Team Lead, South East Asia)

These requirements were mostly seen as indispensable in order to make global collaboration work properly, as PWC with team members alone was not enough. So the big team meetings for the entire team, which took place twice a year and which were complemented by individual trips to see some colleagues separately, were described as *“bare minimum”* and as *“important and necessary”*:

*“Project work lives of bringing people together, locking yourself up with them in one room, with a Whiteboard, to build a shared understanding, to tick of things on your to do list, short communication, to overhear what is going on in the phone call the colleague has, that is how successful projects work.”* (HR Professional, South East Asia)

So, there was a mutually shared understanding that global team work required face-to-face interaction and that collaboration through technology mediated communication and PWC alone could not lead to successful results. In addition, it was a shared belief that global teams were necessary to address global challenges within TechComp. Yet, the consequence was that greater international mobility was required. On the one hand, the potential for peripheral work connectivity had made global collaboration across time zones and continents possible in the first place, yet the result was not a reduction but an increase in the need to travel:

*“Here cause and effect meet each other. That I can have a global team at all requires that you see each other a few times a year. And in this sense you have to be even more mobile than before when there were no global teams.”* (HR Professional 1, Europe)

This shows that hoped for reductions to mobility expectations through the possibility to connect from anywhere, anytime had not materialized. Instead, more global collaboration had been enabled and had thus been realized, thereby increasing rather than reducing travel requirements, often extending workdays and eating into private time.

And, as we have seen previously, this sort of travel was mainly carried out by employees who were not based in Europe. This illustrates again that expectations of what was needed for successful collaboration had been established through general work experiences of team members and had translated into team expectations and routines, having created a mutual

understanding that mobility was inevitable. Yet, the earlier mentioned mentally and structurally ingrained headquarter-centeredness, limited possibilities for action on side of non-Europeans and made the negotiation of such mobility expectations a one-sided experience, primarily extending workdays and weeks of non-Europeans.

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To sum up, we can see that PWC was a key factor in enabling global work and thus became a space where work conditions, primarily intensity and length of the workday, including aspects of workload, travel, and norms and expectations, had to be renegotiated. In addition, normalization processes that took place in the global team created expectations of availability and high levels of PWC that functioned as very strong disciplinary mechanism in these negotiations.

### **6.2.5. Negotiating Exclusion**

In addition to aspects of headquarter-centeredness and work conditions another theme that became clear to me was that of exclusion. While the team did not perceive this as an explicit problem, there were certain unspoken issues that surfaced in the conversations I had with the team members. The biggest challenges seemed to be the issue of in- and out-groups and yet again the aspect of local vs. global responsibilities.

#### **6.2.5.1. Dynamics of In- and Out-groups**

As has been described earlier, it is common for globally distributed teams to develop subgroup dynamics that can result in an “in-” and an “out-group” (Gilson et al., 2015), which further shapes group outcomes and power relations. In this particular team one key aspect responsible for the development of such group dynamics, was the fact that some of the team members had known each other for a long time and had intensively worked together in the past. This meant that they had long established a trusting relationship before this new team had formed and did not have to rely on face-to-face meetings and technology mediated communications to get to know each other and to establish trust:

*“I think we have got, we are unique in that many of us have worked for [Team Leader]. Directly me, [Colleague 1], [Colleague 2], [Colleague 3], [Colleague 4], we all knew each other a fairly long time and many of us had worked together in previous organizations of global teams. [Colleague 2] and I have known each other pretty well for 5 years, ehm, so I think there is a respect for one another and I think there is a, I think [Team leader] has set a very positive tone that this is a, not only a beneficial thing from a business perspective but from a personal perspective. This is an opportunity to embrace and take advantage of, the ability to have friends and close*

*professional colleagues in other parts of the world to expand your horizons and you learn and grow as a person and as a professional.” (HR Professional, Americas)*

This quote illustrates to what extent some of the team members benefitted from having such close relationships with their distant colleagues and it allowed them to get straight to work without having to go through a lengthy team building phase:

*“...I think it all helps us at this point in our evolution that we know each other already... if we had started the team and none of us knew one another we might be slower to adapt because so many of us already knew one another...these are people I have worked with very closely for a long time. When the team was formed it was like oh good, it was not anything I didn't know, we were actually worried that the team would get broken up, we were happy to stay together. Haha.” (HR Professional, Americas)*

Another aspect that potentiated the problem of new people entering an already well established group was the fact that the team was not completely staffed by the time it had started operating. This meant that parts of the team had started to work together from day one of this new setup, developing processes and strategies, while others joined only gradually:

*“Another problem was...not only that we didn't all know each other but that the team got staffed bit by bit. China joined later, then Mexico, then India. So, there was a core team from the beginning that worked on getting projects set up.” (HR Professional 3, Europe)*

These aspects shaped the impression that there was an “inner circle” and the new team members found it difficult to get access to this circle. The team – and the team leader in particular – were aware of the danger of such a development and had tried to rectify the situation early on by organizing a big face-to-face team meeting. This personal interaction did in fact help team members to lay the foundation for a trusting work relationship, as had been commented on by some team members. Yet, it couldn't fully eradicate the fact that a core team had already been formed to some degree.

Indeed, it was left up to the individual team members to make the effort to enter the inner circle by being proactive and self-reflective as well as by displaying high levels of PWC to the rest of the group:

*“You have to watch yourself and become active, if you have the impression that others are doing better [at integrating] and you think to yourself...somehow I am not part of it yet.” (HR Professional 2, Europe)*

However, showing such pro-activity was even more difficult for those who did not yet know the rest of the team well and who had to rely mainly on technology mediated communication. This showed yet again that PWC was a threshold for global work to become possible. Yet it also brought about new challenges by providing a space for the establishment of certain team dynamics and power relations, as direct face-to-face communication could not fully be replaced by technology mediated communication.

The only option new team members had was to show ever greater levels of PWC to demonstrate their engagement and responsiveness as well as show ever more mobility to meet the rest of their team face-to-face as often as possible. This was necessary in order to establish the trust others already had built up and to overcome the constraints of connectivity. So the team culture was marked by constant self-work, shifting the responsibility of success on the individual and greatly reflecting Foucault's idea of self-discipline. Yet this new responsibility was productive in that it allowed the individual team members to reconfiguring power relations through their own actions. In this sense, the constraints of connectivity provided the platform upon which individuals had to negotiate their own standing in the team.

#### **6.2.5.2. Local vs. Global**

The final PWC related aspect of exclusion I could observe in the team was again the issue of global versus local roles. I have argued earlier that this dual responsibility often led to an intensification of work due to more work being expected from one person in the same amount of time, without any additional resources being made available. The workload and the available time resources and globality of the team then made high levels of PWC inevitable. In the context of exclusion such a double role had again other consequences.

As was pointed out by one team member from Europe, often only one third of the team attended the call. Especially the team members with dual roles (i.e. local and global) had other topics on their agenda, which they had to get done during the day. This meant that they would dip in and out of global meetings that took place either at the periphery of their workday or when they had time during the day, and would then realize that the conversation had moved on and that they had missed something important. Or else, they sometimes realized that they had been talking passed each other all along.

*"Everybody has different work experiences in different countries due to which we use terms differently despite using the same language...So we talk about this topic but we have different pictures on our mind. I realized this in a few meetings. I thought they are actually talking about something completely different. Some people take certain things for granted because they are much closer to the topic and others who come in on an on- and off basis don't have a certain*

*piece of information, feel behind and just want to know what is going on and why everybody seems to be clear except for oneself.” (HR Professional, Middle East)*

This meant, however, that the ones, who could not attend all meetings due to time constraints and other work commitments, could not influence decisions to the same extent as their purely global co-workers and were also often left wondering whether their input was even wanted.

*“I am in these meetings but they are few and far between. And then there is always the question, I think I am quite open in these calls but of course you cannot fight in every battle. So I think there should be input from everybody, but there isn’t and so I am unsure to what extent openness of discussion is expected and wanted at all.” (HR Professional, Middle East).*

In some instances this meant that certain team members were no more than the “*postman*” delivering messages to their local organizations, as one European team member put it. Deciders were the ones who were most present in team calls with the consequence that those with dual responsibilities had a structural disadvantage, leading to less influence.

So again, while technologies affording peripheral work connectivity enabled such global teams to form and work together in the first place, PWC also provided a space where team dynamics and power relations were rendered visible. It was in this space that the actual power relations in the team became contested and heavily shaped by social structures and context. This example illustrates again the dispersed nature of power, as employees with global and local roles enjoyed great prestige and status in one moment but found themselves stripped of great levels of decisional influence in the next. Power, it seemed, was highly contested and a constant negotiation in this team. In this particular example, this meant that connectivity-enabled global team setups allowed exclusionary forces to emerge, shaping team outcomes and power relations.

### **6.3. Conclusion**

So what can be said about peripheral work connectivity and global work at TechComp? As we have seen, unsurprisingly there is a strong association between the level of PWC and the extent of one’s global collaborations. Global teams greatly depend on technology to enable communication and hence collaboration and PWC allows teams to bridge time differences and spatial distance. So, clearly, new communication technologies have allowed global collaboration to take place in the first place.

Despite TechComp’s intent to form global teams with a diverse set of perspectives and beliefs, in order to develop better solutions for global problems with local and global perspectives

being equally represented, in the space that peripheral connectivity provided a variety of power relations became contested.

So for instance, team hierarchies were negotiated and strong tendencies of headquarter-centeredness and Western dominance became visible. In the case of the global workers I interviewed, this meant that often work was eating into their private time, leading to a desynchronized social life for some. Employees based at the European headquarters, on the other hand, did not have the same issue and got "*the normal workday*". While the global HR team tried hard to mitigate the issue of time differences, the biggest compromises had to be made by the Australian, Asian and Middle Eastern colleagues, reconstituting a sense of not just headquarter-centeredness but also Western dominance at TechComp. Yet, as we have seen from the example of the Middle Eastern engineer, who challenged the taboo of Sunday work, headquarter-centeredness was a contested field with the possibility to negotiate one's own role and power position within it.

Furthermore, the constant inflow of emails, the physical distance of the team, the setup of bringing together people with dual roles (i.e. local and global) with those with only global roles as well as the breadth of time zones this team covered led to work extension and intensification. Again, all of these outcomes were consequences of connectivity enabled global work and revealed a dynamic of ever greater expectations of PWC by the employer and ever less uninterrupted leisure time on side of the employee.

While many cherished the new flexibility they had gained through the possibility to work temporally and spatially flexible, they did not reflect on the fact that such high demands wouldn't have been placed on them without the possibility to connect in the first place. In fact, their own behavior and connectivity expectations of themselves and others, triggered by PWC's disciplinary function, spurred the cycle of ever higher levels of connectivity.

However, the employees implicated in these dynamics were not passive and inapt victims of a dominant employer one-sidedly exerting power. Instead, they actively negotiated their own boundaries, retaining periods of uninterrupted time off, as was exemplified by the HR team member who regularly took time off during evenings to care for her child. In this sense, connectivity provided a space where work conditions were rendered visible and open for contestation.

In addition to these aspects, we have also seen that PWC and technology mediated communications are not able to fully substitute face-to-face interactions, leading to ever greater pressures of mobility that are often one-sidedly put on employees who are not based

at the headquarters and which further extend the workday and week. In these situations, non-European employees had little room for negotiation, if they wanted to retain their prestigious role in this particular team. Yet, it was their own ambition as well as internalized organizational expectations and norms that equally shaped these dynamics.

Finally, we have seen that the connectivity enabled reliance on technology mediated communication led to exclusionary forces being set free, as subgroup dynamics and the burden of dual responsibilities arose. Nonetheless, we have also seen that the outcome of one's role in such power relations was not pre-given but contested and individuals could proactively and continuously influence these relations.

So, in conclusion, I argue that in the situation of these global workers work connectivity, and PWC in particular, enabled new ways of working together and it thus became a sociomaterial platform where hierarchies, work conditions and exclusion were rendered accessible for contestation. However, in some instances PWC became more than a mere space for negotiations. In fact, in the case of managerial, peer and self-expectations of peripheral work connectivity levels, PWC itself became an actor in such negotiations through its disciplinary qualities.



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## **7. Chapter 7: Conclusion**

This thesis aimed to demonstrate that work connectivity in its peripheral form is more than a driver of work availability. Rather, I have argued that peripheral work connectivity plays a major role in the increasingly digital workplaces of today's corporate world of work, beyond the question of how often employees, usually high status professionals make themselves available to work by means of connecting around the clock. Indeed, peripheral work connectivity reshapes work practices for employees in large organizations such as TechComp across multiple job roles and status levels. It is furthermore a key player in power negotiations at work by providing a platform for contestation and by being an agent in the resulting struggles. In this final chapter I will now reiterate the key gaps in the existing literature on work connectivity I have identified in chapter 1, but additionally I will demonstrate how I have sought to fill these in this thesis. Moreover, I will substantiate my main argument, by synthesizing the empirical findings from the chapters I have presented previously. Finally, I will conclude by reflecting on the limitations to this study and I will provide a future outlook of research on work connectivity.

## **7.1. Synthesizing the Argument: Gaps & Contributions**

Today most of us carry smart mobile devices with us at all times. We own smartphones, laptops and / or tablets, either for private purposes, for work or for both. These new ICTs and their possibility to connect around the clock afford previously unknown spatial and temporal flexibility. Especially in the realms of work this has major consequences and, as I have pointed out previously, has become a very hot topic of scholarly as well as popular attention in recent years.

So for instance, we have learned that the possibility to be constantly connected to work is not perceived equally well by the people dealing with 'constant connectivity' in their work role (Matusik & Mikel, 2011) and there are different strategies for dealing with connectivity (Mazmanian, 2013).

In these discussions the term 'constant connectivity' is often used to refer to situations of carrying a smart mobile device with us around the clock and hence being always available. Yet, no additional attempt is usually made at conceptualizing the term connectivity further, leaving its interpretation and meaning fairly vague (with a notable exception of Kolb (2008) and Kolb et al., (2012)).

In addition to this vague use of the term of 'constant connectivity', most research that studies the phenomenon mainly singles out one technology – e.g. smartphones (Mazmanian et al., 2013; MacCormick et al., 2012) or emails (Barley et al., 2011) – and studies it in isolation. Yet,

'constant connectivity' is a state that can be enabled by a variety of different technologies, including but not limited to email and smartphones, and hence a more holistic approach is needed that investigates the phenomenon without limiting itself to connectivity from one technology only.

Furthermore, in many workplace studies, scholars often tend to take on very deterministic stances of either technology driving change and long work hours (e.g. Duxbury & Smart, 2011; Green, 2004) or connectivity enabled by technology is taken for granted and the role of technology is thus ignored (e.g. Moen et al., 2013; Sturges, 2012). And while more and more studies emerge that use a sociomaterial research lens that tries to bridge the gap between both deterministic positions (e.g. Orlikowski, 2007; Jarrahi & Sawyer, 2013; Barley et al., 2011; Orlikowski & Scott, 2014; Scott & Orlikowski, 2014), more research is necessary that studies the use and consequences of new communication technologies in the workplace, while taking into account both the social and the material.

In addition, most research to date has been very Anglo-Saxon centered, limiting our understanding of connectivity to places of work and technology use in North America (Mazmanian et al., 2013; Barley et al., 2011), Australia and New Zealand (Wajcman & Rose, 2011; MacCormick et al., 2012) as well as to high status individuals who are the most likely to be confronted with the phenomenon of 'constant connectivity' from a user perspective (e.g. Besseyre et al., 2012; Perlow, 2012).

In this thesis I thus build on the valuable insights gained from these studies, by going beyond these already well-researched contexts, investigating the phenomenon of 'constant connectivity' beyond the Anglo-Saxon world of bankers and management consultants. It is clear that connectivity is mostly relevant to those that are immersed in environments where mobile technology is widely accessible and where pressure of availability and commitment is high. Yet, mobile technology has become so widely ubiquitous in recent years that we need to look further than the realms of high status professions and investigate how people in other job roles deal with the phenomenon.

Furthermore, the majority of research to date has been conducted from a management or technology perspective, primarily focusing on how people use technology, what this means for productivity and work practices as well as what it means for work-life balance. All these studies have presented us with valuable insights regarding the use and stress potential of ICT (Barley et al., 2011; Bucher et al., 2013) and the consequences for individuals (Middleton, 2007) and organizational outcomes (Kolb et al., 2008). These studies are important and have greatly deepened our understanding of the ongoing digitalization of today's workplaces.

In addition to such studies of work practices, some first attempts have been made to look at how norms and expectations shift in relation to connectivity (e.g. Mazmanian et al., 2013). Such research has highlighted how ‘constant connectivity’ redefines what high status professionals expect of themselves and others in terms of availability for work via their mobile technologies.

However, more sociological questions such as how power dynamics are affected, shaped and possibly reconfigured by connectivity have so far not been addressed sufficiently by scholars of organization. In particular, gender and organizational hierarchies in relation to connectivity, have not yet been studied thoroughly enough.

Finally, most research that addresses questions of connectivity and how it contributes to a reshaping of work practices has been mostly qualitative (MacCormick et al., 2012; Mazmanian, 2013; Wajcman & Rose, 2011; Duxbury et al., 2014), often mainly relying on experiences of individuals. These accounts are no doubt of fundamental importance in order to understand the phenomenon of connectivity. Nonetheless, little is known about the actual extent of connectivity in large organizations, as wide-reaching access to conduct such research is difficult and often makes a statistical analysis of the phenomenon unfeasible. Yet, as I show in this thesis, there is much to be gained from analyzing the extent of connectivity in organizational contexts statistically in order to complement already existing, mostly qualitative studies.

So we can conclude that the study of connectivity has developed quickly in recent years but it is still at a nascent state. There was thus ample room for me to conduct more research trying to fill above spelled out gaps. In this thesis I have consequently attempted to do exactly this by:

- 1) Advancing our understanding of connectivity theoretically by thoroughly conceptualizing the term.
- 2) Looking at connectivity without singling out one technology in isolation.
- 3) Avoiding deterministic tendencies through the use of Sociomateriality as an undergirding ontological understanding of the entanglement of social and material actors.
- 4) Diversifying the contexts within which connectivity is studied through the inclusion of non-Anglo-Saxon and non-Western countries as well as groups of workers, who don’t belong to the widely studied professions of banking or management consulting.
- 5) Studying the extent of connectivity through mixed methods including a statistical analysis, to further our understanding of how vast the phenomenon is, as well as continuing to

build on existing lines of research by complementing such statistical with qualitative analyses.

- 6) Going beyond managerial and technological perspectives of connectivity, investigating the phenomenon from a more sociological perspective by focusing on power relations.

By addressing the above discussed challenges in this thesis, I contribute to existing knowledge on connectivity by conceptually and empirically advancing our understanding of the phenomenon.

More precisely, I highlight that connectivity is often a very vague concept that is widely used in studies of work and technology, but no conceptual differentiation is made between connectivity with work and connectivity that is of an entirely private nature. For these reasons, in this thesis I offer a refined definition of connectivity through the introduction of *work connectivity* that specifically refers to connectivity with one's workplace.

And since one attribute of connectivity is its cross-domain nature, that is, that it crosses traditional boundaries between the domains of work and private life, I further complicate the term by differentiating work connectivity by means of spatial and temporal dimensions.

Here, I make a distinction between peripheral work connectivity (PWC) and non-peripheral work connectivity (NPWC). The former refers to connectivity with work at the periphery of the workday and workplace, meaning during traditional off-hours and away from one's main workplace; and the latter refers to connectivity with work during traditional work hours, while within one's workplace or in another designated work area (e.g. telework contracts).

Peripheral work connectivity is the type of connectivity that seems to harbor the greatest potential for disrupting traditional ways of working and living, due to its role in creating ever more blurry boundaries between the traditional domains of work and the home. It thus brings to the fore important power relations between employees, employers and other actors such as children and spouses. For these reasons I have chosen to focus on PWC in this thesis.

More precisely, I focused on two issues that are heavily related to PWC, namely the genderedness of peripheral work connectivity and its implications for female employees in particular, as well as the effects of PWC on global team work, where employees greatly and often entirely rely on PWC to make such team setups function in the first place.

In order to address the second challenge of avoiding the trap of looking at one technology in isolation, I measured connectivity by the degree of how often employees said they connected to work (e.g. through messages or information of any kind such as email, instant messages,

texts, calls, intranet news, social media updates), outside of traditional work hours (i.e. mornings, evenings, weekends, holidays, annual leave).

These questions leave it initially open what technologies employees use to engage in peripheral work connectivity. Yet, in order to fully understand the extent and the face of PWC, I also asked employees what technologies they use most often in order to connect to work at the periphery of their workday. Here it becomes clear that it is not the often studied smartphone that is most frequently used for PWC, but instead it is the laptop, a much more well-known and widely spread technology. This finding highlights that PWC is even more extensive at TechComp than previous studies have found, which only focused on work connectivity through a smartphone.

The third challenge of avoiding to fall prey to deterministic tendencies I address by using Sociomateriality (Orlikowski, 2007; 2010; Orlikowski & Scott, 2008; Scott & Orlikowski, 2014) as an underlying ontological foundation for this study, making sure that the role of technology and the social world are equally acknowledged. In particular, I illustrate how Sociomateriality and my Foucaultian conceptualization of power as distributed, relational and productive (Foucault, 1977; 1982) support each other by highlighting that it is always an entanglement of sociomaterial forces that shape power negotiations.

Fourth, while invaluable insights regarding the shifting norms of availability for professionals have been generated by studying high status employees in the US and Australia, I have pointed out that little is still known about work connectivity in European work contexts, as well as in non-Western work environments. Large multinational organizations such as TechComp are however spread across the globe and a better understanding of the multiple work contexts within which TechComp employees and others are situated is necessary in order to get a clearer picture of the extent and the consequences of PWC. This is particularly important from an organizational perspective but also from a scholarly perspective that aims to understand a phenomenon as fully as possible.

To fill this gap my study therefore draws on quantitative research I conducted in 9 countries, including a variety of Asian and Middle Eastern countries (i.e. India, China Saudi Arabia and the UAE), European countries (i.e. Denmark and the UK), an Eastern country (i.e. Russia), as well as countries from the Americas (i.e. USA and Brazil).

In addressing the 5<sup>th</sup> challenge of utilizing mixed methods, I complement these quantitative insights with qualitative interviews with individuals from these parts of the world and others, as has been detailed in previous chapters. This approach allows me to develop a



comprehensive understanding of what PWC means for the employees in these different countries by triangulating data sources as well as cultural and work contexts.

In addition, merely restricting my study to employees who have a company email address as well as regular access to a computer as part of their work role and thus by not limiting myself to certain professions or occupations upfront, I was able to generate a random sample of employees in the respective countries across all job roles within TechComp. This allowed me to study a previously unknown breadth of work contexts. I then utilized the survey method to build a statistical and generalizable picture of the extent of peripheral work connectivity and its drivers of all employees at TechComp in the studied countries.

Using these quantitative data, I show in this thesis that PWC is a widespread phenomenon across all of these countries, affecting many different job roles even though high status employees remain the most likely group to show very high levels of PWC. In this sense I demonstrate that peripheral work connectivity can be both a symbol and a result of status but is not limited to this interpretation. I moreover show that PWC at TechComp is not just driven by company smartphone ownership but in fact laptops are much more widely used in order to connect to work at the periphery of the workday and even one's private phone is a common tool employees draw on to increase their PWC.

These figures highlight that since mobile technology in one form or another is now so ubiquitous among employees in the studied countries, expectations of PWC seem to have clearly shifted. Nonetheless, there are still many employees who negate high levels of PWC, showing that the affordances of PWC alone to be constantly available do not determine the outcome. Employees still play a role, or in other words have the "power to" negotiate their personal PWC level. Hence, the quantitative part of this thesis makes a contribution by widening our understanding of PWC statistically and contextually.

Finally addressing the 6<sup>th</sup> challenge, by formally interviewing more than 80 employees at TechComp as well as by chatting to dozens of others informally over the course of my ethnographic work within the organization, I have furthermore been able to widen our understanding of PWC particularly in relation to power negotiations across a variety of national and occupational contexts. Here I argue that PWC is in fact a platform or a space that renders visible important organizational but also societal power relations.

It is connectivity's attributes of being able to cross domains, primarily the domains of work and of the home as well as its potential to connect from anywhere, at any time, shifting norms and expectations of how connected one should be to work, that turn PWC into such a space.

Following Foucault (1977), I show that these attributes offer room to normalize high PWC levels, cutting across traditional boundaries and they enable others and the self to constantly examine oneself to what extent one has deviated from the new norm of high PWC. Yet not all employees behave similarly and give in to these new expectations. Many actively negate and circumvent them or find other sociomaterial strategies to make them work for their individual life situations. By bringing these power dynamics to the fore, they become contested and PWC thus turns into a space of possibility; a platform of opportunity to renegotiate power relations and possibly reconfigure these.

What I have also shown and what I furthermore add to our understanding of PWC is that these power negotiations are not limited to contesting one's availability for work. Instead, I put the spotlight on other important power dynamics such as gender relations, including roles and identities, as well as organizational and team hierarchies, work conditions and exclusion that are rendered visible in the space that PWC provides.

In chapters 4 and 5 we have seen that women have generally lower levels of PWC than their male colleagues, independently of job type and status level. Even among senior managers a gendered PWC gap remains observable, although it is visibly narrowing. By interviewing 69 women from 5 different countries, I investigated the reasons behind this gender gap and what I found made clear that structural and cultural forces play a major role in determining a woman's PWC level. Across all of these countries women still mostly identify themselves as the main caretaker and organizer in the home, both for dependents and the household.

Yet, in addition they now also hold a new role as business women. Regulating – often meaning down regulating their PWC level – is the only option they see in order to fulfill all of their competing roles. While these struggles have accompanied women across the world ever since they entered the labor market, PWC provides a new space where emotions associated with these struggles such as feelings of frustration, guilt and fear as well as expectations of how they should be – as women – are rendered visible and become contested.

By either down or up regulating their PWC level, women navigate through the competing demands of their conflicting roles, while performing their gender identity to the best of their ability. Women utilize high PWC levels to demonstrate commitment and reduce fears of being judged and they lower their PWC level to mitigate feelings of guilt towards their families. Depending on context, personal experiences and expectations, these women choose individual strategies that allow them to muddle through somehow, while trying to maintain their identities as mothers, partners, caretakers, colleagues or managers.

Some of them embrace the possibility to connect from anywhere, anytime wholeheartedly, as it enables them to remain visible in the workplace, while not having to give up their role as family caretakers. Others on the other hand, feel that they can't live up to the high expectations of PWC to the extent their male colleagues can, making them feel and appear inapt and lacking. So, I demonstrate that PWC is a space of possibility with quite diverging outcomes for all of these women.

In chapters 4 and 6, in the context of global work teams, we have seen that again quite different power dynamics ensue in the space that PWC provided. The team is an unusual case for TechComp in that the team leader is not based at the European headquarters but in South-East Asia with the rest of his team being distributed across four continents. Yet, despite the key decision maker not being situated in the European time zone, Europe is still seen as the "middle of the world" and all other team members have to adjust their availability according to the European clock and calendar.

This means that employees from Australia have to attend calls in the middle of the night and Middle Eastern colleagues often have to forego one day of their weekend – Friday – for the sake of an important digital meeting with or digital message from the headquarters. Here PWC provides the basis upon which such global work is made possible in the first place but at the same time it renders visible dynamics of headquarter-centeredness as well as issues of PWC-enabled work intensification and extension due to insufficient resource allocation to fulfill both local and global roles.

PWC enables global work to happen but its constraints of not being able to adequately substitute face-to-face interactions can in some instances lead to work extension through e.g. amplified travel expectations. In addition, these constraints further bring to the fore a dynamic of exclusion. For instance, team members who already knew most of their new colleagues in person prior to joining this new global team – and who hence don't have to rely on technology mediated communication and PWC alone to develop a trusting relationship – fare much better at finding their place in the team.

Yet, at the same time PWC-enabled global team work allows these team members to build up a reputation within TechComp by being able to occupy a global role, while remaining based in their preferred location. This global exposure is embraced by many and evens out some of the drawbacks of this global setup. In this sense I argue that PWC again becomes a platform of possibility. It provides a space where employees can advance in their careers or fulfill global roles without having to move countries or continents but at the same time they have to

renegotiate their hierarchical position in the team, their work conditions and their team inclusion.

In addition to these illustrations of PWC turning into a space where power dynamics ensue and become contested, I argue that PWC is more than a negotiation platform. In fact, and particularly highlighting the sociomaterial dimension of PWC, it is also an agent in the earlier outlined power negotiations. Especially its attribute of unknown pervasiveness and potentiality to connect from anywhere, anytime, make this agency most visible.

As we have heard, the technological affordance to be connected to anyone, independent of time and space, has led to a shift in norms of availability for work and hence a generally high level of PWC, also at TechComp. This potentiality has led to an unknown pervasiveness of connectivity, leading to uncertainty of how connected others are, how many asynchronous messages have reached us without us having seen them and the uncertainty of how others will think of us if we don't respond to these messages in a timely manner.

This uncertainty cuts across all domains due to PWC's cross-domain nature and acts as an incredibly strong disciplinary mechanism. Individuals choose levels of PWC to reduce this uncertainty and mitigate the feeling of not being able to fulfill the expectations of availability and responsiveness that have been placed on them by others and by themselves. People thus discipline themselves or self-surveil and connect to work almost around the clock in an attempt not to deviate from the norm. PWC is therefore also a new state of consciousness of having to fulfill expectations and thus an agent in the power negotiations that take place in the space that peripheral work connectivity provides.

In the case of the women I interviewed, this constant uncertainty of not living up to expectations to the level others could, particularly male colleagues, is at the back of the mind of all women I spoke to no matter what country they come from. In many cases structural aspects drive these women to down regulate their PWC, in an attempt to mitigate feelings of guilt towards their children and to fulfill their private roles.

Yet, the new state of consciousness that PWC also is, means that these women are aware that others could find out that they are not as available as these colleagues may expect of them. For these reasons, PWC acts as a disciplinary mechanism, driving these women to go back to their laptops and smartphones at night in an attempt to reduce the uncertainty that they have missed something important at work or that some problem has blown up that they are to blame for precisely because they haven't connected.

Yet, if PWC becomes too intrusive a feeling of guilt quickly encroaches on these women and makes them disconnect and focus on their families instead. It is thus a constant back and forth between opportunity and disadvantage, giving in and resisting to PWC.

In global teams this uncertainty or state of consciousness takes on yet another global dimension. The global team setup means that it is a fact that there is at least one team member awake and working at all hours of the day and almost all days of the week. While this has the advantage of a longer working week, as one team member described it, this also means that messages could flow in at any time of the day, adding a major level of uncertainty to the lives of these employees of having missed something important.

In addition to the fear of not being in the loop, a team culture of wanting to help each other out and progress quickly drives employees to connect almost around the clock in order to check whether there is something they need to answer. The uncertainty and the potential to connect at any time, makes these employees discipline themselves in the name of their individual peace of mind and the overall team success. In this sense PWC has become a mechanism for self-surveillance and discipline and thus an active agent in the power negotiations that PWC provided a space for. So, I argue that PWC is a platform and an agent, the reason for and an actor in power negotiations.

Nonetheless, as we have also seen in the previous chapters, people are not passive victims of externally imposed norms and expectations. They have agency and the “power to” (dis)connect, as they devise a variety of individual strategies to deal with expectations and norms. For instance, we have seen how one female employee has decided to down regulate her PWC level by disabling the automatic downloading of incoming messages on her company phone and forcing herself to log in to her emails via her laptop. This makes the process of checking work related messages a much longer endeavor, thus limiting her own willingness to connect outside of work. She has turned the constraint of one technology – the laptop – into a virtue to regulate her PWC level.

Other women don’t negotiate their PWC level but change their arrangements at home by organizing their children, their husbands or their relatives accordingly. So for instance, take the case of one woman who has recently split up with her husband and who now shares childcare for her daughter with her ex-husband. She does so by rotating on a weekly basis where the child stays and she makes sure that she is available “extra-long” during weeks when the child is with her father and down regulates her PWC in weeks that her daughter stays with her.

Again others challenge the general expectations of availability that are placed on them in the first place. For instance one Middle Eastern engineer does so by rejecting meeting invites on a Friday afternoon and sending an alternative invitation to the respective colleague on a Sunday morning to emphasize the intrusion that this Friday meeting would mean to this employee in the Middle East.

And yet again others flex their working hours, as one global team worker from Australia does, who has to make herself available long into the night in order to participate in team meetings. In order to compensate she sometimes takes some time off during the middle of the day to take a nap. While this global work setup is very demanding for this particular employee, she has consciously made the choice to become part of this team, knowing that her work hours will become very unusual because she wants to fulfill a global role at TechComp, while being able to live in her preferred location, Australia.

So in conclusion, I argue firstly that PWC provides a space where new work practices and related power relations become negotiated and secondly, that shifting norms and expectations of availability lead to PWC turning into a disciplinary agent in these negotiations. Nonetheless, employees have a stake in determining the outcome of these contested spaces and they can limit and redirect the negative effects of constant peripheral work connectivity and can even turn it into a positive and enriching experience. PWC is thus a space of possibility where multiple stakeholders interact to negotiate and reconfigure power relations. It is not a platform that manifests negative, pre-determined and exploitative outcomes (see summary of this argument in the figure below).

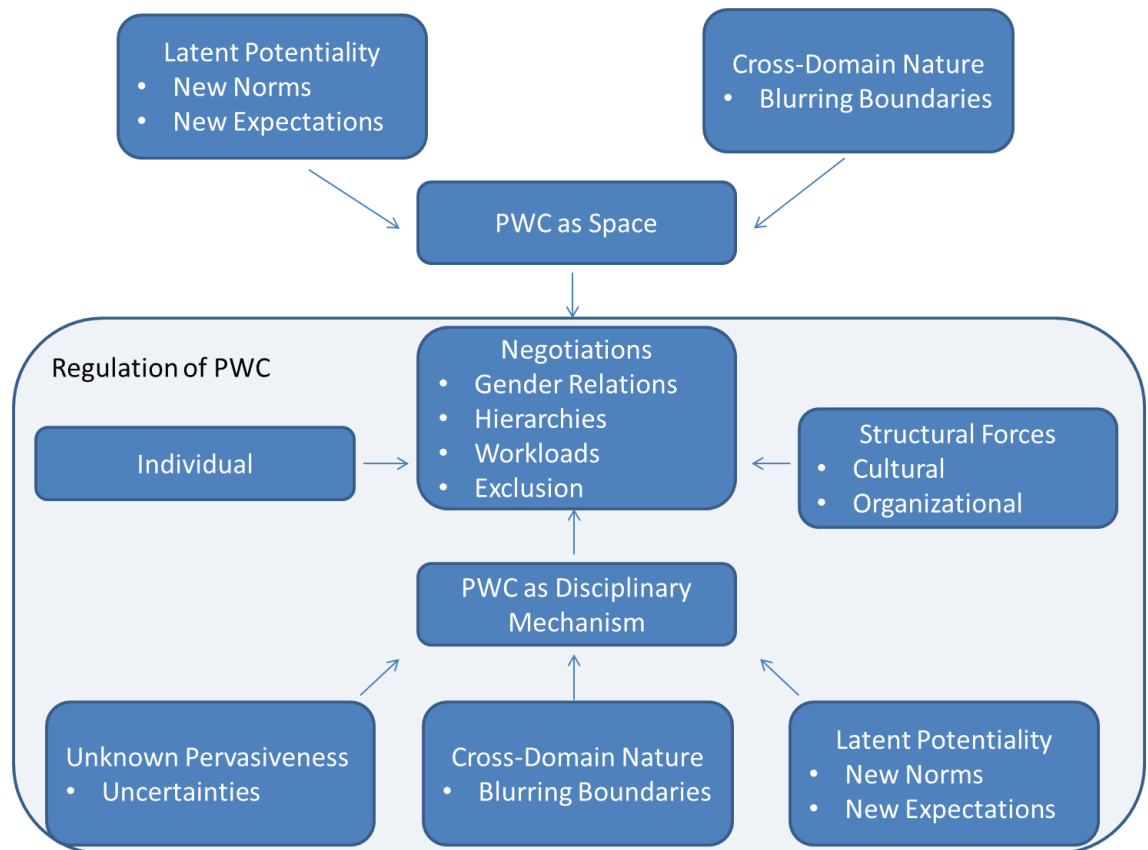


Figure 36 – Chapter 7

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The contribution of this thesis is therefore to advance our understanding of connectivity conceptually and empirically by providing a thorough definition of the term and by empirically investigating one dimension of connectivity, namely work connectivity in its peripheral form. Through the study of diverse work contexts and work roles as well as through the use of mixed methods, I shed light on PWC, its extent, form and effects on power relations.

## 7.2. Limitations & Future Outlook

As is usually the case there are a number of limitations to this study that I would like to reflect on in this section. First of all, a case study research design is always exposed to criticism of not being generalizable to other cases and hence not being able to contribute to the creation of knowledge in the social sciences (Flyvbjerg, 2004). It is certainly true that research designs which can draw on random samples of an entire population are more prone to generalization. However, research in organizations is very difficult to conduct due to the issue of access (Bryman, 1992) and hence generating a random sample of all employees from certain types of organizations is simply not feasible.

Despite the large scale access I was lucky enough to have to conduct my fieldwork, it was impossible to generate a random sample from all employees within TechComp for the large scale questionnaire I conducted due to a variety of legal and practical reasons such as the danger of having too few participants in certain countries to make an analysis feasible. Consequently, I chose to select nine countries and generate a random sample of all employees from these countries, ensuring that I would have enough responses from each country group at the end to be able to analyze the data statistically later on. In my decision what countries to include in the sample, I was careful to include both Western and non-Western countries which all had large employee bodies and occupied an important role within TechComp. Due to limiting this study to nine countries though, I cannot claim generalizability for all of TechComp. Nonetheless, this otherwise randomly generated sample allowed me to gain a general impression of what was happening at TechComp and enabled me to identify a trend across the different countries.

Another limitation of this study was the number of variables that I tested for in the regression model. While the overall  $R = 0.738$  and  $R^2 = 0.544$  were high, explaining more than half of the variance of residuals within the regression model, there are other variables that may shape employees' peripheral connectivity level that I did not include in the analysis. My study was exploratory in nature and I expected that other variables would appear later on that should be investigated further in the future. One potential variable that could further influence individual PWC level is that of ambition as well as personal career goals. These aspects came up in a number of conversations I had with TechComp employees, indicating that they could be other important variables to test in the future.

Another limitation in relation to the questionnaire I conducted was the problem of language. When doing research across different countries and cultural contexts, language clearly becomes a major hurdle to overcome (Sekaran, 1983) and this may stop many researchers from conducting such studies in the first place.

This problem can be easily solved, if there is a team of researchers that together combine knowledge of all languages which are needed for the study. Unfortunately, I did not have the option to draw on a team of multi-lingual researchers. For this reason I had to rely on a professional translation service that translated the survey questions and the open responses for me into 3 additional languages (i.e. Chinese, Portuguese, and Russian).

Consequently, I cannot personally guarantee that all questions and responses have been translated correctly. It is a possibility that some meaning of the English questions I devised for the survey instrument has gotten lost in translation. Nonetheless, the professional service I



utilized – a TechComp internal service – had very good references and the results did not show any major unusual deviations that could have resulted from a translation error.

Furthermore, employees from certain countries that were included in the study had to respond to the survey in English even though they are not native speakers (i.e. India, Saudi Arabia, UAE, Denmark). This was due to the HR department of TechComp ensuring that employees in these countries were generally required to have a high level of English in order to work for the organization in the first place. Nonetheless, it may be possible that some invited participants were deterred from taking part because the questionnaire was not offered to them in their native language. However, the response rates from these specific countries didn't differ significantly from countries where English is the native language or where a translated questionnaire was offered.

Finally, as is usually the case with one-off questionnaires as research method (Bryman, 1992; Walliman, 2006), the quantitative data I collected are cross-sectional in nature and hence only a reflection of the situation at the moment in time when the survey was conducted. Precisely because of this shortcoming, I chose to use mixed methods and complemented the collection of quantitative data with ethnographic work that lasted for more than 1.5 years with frequent visits to the field. This allowed me to widen my understanding of TechComp beyond the cross-sectional picture, a one-time survey can draw. Furthermore, I did not aim to infer causality from the data I collected due to following an exploratory approach, which makes the problem of cross-sectionality less severe (Bryman, 1992).

In relation to the qualitative data I collected some further limitations need to be pointed out. First of all, in most cases I relied on gatekeepers to get me in touch with potential informants, which clearly limited the potential pool of participants for the formal interviews I conducted. Only in one case did I have the possibility to distribute a call widely to a variety of potential interview candidates, independently of a formal gatekeeper. This was the case for the interviews that took place with female employees in the UK and was made possible only through my access to the online company internal social media platform that hosted a very popular network group for women in the UK. Yet, even here my potential reach to recruit informants was limited to the women that utilized this platform and who wished to participate in my study. In all other cases I had to identify one person in the respective country where I wanted to interview in, who would get me in touch with possible interviewees. So I was confronted with a situation of gatekeeping and self-selection.

Again, these problems are typical when using interviews as research method (Bryman, 1992; Maxwell, 2009) but I was not aiming to generalize from the interviews I conducted. Moreover,

I was lucky enough to find very valuable contacts in each country of interest to me, who volunteered to get me in touch with employees that belonged to the demographic and that faced the kind of situations I described (i.e. mostly women with children living in their household, but to a lesser extent also women without children for the study on gender and PWC; members of teams spread across the globe for the study of global work and PWC). In addition to the initial contacts I could generate from such gatekeepers, I was then able to snowball further, widening the reach of my interviewee pool. This method allowed me to interview a very broad spectrum of people from different backgrounds, across different job roles, status levels and family situations.

One issue associated with the interviews I conducted with the members of the global team I studied, was the problem that not all team members had volunteered to participate. This means that I cannot know what other issues these non-participants would have brought to the fore in the context of my study on global work and PWC. However, the large majority of team members participated (11 out of 15) and a 12<sup>th</sup> member would have participated but fell seriously ill just days before the interview was scheduled, showing that this non-response was not due to a negation of the study. The generally just as critical as positive take these interviewees had in relation to the topic of the interview further demonstrated to me that both sides of the spectrum in terms of negative and positive experiences were represented amongst these informants. In addition, all core team members that regularly attended the global meetings as well as the team leader participated in the study.

Another issue I faced was the problem of mode of interviewing. Due to this study being cross-national and a limited budget being in place that didn't allow me to travel to all of the countries where I wanted to interview employees, I had to rely on online interviewing through the use of a conference call application (i.e. Microsoft LiveMeeting). This application was available to all employees at TechComp, who used a computer for their daily work. Where possible I also utilized webcams to complement the conference call mode with video. In many cases, this was possible and allowed me to see my interviewees face-to-face, while conducting the interview with them.

Nonetheless, online interviewing remains at a more anonymous level than personal interviewing and this may make it more difficult to establish rapport and trust with the informants (Fielding & Thomas, 2008). However, my overall research approach emphasizing reciprocity by sharing personal stories and research insights with the informants allowed me to quickly establish rapport with most of my interviewees.

In addition, I could further benefit from the often cited affordance of digital communication, rendering gender, age and status level less significant (Dubrovsky et al., 1991; James & Busher, 2009). This was particularly the case for the interviewing process within the global team, where I spoke to a variety of very senior males and females that would quite possibly not have been as open with me, if they had seen me in person, being a female PhD student in my mid-twenties. For these reasons I did find the online interviewing mode even better than personal face-to-face interviewing for this kind of interview.

Finally, I need to point out one other limitation that can at the same time provide a space for future research and different research designs. As I pointed out at the very beginning of this thesis, I only looked at experienced peripheral work connectivity and not actual peripheral work connectivity due to mostly methodological but also conceptual reasons.

It is very difficult to measure actual PWC as I would have had to install a tracking application on all mobile technologies that the employees I studied were using or I would have had to issue time diaries that would also have relied on accurate reporting of the informants. These options were not feasible for me due to a variety of legal constraints that would have made the installation of such software on TechComp devices impossible and it would have severely limited the number of employees that could have participated. A survey allowed me to measure the actual extent of perceived PWC level in a much grander scale than time diaries of logging studies would have been able to. Furthermore, I wanted to focus on experiences of PWC anyhow, as it is these that shape perceptions and hence influence decisions and feelings. Nonetheless, more research utilizing logging techniques may be a fruitful way forward to contrast experienced PWC with actual PWC levels.

So, in addition to above outlined limitations and potential ways forward, there are a variety of other related issues that should be addressed in future scholarship. Firstly, while the focus of my gender chapter has been on understanding where the connectivity gender gap is coming from by focusing on the experiences and accounts of women at TechComp, more research is needed that contrasts these perspectives with those of men.

Gender studies have often singularly looked at women's lives in relation to issues of work and family, and rightly so, as women are still the ones that shoulder the bulk of caring and housework in the homes of families all across the world (Craig, 2006; Bianchi et al., 2012; Baxter et al., 2008). Nonetheless, to gain a thorough understanding of the connectivity gender gap we also need to understand more fully why men connect to work as they do, what drives them and how they perceive the recent shifts in norms of availability and expectations of high PWC.

Another very important line of future research is the issue of privacy in relation to work connectivity, including both peripheral and non-peripheral dimensions. What does it mean for the employer-employee relationship, if employers have access to data that allow them to monitor every move of their employees during work and even during non-work hours? The mobility of the devices that are now used for work and their permanent connection to the internet leaves traces of how employees move and when. In theory, employees can now be monitored nonstop. Important questions to address here should then be: Who owns these data, should they be allowed to be used by employers and with what consequences?

Finally, I want to point out here that this study is only one contribution to a vast phenomenon that awaits further investigations in different contexts, with different methods and with different foci. In particular, it is important to investigate now, whether and if so, how *non-peripheral* work connectivity may turn into a space where power relations become contested. Furthermore, it is crucial to study the phenomenon of work connectivity longitudinally in order to see how new technologies may change the role of connectivity with and at work over the course of many years. Our understanding of work connectivity can moreover benefit from further refinement of the concept and investigation of the different forms of non-peripheral work connectivity I have defined in chapter 1.

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My own research is only a snapshot of how work connectivity and peripheral work connectivity in particular have played out at TechComp during the time I spent with the organization. Nonetheless, the insights I have gained have hopefully been able to provide us both with food for thought but also with an optimistic impression that we are not victims of external forces that control our work and now increasingly our private life. Rather, it is in our own hands to turn technological constraints into virtues.

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## 8. Appendix

### 8.1. Glossary

#### 8.1.1. Science & Technology Studies related Definitions

**Agency:** Capacity for action (Giddens, 1984)

**Human Agency:** “The ability to form and realize one’s goals” (Leonardi, 2011: p.147).

**Material Agency:** “The capacity for nonhuman entities to act on their own, apart from human intervention” (Leonardi, 2011, 148). “The exercise of agency through performativity” (Barad, 2003) or simply, “through the things they [nonhuman entities] do that users cannot completely or directly control” (Leonardi, 2011: 148).

**Social Technologies:** Traditional and emerging information and communication technologies (ICT) that are used for interaction with other people and to “acquire and share knowledge” (Jarrahi & Sawyer, 2013: 113). These include for instance social media platforms, blogs, emails, telephone, instant messaging, wikis, etc.

**Sociomateriality:** This is a research lens grounded in developments in STS such as Actor-Network Theory (Latour, 2005) and the Social Shaping of Technology (Mackenzie & Wajcman, 1999), that proposes the “constitutive entanglement of the social and the material in everyday organizational life” (Orlikowski, 2007: 1438). This perspective argues that both human and material agency only exist in relation to each other. The view of both as separate entities is only analytical, as in reality they constitute and enact each other in practice.

#### 8.1.2. Connectivity related Definitions

**Connectivity:** Connectivity is defined as a duality of connects and disconnects (Kolb, 2008) between two technological devices that involves human and technological agency, is latent yet pervasive and that offers the potential to connect between or within domains.

Kolb (2008: 128) define connectivity as “the mechanisms, processes, systems and relationships that link individuals and collectives (e.g. groups, organizations, cultures, societies) by facilitating material, informational and/or social exchange. It includes geo-physical (e.g. space, time and location), technological (e.g. information technologies and their applications) as well as social interactions and artefacts.”

**Work Connectivity:** The degree of connectivity an individual has with his or her workplace.

There is a difference between experienced work connectivity (own perception) and actual connectivity (actual number of hours per day one is actively connected to work). The connectivity level can be imposed (either directly through orders and rules or indirectly through norms and expectations) or it can be self-chosen (through personal preferences).

Work connectivity can be differentiated further by means of space and time, leading to two different forms of work connectivity, *peripheral work connectivity* and *non-peripheral work connectivity*.



**Peripheral Work Connectivity:** Connectivity with work, while away from the main workplace (spatially peripheral), during all non-standard work hours, i.e. early mornings, late evenings, weekends, holidays and annual leaves (temporally peripheral).

**Non-peripheral Work Connectivity:** Connectivity with work, while in one's main workplace and during their main work hours.

### 8.1.3. Work related Definitions

**Blurred Boundaries:** Through the changing nature of work and the advances of ICT in the workplace, the traditional boundaries between the domain of work and the domain of the home of an industrial society become increasingly blurred (Perlow, 1998), leading to spillover in both directions.

**Collocated Work:** This term refers to the situation when co-workers are geographically collocated.

**Distributed Work:** This term refers to the situation when co-workers are geographically distributed.

**Global Work:** "Situations in which workers are collaborating across national boundaries" (Hinds et al., 2011: 136) and where they are both culturally diverse and geographically distant.

**Interruptions:** The reasons why people change their work task (Wajcman & Rose, 2011: 946). There are two forms of interruptions (González et al., 2004; Wajcman & Rose, 2011): 1. External interruptions, i.e. an external event in the environment that causes a change in work task, 2. Internal interruption, i.e. self-initiated changes in work task.

**Knowledge Worker:** Knowledge workers are employees in a knowledge economy that experience 1) high complexity of tasks, 2) interdependence of their work with the work of others, 3) high levels of uncertainty surrounding their work, and 4) high levels of work autonomy (Benson & Brown, 2007).

**Mobile Work:** The work of people who regularly work at least a few hours per week away from their main office site (this excludes teleworkers who have their home as their main office site). There are 2 dimensions to mobile work: 1. Mobile work can be locally mobile (within the same workspace (see Felstead et al., 2005)) or remotely mobile (beyond the same workspace).

**Spillover:** This refers to the event when "the work microsystem and the family microsystem significantly influence one another through a permeable boundary" (Chesley, 2005).

**Telework:** Work conducted from home for at least one full day per week (Andriessen & Vartiainen, 2006).

**Work Autonomy:** Work Autonomy is defined as a multi-faceted construct (Breugh, 1985, 1999) that comprises 1) task discretion, 2) temporal or scheduling discretion, 3) spatial discretion, and 4) criteria discretion. Due to these multiple facets, work autonomy should not be confused with work interdependence (Kiggundu, 1983).

**Work Extension:** Extension of total number of hours of work due to mounting workloads and a reduced number of idle times (Moen et al, 2013; Chesley, 2010; Chesley & Johnson, 2015; Duxbury & Smart, 2011).

**Work Intensification:** Effort employees put into their work while working (Burchell et al., 2002; Kelliher & Anderson, 2010) and density of tasks, that is, number of tasks that employees are working on in parallel.

**Work Practices:** Work practices are the daily canonical and non-canonical practices of people in their workplace (Brown & Duguid, 1991) that make up a community of practice and that include narration of stories, collaboration, construction of shared understandings and identity. Work practices are here defined as the temporal, spatial, collaborative and communicative practices that people use to conduct their work.

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## **8.2. Appendix Chapter 2**

### **8.2.1. Additional Ethics Discussions**

#### **8.2.1.1. Online Ethnography**

The unobtrusive, often invisible and anonymous nature of online research raises ethical concerns that do not exist to the same extent in offline contexts, where the researcher is visibly present. Whereas in other, traditional fieldwork methods, such as qualitative interviewing and quantitative surveying, many procedures are in place to protect the researched subject, for instance through the imperative of seeking informed consent, in online research many researchers forego seeking such consent for three main reasons (Gleibs, 2014: 355): 1. The “research is nonobtrusive and bears minimal risk to participants”, 2. “the research is not affecting the rights and welfare of participants”, 3. “the research could not practicably be carried out without the waiver [of informant consent].” In addition, users of social media platforms usually have to accept terms and conditions before they can use the platform that specify the degree of visibility of their online interaction, what kind of data is stored and how their data get used. Moreover, users of such platforms can generally also change their privacy settings to control who can see their activity and who cannot.

However, as Hugl (2011) pointed out, many social media platform providers do make money from their platforms by selling personal data of users for profiling purposes (i.e. where a detailed profile of users is created based on their social media activity such as likes and comments); and this usually happens without the user knowing it, even though they will most likely have agreed to this in the terms and conditions. Yet, according to Dumas et al. (2014) the large majority of social media users are too careless with their data and furthermore don’t read the terms and conditions to which they agree.

Even though these points need to be taken very seriously, in enterprise social networks, where employees are usually explicitly informed about the degree of visibility of their online activity and where their data are not sold for profiling purposes, these concerns become less urgent. Nonetheless, following Gleibs (2014), it remains important to be aware of these issues and to apply contextual integrity by reconsidering above ethical concerns when it comes to publishing the data, possibly seeking consent prior to such publication. In addition, earlier discussed emphasis on reciprocity should also be upheld, though this is often difficult due to increased anonymity online (Ryen, 2004).

In the case of the internal social media solution of the studied organization, the team managing the platform had had to go through many approval procedures prior to being

implemented worldwide (i.e. workers council approval, data protection screening), further ensuring that employees were protected from e.g. being fired due to their activity online. Moreover, similar to public social media networks, every employee with access to this platform had to actively activate their account by agreeing to the terms and conditions that explicitly spelled out what data would be stored and how their activity would be monitored. And, as was stressed by both the legal department overseeing the company regulation behind this platform and the IT department managing it, the use of this social network was not mandatory and employees could refuse to activate their accounts.

In addition, in order to prevent abusive and offensive behavior on this platform, unlike private social media platforms, employees were made aware that their online profile would always display their real name, as known by the company. For employees, this was an additional indicator of the visibility of their activities that constantly reminded them that this was a work tool and that they were, after all, monitored to some extent. Of course, this potential feeling of being monitored may diminish the benefits that usually come with online research as being natural, but on the other hand, the objective of this research was to study work practices and this platform was an online work space.

#### **8.2.1.2. Offline Ethnography Ethics**

My role as full observer, which according to Bryman (2012; 1989) signifies researchers who assume a work role in the company while being known as researcher, ensured that employees I collaborated with knew that I was a researcher investigating their organization. In contrast to covert observation, this form of observation has less ethical concerns attached to it as individuals studied are aware of this fact, though they may forget this the longer I participate in their daily routines. For this reason, it is important to stress that seeking consent from participants and considering ethics is an ongoing process (Plankey-Videla, 2012; Ryen, 2004) and participants who may consented to participate in my research at the outset of the project, may change their minds later on. Furthermore, project goals may change, not reflecting the initial objectives anymore for which consent had been granted.

Consequently, following Wax (1982), who emphasized that reciprocity is key to successful and ethically correct fieldwork and being aware that “[o]bservers cannot expect to be only on the receiving end of the participant observer process” (Wade, 1984: 213), I was anxious to be transparent at all times and to provide people I interacted with, with information about my research results and with support for their work where possible. For this reason and because it is often impractical and unfeasible for this kind of research (Herrera, 1999; Bryman, 2012), no explicit informed consent could be sought every time I engaged with employees from the

studied organization. However, all data collected during participant observation phases were anonymized and kept in an encrypted hard drive at all times, as to ensure that no sensitive data could slip out and harm informants.

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### 8.2.2. Consent Email Gender Study

Dear XXXXXXXXXXXXX

This is Isabell, the PhD student of the XXX team currently working on the topic of Digital Connectivity at XXXXX. First of all thank you for making yourself available to participate in this study. I hope you will find it interesting and useful.

I have chosen this time slot based on your calendar but please feel free to propose another time, if this one does not work for you. My aim is to complete the interview within 45 minutes but I scheduled 15 minutes extra for any contingencies that may arise. Of course we can end the interview after the 45 minutes should you not be able to dedicate more time to this interview.

It would be good if you could sit in a quiet room during the interview so that we can talk in confidence.

Please note that I have included more information about the project as well as respective confidentiality and data privacy rules I comply with below. **With your acceptance of this email invitation you confirm that you have read the below information and consent to being interviewed.**

I look forward to talking to you soon.

Kind regards,

Isabell

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Due to my university's ethics guidelines I have to inform you of a few things upfront:

**Purpose of project:** The goal of this study is to understand how digital connectivity affects employees at XXXXX. More precisely, this research aims to understand how employees with and without children manage their boundaries and their level of connectivity at XXXXX, what role gender plays and how this affects their career prospects.

**Notes on study process and confidentiality:**

1. The interview is part of a doctoral research project based at the London School of Economics (LSE) in cooperation with XXXXX. The researcher, Isabell Loeschner, is enrolled at LSE as full



time PhD student and has a contractual relationship with XXXXX as PhD student from December 2013-December 2016. She has signed a confidentiality agreement with XXXXX.

2. The results of this study can be shared with PhD supervisor Professor Judy Wajcman who has signed a confidentiality agreement with XXXXX. Anonymized results as part of the doctoral thesis can be shared with other academic researchers for assessment purposes.

3. All of the data collected will be anonymized and Isabell Loeschner will be the only person who has full access to the raw data. As external researcher, she has no contractual obligation to provide XXXXX with names of participants or unanonymized data that would violate the right for confidentiality of participants.

4. With your consent, the interview will be recorded for transcription purposes. The recordings will only be accessed by Isabell Loeschner and will be stored on an encrypted hard drive. You can ask for the recording to be stopped at any time during the interview.

5. The results from the interview may be utilized for XXXXX internal reports and may be published in academic outlets e.g. academic journals, presentations and in book form. However, the results will only be made available in aggregated and anonymized form.

6. Your participation in the study is voluntary.

### 8.2.3. Consent Email Global Work Study

Dear XXXXXXXXXXXXX

This is Isabell, the PhD student of the XXX team currently working on the topic of Digital Connectivity at XXXXX. First of all thank you for making yourself available to participate in this study. I hope you will find it interesting and useful.

I have chosen this time slot based on your calendar but please feel free to propose another time, if this one does not work for you. My aim is to complete the interview within 30 minutes but I scheduled 15 minutes extra for any contingencies that may arise. Of course we can end the interview after the 30 minutes should you not be able to dedicate more time to this interview.

It would be good if you could sit in a quiet room during the interview so that we can talk in confidence. Please note that I have included more information about the project as well as respective confidentiality and data privacy rules I comply with below. **With your acceptance of this email invitation you confirm that you have read the below information and consent to being interviewed.**

I look forward to talking to you soon.

Kind regards,

Isabell

+++++

Due to my university's ethics guidelines I have to inform you of a few things upfront:

Purpose of project: The goal of this study is to understand how digital connectivity affects global work teams. More precisely, this research aims to understand how global teams collaborate across time zones and what role new communication technologies and the possibility to be constantly connected play in such work setups.

Notes on study process and confidentiality:

1. The interview is part of a doctoral research project based at the London School of Economics (LSE) in cooperation with XXXXX. The researcher, Isabell Loeschner, is enrolled at LSE as full time PhD student and has a contractual relationship with the XXXXX as PhD student from December 2013-December 2016. She has signed a confidentiality agreement with XXXXX.

2. The results of this study can be shared with PhD supervisor Professor Judy Wajcman who has signed a confidentiality agreement with XXXXX. Anonymized results as part of the doctoral thesis can be shared with other academic researchers for assessment purposes.
3. All of the data collected will be anonymized and Isabell Loeschner will be the only person who has full access to the raw data. As external researcher, she has no contractual obligation to provide XXXXX with names of participants or unanonymized data that would violate the right for confidentiality of participants.
4. With your consent, the interview will be recorded for transcription purposes. The recordings will only be accessed by Isabell Loeschner and will be stored on an encrypted hard drive. You can ask for the recording to be stopped at any time during the interview.
5. The results from the interview may be utilized for XXXXX internal reports and may be published in academic outlets e.g. academic journals, presentations and in book form. However, the results will only be made available in aggregated and anonymized form.
6. Your participation in the study is voluntary.

### 8.2.4. Questionnaire

| In the first set of questions, we want to learn about your background to relate connectivity levels to demographic groups. All responses given are anonymous.  |     |   |   |   |  |                         |                                  |                          |                                |                                |                        |                   |
|--|-----|---|---|---|--|-------------------------|----------------------------------|--------------------------|--------------------------------|--------------------------------|------------------------|-------------------|
|  |     | Question  | Response 1  | Response 2  | Response 3   | Response 4              | Response 5                       | Response 6               | Response 7                     | Response 8                     | Response 9             | Response 10       |
| 0.1  | 0.1 | What is your age?   | ____ Years  |   |  |                         |                                  |                          |                                |                                |                        |                   |
| 0.2  | 0.2 | What is your marital status?  | Single  | In a relationship   | Married  | Divorced                | Widowed                          |                          |                                |                                |                        |                   |
| 0.3  | 0.3 | What is your highest obtained level of education?                           | Some secondary school   | Graduated from secondary school                                     | Vocational/professional qualification                  | Bachelor Degree         | Master Degree/Diploma/Equivalent | PhD                      |                                |                                |                        |                   |
| 0.4  | 0.4 | How many children under the age of 16 do you have living in your household? | 0   | 1   | 2  | 3                       | 4                                | 5                        | 6                              | >6                             |                        |                   |
| 0.5  | 0.5 | What is your current level of employment (i.e. hierarchical position)?      | Individual Contributor (Employee without Management Function below Global Position Level 4) | Management incl. Project Management (below Global Position Level 4) | Senior Management (Global Position Level 4 and higher) |                         |                                  |                          |                                |                                |                        |                   |
| 0.6  | 0.6 | What job family do you work in?   | Audit   | Communications  | Customer Services                                      | Engineering             | Health & Safety                  | Finance                  | General Management             | Human Resources                | Information Technology | Internal Services |
| 0.7  | 0.7 | How long have you been working for TechComp?                                | Less than 1 year  | 1 to less than 3 years  | 3 to less than 5 years                                 | 5 to less than 10 years | 10 to less than 15 years         | 15 to less than 20 years | 20 years to less than 25 years | 25 years to less than 30 years | 30+ years              |                   |
| 0.8  | 0.8 | I work...   | Part-time   | Full-time   |  |                         |                                  |                          |                                |                                |                        |                   |
| 0.9  | 0.9 | My contract is...   | Permanent   | Temporary   |  |                         |                                  |                          |                                |                                |                        |                   |
| In the second set of questions, we want to understand the existing digital connectedness of employees with their workplace. All responses given are anonymous. |     |   |   |   |  |                         |                                  |                          |                                |                                |                        |                   |

|                     |    |   |   |  |                   |                  |                          |                        |        |        |        |      |
|---------------------|----|---|---|--|-------------------|------------------|--------------------------|------------------------|--------|--------|--------|------|
| 1.                  | 1. | Which hardware do you use the most often at work?   | Company Smartphone                              | Company Laptop / Laptop with Docking Station             | Company Tablet    | Desktop Computer | None                     | Other (please specify) |        |        |        |      |
| 2.                  | 2. | Do you possess an organizationally owned smartphone?  | Yes   | No   |                   |                  |                          |                        |        |        |        |      |
| 2.                  | a) | If yes, did you request this smartphone?  | Yes, I actively requested a smartphone for work | No, it was given to me without a special request of mine |                   |                  |                          |                        |        |        |        |      |
| 2.                  | b) | Do you have permission to use this smartphone privately?  | Yes   | No   | Don't know        |                  |                          |                        |        |        |        |      |
| 2.                  | c) | How useful do you think your smartphone is for work?  | Not at all useful                               | Slightly useful  | Moderately useful | Pretty useful    | Extremely useful         |                        |        |        |        |      |
| 2.                  | d) | How often do you use your work smartphone privately?  | Never   | Rarely   | Sometimes         | Often            | All the time (every day) | Prefer not to say      |        |        |        |      |
| Connectivity page 2 |    |   |   |  |                   |                  |                          |                        |        |        |        |      |
| 3.                  | 3. | Do you own a private smartphone?  | Yes   | No   |                   |                  |                          |                        |        |        |        |      |
| 3.                  | a) | If yes, how often do you use your private smartphone for work (e.g. checking emails, making phone calls)?                                       | Never   | Rarely   | Sometimes         | Often            | All the time (every day) | Prefer not to say      |        |        |        |      |
| Connectivity page 3 |    |   |   |  |                   |                  |                          |                        |        |        |        |      |
| 4.                  | 4. | On average, please estimate the percentage of time on a normal workday that you spend communicating (i.e. meetings, emails, phone calls, etc.). | 0-10%   | 11-20%   | 21-30%            | 31-40%           | 41-50%                   | 51-60%                 | 61-70% | 71-80% | 81-90% | >90% |

|                     |    |  |       |                             |               |                    |            |                   |                              |                         |        |      |  |
|---------------------|----|--|-------|-----------------------------|---------------|--------------------|------------|-------------------|------------------------------|-------------------------|--------|------|--|
| 4.                  | a) | Of the time you spend communicating, please estimate the percentage of time you communicate <u>via a technology</u> (e.g. phone, email, communicator)? | 0-10% | 11-20%                      | 21-30%        | 31-40%             | 41-50%     | 51-60%            | 61-70%                       | 71-80%                  | 81-90% | >90% |  |
| Connectivity page 4 |    |  |       |                             |               |                    |            |                   |                              |                         |        |      |  |
| 5.                  | 5. | How often do you use the following communication channels for work, on an average day that you work from your office?                                  |       |                             |               |                    |            |                   |                              |                         |        |      |  |
| 5.                  | a) | Email  | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | b) | Face to Face Conversations   | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | c) | Phone Call   | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | d) | Communicator   | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | e) | TechComp Social Network  | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | f) | Live Meeting   | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 5.                  | g) | Other (please specify)   | Never | A few times a month or less | Once a week   | A few times a week | Once a day | A few times a day | Often on every day           | Very often on every day |        |      |  |
| 6.                  | 6. | How often do you check your work email during the workday?   | Never | Once a day                  | 2-3 times/day | Every other hour   | Every hour | A few times/hour  | As soon as new emails arrive |                         |        |      |  |
| Connectivity page 5 |    |  |       |                             |               |                    |            |                   |                              |                         |        |      |  |
| 7.                  | 7. | How often do you connect to work (e.g. check emails, TechComp Social Network, Intranet)...   |       |                             |               |                    |            |                   |                              |                         |        |      |  |

|                     |     |  |                    |                         |                   |                            |                             |                        |                         |                         |  |  |
|---------------------|-----|--|--------------------|-------------------------|-------------------|----------------------------|-----------------------------|------------------------|-------------------------|-------------------------|--|--|
| 7.                  | a)  | ...during the morning prior to arrival at your office (excluding home office days)?  | Never              | Rarely                  | Sometimes         | Often                      | Very often (every day)      | Prefer not to say      |                         |                         |  |  |
| 7.                  | b)  | ...during the evening after leaving your office (excluding home office days)?  | Never              | Rarely                  | Sometimes         | Often                      | Very often (every day)      | Prefer not to say      |                         |                         |  |  |
| 7.                  | c)  | ...during the weekend/public holidays?   | Never              | Rarely                  | Sometimes         | Often                      | Very often (every day)      | Prefer not to say      |                         |                         |  |  |
| 7.                  | d)  | ...during personal holidays?   | Never              | Rarely                  | Sometimes         | Often                      | Very often (every day)      | Prefer not to say      |                         |                         |  |  |
| 7.                  | e)  | On normal office days (excluding home office days), how often do you connect to family/friends or make any other private calls?        | Never              | Rarely                  | Sometimes         | Often                      | Very often (every day)      | Prefer not to say      |                         |                         |  |  |
| 8.                  | 8.  | What <u>hardware</u> do you use most often to connect to work <u>outside of your main workplace</u> ? (Multiple answers possible)      | Company Smartphone | Company Laptop          | Company Tablet    | Private Smartphone         | Private PC (Laptop/Desktop) | Private Tablet         | Other (please specify)  | I don't connect to work |  |  |
| 9.                  | 9.  | Which <u>applications</u> do you use most often to connect to work <u>outside of your main workplace</u> ? (Multiple answers possible) | Email              | TechComp Social Network | Calendar          | Communicator               | Live Meeting                | Other (Please specify) | I don't connect to work |                         |  |  |
| Connectivity page 6 |     |  |                    |                         |                   |                            |                             |                        |                         |                         |  |  |
| 10.                 | 10. | To what extent do you agree with the following statements?   |                    |                         |                   |                            |                             |                        |                         |                         |  |  |
| 10.                 | a)  | Technical communication gaps at work (e.g. internet too slow, dropped connections) often undermine the productivity of my work.        | Strongly Disagree  | Disagree                | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree              | Agree                  | Strongly Agree          |                         |  |  |
| 10.                 | b)  | I am unable to stay in touch with my colleagues and/or team members when I am in other locations than my main office.                  | Strongly Disagree  | Disagree                | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree              | Agree                  | Strongly Agree          |                         |  |  |

|  |     |  |                   |                        |                   |                            |                |                    |                |        |      |  |
|--|-----|--|-------------------|------------------------|-------------------|----------------------------|----------------|--------------------|----------------|--------|------|--|
| 10.  | c)  | The amount of written electronic communications (e.g. email, communicator, SSN, etc.) I receive, makes it difficult to be productive in my work. | Strongly Disagree | Disagree               | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree              | Strongly Agree |        |      |  |
| 10.  | d)  | I feel socially disconnected (i.e. out of the loop) from my team.  | Strongly Disagree | Disagree               | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree              | Strongly Agree |        |      |  |
| 10.  | e)  | The amount of time I spend on the phone, including Live Meetings, makes it difficult to be productive in my work.                                | Strongly Disagree | Disagree               | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree              | Strongly Agree |        |      |  |
| 10.  | f)  | The amount of face-to-face meetings I take part in makes it difficult to be productive in my work.   | Strongly Disagree | Disagree               | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree              | Strongly Agree |        |      |  |
| 10.  | g)  | Interruptions and impromptu meetings make it difficult to be productive in my work.  | Strongly Disagree | Disagree               | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree              | Strongly Agree |        |      |  |
| In the third set of questions we want to find out what factors are shaping the varying levels of connectivity that exist at TechComp. All responses given are anonymous. |     |  |                   |                        |                   |                            |                |                    |                |        |      |  |
| 11.  | 11. | In your current job, what describes best how frequently you collaborated with colleagues abroad but...   |                   |                        |                   |                            |                |                    |                |        |      |  |
| 11.  | a)  | ... <u>in the same time zone</u> (within +/-1 hour tolerance)?   | Never             | Less than once a month | Once a month      | A few times a month        | Once a week    | A few times a week | Daily          |        |      |  |
| 11.  | b)  | ... <u>in a different time zone</u> (more than +/- 1 h difference)?  | Never             | Less than once a month | Once a month      | A few times a month        | Once a week    | A few times a week | Daily          |        |      |  |
| 12.  | 12. | On average, how many hours per week do you work...   |                   |                        |                   |                            |                |                    |                |        |      |  |
| 12.  | a)  | ... <u>from home</u> ?   | none at all       | 1-5h                   | 6-10h             | 11-15h                     | 16-20h         | 21-25h             | 26-30h         | 31-35h | >35h |  |
| 12.  | b)  | ... <u>in a third space</u> (i.e. client site, hotel, cafe, airport etc.)?   | none at all       | 1-5h                   | 6-10h             | 11-15h                     | 16-20h         | 21-25h             | 26-30h         | 31-35h | >35h |  |
| In this subset of questions your level of work autonomy will be measured in order to relate autonomy to levels of connectivity. All responses given are anonymous.       |     |  |                   |                        |                   |                            |                |                    |                |        |      |  |



|   |     |   |                 |               |                   |               |                |  |  |  |  |  |
|---|-----|---|-----------------|---------------|-------------------|---------------|----------------|--|--|--|--|--|
| 13.   | 13. | How much influence do you have on deciding...   |                 |               |                   |               |                |  |  |  |  |  |
| 13.   | a)  | ...how hard (i.e. how long and intensive) you work?   | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | b)  | ...what tasks you are to do?  | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | c)  | ...how you are to do the task?  | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | d)  | ...the quality standards to which you work (i.e. criteria by which you are evaluated)?  | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | e)  | ...when you work (i.e. start, finish, take breaks)?   | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | f)  | ...from where you work, e.g. home, main office, client site, cafe, etc.?  | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | g)  | ...how you communicate at work (i.e. what medium you choose for communication)?   | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | h)  | ...how often you connect to work after regular hours?   | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| 13.   | i)  | ...when to turn off your company communication devices?   | none at all     | not much      | a moderate amount | a fair amount | a great deal   |  |  |  |  |  |
| In this subset norms of responsiveness will be measured to relate these norms to connectivity. All responses given are anonymous. |     |   |                 |               |                   |               |                |  |  |  |  |  |
| 14.   | 14. | How well do(es) your direct manager(s) make his/her/their expectations of responsiveness clear to you?  | Not well at all | Slightly well | Moderately well   | Pretty well   | Extremely well |  |  |  |  |  |
| 15.   | 15. | How well do your management's responsiveness expectations align with your own?  | Not well at all | Slightly well | Moderately well   | Pretty well   | Extremely well |  |  |  |  |  |
| 16.   | 16. | In general (excluding very urgent cases that require immediate attention), what do you consider good practice when replying to digital messages from... |                 |               |                   |               |                |  |  |  |  |  |

|                       |     |  |              |                                  |                            |                              |                             |                          |                                     |  |  |  |
|-----------------------|-----|--|--------------|----------------------------------|----------------------------|------------------------------|-----------------------------|--------------------------|-------------------------------------|--|--|--|
| 16.                   | a)  | ...colleagues?   | Not replying | Replying within a week or longer | Replying within a few days | Replying within the same day | Replying within a few hours | Replying within one hour | Replying as soon as message arrives |  |  |  |
| 16.                   | b)  | ...direct manager(s)?  | Not replying | Replying within a week or longer | Replying within a few days | Replying within the same day | Replying within a few hours | Replying within one hour | Replying as soon as message arrives |  |  |  |
| 16.                   | c)  | ...family / friends you receive at work?   | Not replying | Replying within a week or longer | Replying within a few days | Replying within the same day | Replying within a few hours | Replying within one hour | Replying as soon as message arrives |  |  |  |
| Responsiveness page 2 |     |  |              |                                  |                            |                              |                             |                          |                                     |  |  |  |
| 17.                   | 17. | How often do you feel you need to respond quickly (within 1 hour) to work related digital messages...  |              |                                  |                            |                              |                             |                          |                                     |  |  |  |
| 17.                   | a)  | ...during the workday  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 17.                   | b)  | ...before or after your core work time.  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 17.                   | c)  | ...during weekends/public holidays.  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 17.                   | d)  | ...during personal time off from work/personal holidays.   | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 18.                   | 18. | In the following question set your level of overload and stress will be measured in order to relate stress level to connectivity. All responses given are anonymous. |              |                                  |                            |                              |                             |                          |                                     |  |  |  |
|                       |     | How frequently have you experienced the following over the last 6 months:  |              |                                  |                            |                              |                             |                          |                                     |  |  |  |
| 18.                   | a)  | Felt emotionally drained from your work  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 18.                   | b)  | Felt very energetic.   | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 18.                   | c)  | Felt burned out or stressed from your work.  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 18.                   | d)  | Felt frustrated by your job.   | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |
| 18.                   | e)  | Felt confident about your ability to handle your personal problems.  | Never        | Rarely                           | Sometimes                  | Often                        | All the time                |                          |                                     |  |  |  |

|     |     |   |                   |               |                   |                            |                |       |                |  |  |  |
|-----|-----|---|-------------------|---------------|-------------------|----------------------------|----------------|-------|----------------|--|--|--|
| 18. | f)  | Felt you have accomplished many worthwhile things in this job.  | Never             | Rarely        | Sometimes         | Often                      | All the time   |       |                |  |  |  |
| 18. | g)  | Found that you could not cope with all the things you had to do.  | Never             | Rarely        | Sometimes         | Often                      | All the time   |       |                |  |  |  |
| 18. | h)  | Felt difficulties were piling up so high that you could not overcome them.  | Never             | Rarely        | Sometimes         | Often                      | All the time   |       |                |  |  |  |
| 18. | i)  | Felt used up at the end of the workday  | Never             | Rarely        | Sometimes         | Often                      | All the time   |       |                |  |  |  |
|     |     | In this question subset media literacy is measured in order to relate it to connectivity. All responses given are anonymous.  |                   |               |                   |                            |                |       |                |  |  |  |
| 19. | 19. | In your opinion, how well (i.e. communication channel selection) do the following people communicate at work?   |                   |               |                   |                            |                |       |                |  |  |  |
| 19. | a)  | Colleagues  | Not well at all   | Slightly well | Moderately well   | Pretty well                | Extremely well |       |                |  |  |  |
| 19. | b)  | Direct manager(s)   | Not well at all   | Slightly well | Moderately well   | Pretty well                | Extremely well |       |                |  |  |  |
| 19. | c)  | Yourself  | Not well at all   | Slightly well | Moderately well   | Pretty well                | Extremely well |       |                |  |  |  |
| 20. | 20. | The following questions are aimed at measuring your identification with TechComp, your job and your team respectively due to which some items may seem to overlap. All responses given are anonymous.<br><br>To what extent do you agree or disagree with the following statements: |                   |               |                   |                            |                |       |                |  |  |  |
| 20. | 20. | I identify myself...  |                   |               |                   |                            |                |       |                |  |  |  |
| 20. | a)  | ...with <u>TechComp</u> (i.e. my company forms part of who I am).   | Strongly Disagree | Disagree      | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 20. | b)  | ...with <u>my job</u> (i.e. my job forms part of who I am).   | Strongly Disagree | Disagree      | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 20. | c)  | ...as a member of <u>my team</u> .  | Strongly Disagree | Disagree      | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 21. | 21. | I like...   |                   |               |                   |                            |                |       |                |  |  |  |

|     |     |   |                   |          |                   |                            |                |       |                |  |  |  |
|-----|-----|---|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|--|--|--|
| 21. | a)  | ...to work for <u>TechComp</u> .  | Strongly Disagree | Disagree | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 21. | b)  | ...the tasks I do in <u>my job</u> .  | Strongly Disagree | Disagree | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 21. | c)  | ...to work for <u>my team</u> .   | Strongly Disagree | Disagree | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 22. | a)  | I do more in <u>my job</u> than is absolutely necessary.                        | Strongly Disagree | Disagree | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
| 22. | b)  | I would be prepared to do more for <u>my team</u> than is absolutely necessary. | Strongly Disagree | Disagree | Somewhat disagree | Neither Disagree Nor Agree | Somewhat agree | Agree | Strongly Agree |  |  |  |
|     |     |   |                   |          |                   |                            |                |       |                |  |  |  |
| 23. | 23. | If you have any additional comments, please leave them here.                    |                   |          |                   |                            |                |       |                |  |  |  |

**Table 26 – Appendix Chapter 2**

## 8.2.5. Code Books

### 8.2.5.1. Code Book “Gender”

| Code Level 1        | Code Level 2 | Code Level 3             | Description   | Code Level 1        | Code Level 2      | Code Level 3 | Description  |
|---------------------|--------------|--------------------------|---|---------------------|-------------------|--------------|--|
| Reasons shaping PWC |              |                          | Incidents / Stories that describe the reasons why women regulate their PWC in a certain way.  | Reasons shaping PWC | Fear of Judgement |              | Incidents / Stories that describe the fears of being judged by colleagues (both male and female) for not being able to fulfill one's work and private roles as expected due to which women regulate their PWC to reduce such fears |
| Reasons shaping PWC | Frustration  |                          | Incidents / Stories that describe the frustrations women encounter due to which they regulate their availability accordingly.   | Reasons shaping PWC | Fear of Judgement | Capability   | Incidents / Stories that describe the fear of being judged as less capable than others (i.e. primarily men)  |
| Reasons shaping PWC | Frustration  | Equipment & Policy       | Incidents / Stories that describe the frustrations women encounter due to not having necessary equipment or due to a lack of policies   | Reasons shaping PWC | Fear of Judgement | Commitment   | Incidents / Stories that describe the fear of being judged as less committed than others (i.e. primarily men)  |
| Reasons shaping PWC | Frustration  | Hostile work environment | Incidents / Stories that describe the frustration women encounter due to a hostile work environment e.g. through banter   | Reasons shaping PWC | Fear of Judgement | Deviance     | Incidents / Stories that describe the fear of being judged as deviating from expected norms of how a women should behave either by being too ambitious at work or to ambitious in the home   |
| Reasons shaping PWC | Guilt        |                          | Incidents / Stories that describe the feeling of guilt women feel due to not being able to fulfill all of the roles they are occupying due to which they regulate their PWC in a certain way to | Reasons shaping PWC | Triple Workload   |              | Incidents / Stories that describe the structural issues that women shoulder a high workload both at home (e.g. childcare, household) and in the workplace due to which they regulate   |

|                     |                       |                     |  |                     |                          |                                 |  |
|---------------------|-----------------------|---------------------|--|---------------------|--------------------------|---------------------------------|--|
|                     |                       |                     | manage this feeling  |                     |                          |                                 | their PWC accordingly  |
| Reasons shaping PWC | Guilt                 | Towards children    | Incidents / Stories that describe the guilt women feel towards their children when prioritizing work   | Reasons shaping PWC | Triple Workload          | Default Carer                   | Incidents / Stories that describe the situation that women are usually the main carer (i.e. they are the ones who children turn to first, they organize and plan everything and may or may not delegate to their partners) |
| Reasons shaping PWC | Guilt                 | Towards environment | Incidents / Stories that describe the guilt towards own family (including in-laws or parents), friends and general environment, the women feel due to prioritizing work over family (i.e. mostly children) | Reasons shaping PWC | Triple Workload          | Default homemaker               | Incidents / Stories that describe the situation where women are the main responsible in the home for all household related tasks (i.e. they organize, execute and may or may not delegate)                                 |
| Reasons shaping PWC | Guilt                 | Towards oneself     | Incidents / Stories that describe the guilt women feel towards themselves for having stepped back for family and having invested in their education and careers in vain                                    | Reasons shaping PWC | Triple Workload          | Perfect employee                | Incidents / Stories that describe the situation where women try to be the perfect employee, meaning that they are always available and do everything that is required of them and more                                     |
| Reasons shaping PWC | Guilt                 | Towards work        | Incidents / Stories that describe the guilt women feel towards work due to prioritizing family (i.e. mostly children) over work  | Reasons shaping PWC | Triple Workload          | Self-expectations of perfection | Incidents / Stories that describe the situation where women try to be perfect at everything they do as they consider themselves as perfectionist or have an internal desire to do everything perfectly                     |
| <b>Code Level 1</b> | <b>Code Level 2</b>   | <b>Code Level 3</b> | <b>Description</b>   | <b>Code Level 1</b> | <b>Code Level 2</b>      | <b>Code Level 3</b>             | <b>Description</b>   |
| Strategies          |                       |                     | Incidents / Stories that describe the strategies women use to deal with their conflicting roles and the expectations of work (i.e. high PWC levels)  | Strategies          | Regulating home workload | Sharing Childcare               | Incidents / Stories that describe the situation where women actively share childcare with their partners   |
| Strategies          | Impression management |                     | Incidents / Stories that describe the situation where women use impression management to deal with connectivity expectations   | Strategies          | Regulating job workload  |                                 | Incidents / Stories where employees regulate their job workload to suit their home circumstances   |

|            |                       |                                   |  |            |                          |   |   |
|------------|-----------------------|-----------------------------------|--|------------|--------------------------|---|---|
| Strategies | Impression management | Hiding pressures                  | Incidents / Stories that describe the situation where women try to hide that they perceive a lot of pressure from high PWC levels and conflicting private roles  | Strategies | Regulating job workload  | Embracing PWC                           | Incidents / Stories that describe the situation where women actively embraced the possibility for PWC, hence upregulated their availability, as to deal with competing demands      |
| Strategies | Impression management | Raising awareness                 | Incidents / Stories that describe the situation where women raise awareness about the issues and workloads they are dealing with   | Strategies | Regulating job workload  | Rejecting PWC                           | Incidents / Stories that describe the situation where women actively rejected the possibility for PWC, hence downregulated their availability, as to deal with competing demands    |
| Strategies | Rationalization       |                                   | Incidents / Stories that describe the situation where women rationalize their own behavior in order to accept their PWC level and associated consequences for career and private level                                 | Strategies | Technology management    |   | Incidents / Stories that describe the strategies where employees use technology to regulate PWC   |
| Strategies | Rationalization       | Accepting Trade offs              | Incidents / Stories that describe the situation where women accept that there are trade-offs they have to make if they want to fulfill expectations of connectivity as well as expectations arising from private roles | Strategies | Technology management    | Physical management                     | Incidents / Stories that describe the situation where women managed their technology devices physically e.g. by leaving it at home or by carrying two phones with them at all times |
| Strategies | Rationalization       | Indifferent about others opinions | Incidents / Stories that describe the situation where women simply tell themselves that they don't care what others think about how they deal with PWC and conflicting roles   | Strategies | Technology management    | Technologically disconnecting from work | Incidents / Stories that describe the situation where women disconnected from work by e.g. turning it off, letting the battery run out etc.   |
| Strategies | Rationalization       | Perfectionism                     | Incidents / Stories that describe the situation where women justify their own level of PWC with their personality trait of perfectionism   | Strategies | Regulating personal time |   | Incidents / Stories that describe the strategies where employees adjust their personal lives or develop personal rationales   |

|            |                          |                         |   |            |                          |                   |  |
|------------|--------------------------|-------------------------|---|------------|--------------------------|-------------------|--|
| Strategies | Regulating home workload |                         | Incidents / Stories that describe strategies where women regulate their home workload to cope with work related expectations including PWC level                          | Strategies | Regulating personal time | Giving up oneself | Incidents / Stories that describe the situation where women gave up their own dreams and desires to fully commit themselves to work and private roles                                      |
| Strategies | Regulating home workload | Outsourcing childcare   | Incidents / Stories that describe the situation where women outsource the childcare for their children to fulfill work related demands and high PWC levels                | Strategies | Regulating personal time | Less sleep        | Incidents / Stories that describe the situation where women cut back on their sleep to fulfill work and private roles  |
| Strategies | Regulating home workload | Self-organize childcare | Incidents / Stories that describe the situation where women organize external childcare by themselves without relying on existing nurseries etc.                          | Strategies | Regulating personal time | Stepping back     | Incidents / Stories that describe the situation when women actively stepped back from work, usually for a limited period of time, to fully focus on family, hence reducing PWC accordingly |
| Strategies | Regulating home workload | Using company benefits  | Incidents / Stories that describe the situation where women use company benefits e.g. financial support for daycare, in order to fulfil work demands including PWC levels | Strategies | Regulating personal time | Time for self     | Incidents / Stories that describe the situation where women make time for themselves to refuel in order to be able to manage both work and private roles                                   |

**Table 27 – Appendix Chapter 2**



### 8.2.5.2. Code Book “Global Work”

| Code Name<br>Level 1     | Code Name<br>Level 2         | Code Name<br>Level 3          | Description  | Code Name<br>Level 1 | Code Name<br>Level 2         | Code Name<br>Level 3 | Description  |
|--------------------------|------------------------------|-------------------------------|--|----------------------|------------------------------|----------------------|--|
| Dominant<br>Work Culture |                              |                               | Incidents / Stories that describe the hierarchical order of work cultures at TechComp  | Work<br>Conditions   | Connectivity<br>Expectations |                      | Incidents / Stories that describe the expectations of how high one's level of PWC has to be                            |
| Dominant<br>Work Culture | Headquarter-<br>Centeredness |                               | Incidents / Stories that describe the hierarchical order where headquarter culture dominates others  | Work<br>Conditions   | Connectivity<br>Expectations | Management           | Incidents / Stories that describe the managerial expectations of how high one's level of PWC has to be                 |
| Dominant<br>Work Culture | Headquarter-<br>Centeredness | Desynchronized<br>Social Life | Incidents / Stories that describe the situation where one employee subordinates his/her social life in terms of timing to the requirements of work due to not being in the dominant position | Work<br>Conditions   | Connectivity<br>Expectations | Peer Pressure        | Incidents / Stories that describe the peer expectations of how high one's level of PWC has to be                       |
| Dominant<br>Work Culture | Headquarter-<br>Centeredness | Mobility                      | Incidents / Stories that describe the situation where one employee has to travel for work due to not being in the dominant position  | Work<br>Conditions   | Connectivity<br>Expectations | Self                 | Incidents / Stories that describe the self-expectations of how high one's level of PWC has to be                       |
| Dominant<br>Work Culture | Headquarter-<br>Centeredness | Western-<br>Centeredness      | Incidents / Stories that describe the hierarchical order where Western culture (e.g. calendar) dominates others  | Work<br>Conditions   | Mobility                     |                      | Incidents / Stories that describe the degree of mobility that is expected of employees due to working in a global team |
| Work<br>Conditions       |                              |                               | All work related conditions that have to be negotiated between employee and employer   | Exclusion            |                              |                      | Incidents / Stories that describe how employees become excluded from team decisions and interna                        |
| Work<br>Conditions       | Workloads                    |                               | Incidents / Stories that describe the amount of tasks one has to complete for work   | Exclusion            | In- and Out<br>groups        |                      | Incidents / Stories that describe the situation where a dynamics of an in-group becomes visible                        |

|                          |                          |                          |  |                          |                            |                          |  |
|--------------------------|--------------------------|--------------------------|--|--------------------------|----------------------------|--------------------------|--|
| Work Conditions          | Workloads                | Local vs. Global         | Incidents / Stories that describe the situation where employees have to complete both local and global tasks without extra resources being made available                            | Exclusion                | Local vs. Global Challenge |                          | Incidents / Stories that describe the situation where team members with dual roles (global and local) become excluded                    |
| Work Conditions          | Workloads                | Info Overload            | Incidents / Stories that describe the situation where constant inflow of emails, text messages and any other work related message creates a feeling of overload and never being done | Exclusion                | Language                   |                          | Incidents / Stories that describe the situation where some team members become excluded due to language hurdles                          |
| Work Conditions          | Workloads                | 24/7 Productivity        | Incidents / Stories that describe the situation in which productivity increases due to one team member always being awake and working on team tasks                                  |                          |                            |                          |  |
| <b>Code Name Level 1</b> | <b>Code Name Level 2</b> | <b>Code Name Level 3</b> | <b>Description</b>   | <b>Code Name Level 1</b> | <b>Code Name Level 2</b>   | <b>Code Name Level 3</b> | <b>Description</b>   |
| Strategies               |                          |                          | Incidents / Stories that describe the strategies employees use to deal with expectations of high PWC and associated consequences   | Strategies               | Team work                  | Common goal              | Incidents / Stories that describe how employees rationalize their own behavior by emphasizing the common goal of their team              |
| Strategies               | Family related           |                          | Incidents / Stories that describe the strategies where employees adjust their family situation or develop family related rationales  | Strategies               | Team work                  | Cultural sensitivity     | Incidents / Stories that describe how employees try to respect cultural differences within the team by consciously reflecting upon these |
| Strategies               | Family related           | Partner alignment        | Incidents / Stories that describe the employees align with partner regarding global work related issues and PWC  | Strategies               | Team work                  | F2F Meetings             | Incidents / Stories that describe how employees schedule f2f meetings to complement PWC and technology mediated communication            |

|            |                |                       |   |            |                |                   |  |
|------------|----------------|-----------------------|---|------------|----------------|-------------------|--|
| Strategies | Family related | Quality over quantity | Incidents / Stories that describe how employees rationalize their own work hours and PWC levels with belief that quality time is more important than the quantity of time | Strategies | Team work      | Lead an example   | Incidents / Stories that describe how employees lead an example by regulating their own PWC in a certain way that they want others to follow   |
| Strategies | Personal       |                       | Incidents / Stories that describe the strategies where employees adjust their personal lives or develop personal rationales   | Strategies | Team work      | Open dialogue     | Incidents / Stories that describe how employees actively engage in open dialogue with their colleagues about their PWC levels and expectations   |
| Strategies | Personal       | Connect as Relief     | Incidents / Stories that describe how employees rationalize their own PWC with belief that high PWC is a relief   | Strategies | Team work      | Respect & Trust   | Incidents / Stories that describe how employees rationalize their own PWC levels by emphasizing the respect they have for others and their progress and the trust that they have in each other       |
| Strategies | Personal       | Disconnect            | Incidents / Stories that describe how employees decide to disconnect outside of normal work hours   | Strategies | Technology use |                   | Incidents / Stories that describe the strategies where employees use technology to regulate PWC  |
| Strategies | Personal       | Flex hours            | Incidents / Stories that describe how employees flex their work hours e.g. take a break during the day to stay on longer at night   | Strategies | Technology use | Block time        | Incidents / Stories that describe how employees block certain days or hours of the day in their calendar to discourage meeting invites at these times  |
| Strategies | Personal       | Planned connectivity  | Incidents / Stories that describe how employees plan their own PWC at set hours and days  | Strategies | Technology use | Instant Messaging | Incidents / Stories that describe how employees use instant messages to filter and help colleagues filter through the amount of emails and to alert to urgent messages that need immediate responses |
| Strategies | Personal       | Use dead times        | Incidents / Stories that describe how employees use dead times e.g. commute times to avoid having to have too high PWC  | Strategies | Technology use | BYOD              | Incidents / Stories that describe how employees utilize their own technology e.g. web cam and headset to make technology mediated communication and PWC easier and smoother                          |

|            |           |                   |   |            |                |          |  |
|------------|-----------|-------------------|---|------------|----------------|----------|--|
| Strategies | Personal  | Conscious choices | Incidents / Stories that describe how employees make conscious choices when and when not to respond to team members                 | Strategies | Technology use | Web Cams | Incidents / Stories that describe how employees use web cams to complement voice calls |
| Strategies | Team work |                   | Incidents / Stories that describe the strategies where employees adjust their team work behavior or develop team related rationales |            |                |          |  |

**Table 28 – Appendix Chapter 2**

## 8.2.6. Exemplary Interview Transcript Excerpt

Interviewee Example UK

23/03/2015

... [short introductions, explanation of research aims and process]

J: Ok, so I have been with TechComp for about 5 years, going on 6 years, and I work for a division called TechComp XXXX and at the moment I work for an XXXX team that works on building construction. I'm an accountant, so I look after the costs for building construction projects which is typically a very male dominated environment. I often get into meetings and I am the only woman there. It is quite interesting and haha. Ehm but I was, I didn't always have this role. I have always sort of had a project role but I started, I was filling in for a lady who was on maternity leave and I actually took a step back from my previous role, to take this role within TechComp and I was just basic accounting kind of stuff. And then I stayed and I am now permanent within TechComp.

I: Ok, in the past, you did not work in a project based environment but more recently with TechComp you started to do project related work.

J: Yea.

I: That's interesting because project work is always the kind of work that is associated with unconventional work hours, high demands, pressure, all that. And it may apply to your role now as well. Yea, so the first question I would ask you then is, are there a lot of situations in which you are asked by your employer or by your management to be available out of traditional work hours, do you work unconventional hours and what are the reasons behind it and is it you choosing to do so?

J: Yea, sometimes it is, there is pressure, sometimes I put the pressure on myself. But for example, you have to go where the project is, so obviously, that's part of the job then, you have to go where that is but the project I am working on at the moment is in XXXX but I am, I live in the South of the UK and XXXX is in the very north of the UK, it takes 4 hours minimum one way to get there and ehm when this project started my manager said, oh I want you in XXXX, 2-3 days a week and we now have come to a situation where it is not possible for me to be in XXXX 2-3 days a week, that's not what I signed up to and I can't do it and they said, oh, is this cause you got a family. and I said, no it is not because I got a family, it is because I am not

the breadwinner in my household, you usually, if you are going to make a big move, to move somewhere, it is the person who earns the most and as a family, you are going to move them. As a consequence of me having children I am not going to base myself somewhere else 3 days a week ehm and I think, I think that's it. It is the automatic thing, because you got a family, they don't consider that you and your husband are running this family together between the two of you, you both have to have a job and you both have to achieve these things in your job, and it is a balance, it can't be one or the other and I think, I think maybe they forget that, it is not a consequence of having children. Well, I suppose it is an indirect consequence of having children but also I don't want to be away from home for 3 days a week. That's...

I: Right, so did you, did they agree with you that it is not necessary, did they just, find a solution for you, that you could be in this project, you didn't have, that didn't require that would have to travel to XXXX all the time? Or what was the result of this all,

J: It is a little bit ongoing, so what is happening is that the structure of the project is changing and they brought now, they are now hiring to do part of the finances based out of XXXX because they think it would be better for someone to be there for the time. I still have part of a role, to consolidate everything and I don't have to be there all the time and maybe go there once a month for a meeting or if it is necessary, but I am not just there to be there. There has to be a reason to achieve something ehm, so, but there is pressure, there is pressure all the time to go and it means that if you are travelling, if you are travelling, you are going to take up some of your personal time, so I leave at 5 in the morning on one day and come home at 8 or 9 o'clock at night on the other day, because if you are travelling you are taking away time that you could work, so you are trying to fit everything in but yea, it is, it is very difficult. At the end, they funny enough hired, so they've hired someone to be based there. But I do kind of feel like they don't feel like I'm not, I'm not a big part of the project anymore, they want someone who is there, I'm not quite sure of my role within the project because of that, in this particular instance.

I: When did all of this happen, is this just a recent thing that happened?

J: Yea, it is quite recent.

I: How old are your children?

J: I got one at 10 and one is 6.5 years old.

I: So there is definitely, obviously, being away for 3 days in the week that is difficult.

J: Absolutely, my husband's role ehm, he is with clients during the day so if, it is about drop offs and pick ups, someone has to drop off and pick up the children and usually you can share this, so it is also difficult for him, if he is going to see a client and I have to say, sorry I have got to leave at 4 o'clock today, because I have to pick up the children and I arrived at half past 9 but I'm going...but you are still, I am still going to bill you for my entire day. It is a constant juggle really.

I: So, he is not with TechComp.

J: No, he is not.

I: Sounds very complicated. I wonder how...are you, in your team, right now, are you the only one who is having these issues or is this something. Are you the only women, you said there is very few women but do the men have similar problems or is it just the women, you know?

J: Yea, I think, I've, I know, I know you are looking at TechComp in particular but I have a lot of friends that work, a lot of lady friends and it seems to me that even if you earn more than your partner, so usually it comes down to who earns the most, because that is the most important person to keep the job right, even if you earn the most, have you heard of this term called the default parent?

I: It may be related to a theory called bargaining theory that has to do with ehm, you know, how power is distributed in a relationship, according to how much money one makes. Is it related to that.

J: No, no, no. So look up this term, the default parent, and ehm, and in any family when you have children, there is always one default parent, it is the one that children go to all the time for everything, just by default. And so by default so you have more pressure on you. Read this article. I read this article and thought oh my god, this is exactly what's happening. I got all the pressure, because when I come home the children always come to me. So, for example I thought always just my family, what is going on with my children, so you come home and dad can be right in the room and they are coming to me and say, does dad want...and they ask me, your father is right there, can you ask, hahaha, can you ask him directly, mom can dad do this

for me. Your father is right there, go and ask him. And it is that you got all this pressure at home and you are probably the default parent because you earn less, or because mom runs everything around the house, so, you have that shift of power all the time and the man's job becomes more important because he earns more and that is what he does.

I: So has this always been like that, that your husband was always the main breadwinner and yours was less.

J: Yea, and it does seem like you know, when you have children, you kind of plateau a bit, your career plateaus a bit and it could be around this thing around working hours because you are slightly restricted and one of you was always going to be restricted I think. Or slightly more restricted ehm, yea.

I: So why do you think it has plateaued, do you think it has because of you not being able to do meetings in the evenings or to be as mobile or..

J: Yea, it could be, TechComp, not just the department I work for, just TechComp, it does seem that TechComp, you need to be mobile, you need to move wherever the work is ehm, eh, so I, it could be because I am not as mobile as maybe other people and you asked me earlier about the other men, do the other men have problems. And, if they do, they maybe not as open about it but I have heard one or two instances where some managers said, look I can't be here for that, I want to pick up my children today. I want to see them. And it is, if you think of the difference between men and women, I have always noticed this, if a man says this, oh no I'm leaving today because I'm going to pick up the children, I'm leaving earlier because I am going to see my child at sportsday, then it is like ahh, he is a good father, what a nice guy. But if a woman says this, she's not that committed to her role. Haha. Because she is focusing on the family more than her job. That's life, I just feel like there is a slight difference in how people are viewed, do you know what I mean, it is very, yea, when a guy says, you know when this guy said look I have had enough of travelling I'm going to pick up my children today then it is like yea, ok, that is fine. But when I say it, I feel maybe it is myself thinking it, but I feel like they are not happy about my commitment to the job.

I: It is so interesting you say this because this was one of the interpretations that I had, that one of the results was that men are much more lax when it comes to managing their boundary and they call into home much more often during the day than women do even though you know women are always expected to be more like that because of family commitments and



then actually men are, and my explanation for that, obviously, I didn't have any evidence until you say this now, but for me that was due to the fact that women are much more visible when it comes to having to deal with family issues and when men do it, it is more accepted and you know, in a way, because it is not seen as their main duty whereas for women it is.

J: Yes, they are not the default parent.

I: It seems like that, yea. And how does this ehm play out in your day to day work routine? Do you have a male manager or a female manager?

J: You know, I'm, I'm not, I self manage, I do have...it is a very unusual role really, because I would say I'm not that defined by hours, because I do whatever hours I have to, but at the same time I have to pick up my children at certain hours and I will go and do these things but I'm not 9 to 5, I log on, I log off. I have just a slightly different, I have a UK manager who is female, because I'm based in the UK I legally have to have a UK manager and then I have a manager who is in the headquarters and he is sort of my manager who is supposed to define, or we agree what I should do, what my job is, what projects I should manage, he is sort of my work manager but the lady is my legal manager.

I: OK, but do you perceive a difference in how they treat you when it comes to dealing with these sorts of issues?

J: You know, they both ehm they are both very easy going as managers and you know, and as far as being flexible with my time I have absolutely no problems, nobody has ever said to me, oh, you know, you didn't log on at 8 o'clock and I'm not happy with that, there is nothing, none of this pettiness or anything. They know that I work long hours. It might not be the norm or standard hours but from that point of view there is no problem. But there is occasionally from my male boss comments that I think mhhh, if I was a man would he have said that. And there is a slight...and I think that this is just upbringing.

I: So that is the headquarter based manager. What are these like? These comments?

J: Yea, just again, he was the first one that said when I first said, look I can't go to XXXX, he said, ehm, he was speaking to a colleague, we were in a group, and he said [interviewee name] can't go to XXXX regularly because she has a family. And I was like eh, this is not quite what I ... it was just the way it was worded, you know these subtleties in the way you get treated

differently and it is sometimes hard to say and you can just, you just let it roll, because if he says something you might just seem bitter and twisted. So you just leave it. I don't know. I don't know how to get passed to be honest. But we are digressing a little bit but as far as hours go, yea, I don't feel conformed to be in any particular hours.

I: So you have a lot of trust from both of your managers that you can just you know do your work and they measure you based on what you deliver rather than how many hours you put in?

J: Absolutely, I have certain days that I like to work from home and then some days I work longer than others. Say I'm at home and it is time to pick up children and I still be logged on, my computer is still logged on but I won't be doing any work but then I might come back later and work longer hours, I think this is quite normal of people who work from home, you tend to work longer hours because you don't switch off.

I: That is true, even though the interesting thing is that a lot of managers think that they have to be very, they need to surveil their employees much more when they work from home because they are worried they won't do as much and that employees treat home workdays as a holiday.

J: Yea..

I: I've heard this story last week where one of the managers at a team meeting said, well look it is a very negative impression if you don't respond to an email, you respond to an email after 5 hours on days that you work from home and you know, I was like, he said this to the group as an example and I was looking at the group and thinking about it with an outsiders perspective, and I thought wow, there is major trust issues here. And I couldn't believe it and especially when management, when the managers themselves don't respond within a day and then you know they expect others to respond immediately, I thought that was very...there is trust issues at TechComp and it is probably department dependent or job role dependent and you don't have that as you said.

J: Yea, no, no, but I have heard of other departments where I think maybe it is department by department and case by case but I have heard of a department where maybe one or two people a manager has an issue with so therefore they just say nobody can work from home and ehh, you are right, it is a trust issue and probably it needs to be dealt with case by case. Or

level by level, because I had a team before where they are quite junior and I wouldn't want them to work from home because I would think that they need close supervision, so if you, some levels just need closer supervision, ehm, and it is better for them to be with you but other levels don't. but where we are in real estate, because you got location managers, project managers, everyone is just so mobile, you have to have some sort of trust in that they are working or travelling or something like that.

I: Right. So what about weekends for example and evenings, do you get calls or messages from work that you have to respond to on a day that you are officially not working. Does this ever happen?

J: It has happened and I used to get worked up about it and ehm now I am slightly stricter on myself and I say that's it, I won't answer on a weekend, particularly on a weekend because I don't have to. There is nothing in my role, where something is not solved on a Saturday or a Sunday, it will be critical to a business. Maybe if my role was critical, maybe. Otherwise I only in the last week or 2 weeks, I may have answered some calls or have spoken in some way between 6 and 8 o'clock but that was of my doing, because I knew I didn't by the time I got there in the morning it would have escalated into a problem and that was fine and I was home, so it is easy to do it from home.

I: So you do kind of keep track of what is going on outside of these official hours. Just in case there is an emergency and then if there is something you would attend to it, but it is not something as a rule that you are not available.

J: No, as a rule now I am trying not to, yea, and it is only by exceptions. I think in this instance, I had left the office around 5, half past 5 and I knew that there was this issue brewing. So I kept in contact, I had my phone with my emails come through and I kind of kept contact to see if something came through and I made a couple of phone calls and I sent another email. But that was it.

I: Was there something particular that made you manage this much more strictly, or was this...

J: Eh, it was, you know I went on the lean course and there was the person who was running the course was from the headquarter and he has worked on, he has done lean for many companies especially within XXXX and we were speaking as part of the problem that is email and the volume of email. And we came to a discussion where in some companies if you, the

email actually stops the server blocks everything from 6 o'clock. We spoke about when you are on holiday, your email might be blocked and the sender will receive a message, your email has not been delivered and will not be delivered until this person returns. Or it won't be delivered and we came to the conclusion that, actually if you don't answer this email what happens, is it the end of the world if you don't look at this email and don't answer it at 6 o'clock, 7 o'clock or 8 o'clock at night. And I came to the conclusion that probably no, and I'm stressing myself out, I was quite sick at Christmas, I was quite stressed and quite sick and that's why I have come to this conclusion that it is ok. It is ok for me to turn off my phone. Nothing is going to happen if you don't look at it.

I: So it was a process that you had to go through to find a strategy that works for you to deal with this.

J: Yea. And I don't mind if it is critical, if something really important, let me know to talk about it. Ehm, but otherwise the world is not gonna stop, everything will be there tomorrow morning.

I: Do you think that this decision to manage this much more strictly now has had an effect on your career prospects or is this...

J: Ehm? I don't think so, I think it is the travelling that has had an impact on my career. I think the conscious decision to maybe just switch off at 6 but be alert to something before I log off, of maybe a potential problem that is fine. But my conscious decision for not wanting to travel as much, I think that is a problem. So is there something.

I: Do you think that your current role is threatened because of that or will you be, do you think you have to become part of another team where this is more accepted, where there is less travel, or is this going to develop?

J: Ehm, I do feel. The problem is that I don't know, you know you can get yourself concerned about something that maybe isn't a concern. But I do feel like my current role within this project team is possible under threat and will be passed on to somebody else who is willing to travel to XXXX or will be based in XXXX.

I: Right. Have you discussed this with your husband, I'm sure you have. Have you found a, you know do you have a plan B what happens when you know your role is under threat and becomes ... ehm, if your role is given to someone else.

J: I suppose eh at the end of the day if my role does come under threat there is hopefully some options to talk about within the current team that I have, that I am in, or within TechComp. Ehm, but yes, I have spoken about it with my husband, and we spoke about maybe I should definitely go once a month, maybe twice a month. Yea, you know anyhow it is such a long way to go, 4-5 h there, 4-5h back. Yea. I don't know. It is a long way to go. So, you know what, I've got a person who is taking over some of the finances and he is currently based in the same place as I am but he is planning to move further up north to be, so he will be within an hour of travelling to work everyday in XXXX but at the moment he is down south with me. So we have both been invited to a meeting in XXXX on Wednesday and I sent him a message, are you planning on going? And he said to me, no, it is very difficult to him to travel to XXXX every week and you know to travel such a long time. I know it is not my imagination, I know I am not being unreasonable. But maybe at the end of the day it is, yea, I mean if you are gonna travel it is, it has to be in a family where only one of your works, because it is too difficult, too difficult.

I: Do you think it is a company culture thing that just as you said it earlier, is it really a company culture that requires you to be completely available and mobile if you want to have a career at TechComp. Is this something that you have heard from others, your own impressions, was it supported by others.

J: It is my impression based on how other people work, they must be under the same pressure and maybe some people can conform to this pressure, so but, but I can't. So therefore it is my impression based on what I can see.

I: Yea, so is TechComp not doing enough in terms of making it possible for parents to have a successful career and be a parent, do you think there is policies lacking or is it just a general attitude of management?

J: It could be a general attitude of some management. I wouldn't like to say all management. Because I don't think I have had, I haven't had horrible managers or demanding managers or you know, ehm, just this one gentleman who is disappointed that I can't go to XXXX and has therefore hired someone else to join the team. He's been subtle in his way of displaying his disappointed and solving the problem. But within this team I have had, the project manager,

the operational project manager previously his boss in XXXX, I know has phoned him at 7 o'clock at night when he is with his kids or phoned him on the weekends, told him he has to be there and there is no excuse haha, so yea, I think some managers just really have a lack of empathy for the line between your personal and private life and some things are just inappropriate. You can't, you shouldn't do that. But I wouldn't, I don't know, I think some managers could do with some training about what is appropriate and what is inappropriate.

I: Do you think that managers from the HQ are worse?

J: Yes, yes.

I: ...[Not disclosed for reasons of anonymity of informant and TechComp]

J: Yea, you know the thing is, as well, what you just said, about a woman can buy her way out if she is in a more senior position, what you've said there has just confirmed what I've said about the default parent, because you would never every say that about a man. You would never say that a man can buy his way out. And the thing is as soon as a woman gets beyond a certain level, a lot of the questions we get is how do you do it, they would never ask a man, never go to a corporate event say, Dr. Thomas how do you do it, how do you juggle your family and your, this job. They would never say that! Hahaha, and it is just assumed that the mother is the main parent. And unfortunately it is probably right. It is probably right, it is true...haha.

I: Why is it right? Is it because men are just still not willing to share equally? We have this discussion that women who think that their husband is doing great, they say oh yea, he helps me. But they shouldn't say help, it is sharing, it is equal.

J: Yea! Yes.

I: And it is not there, it is not there.

J: Yea, because by saying he helps me you are saying that I am the main parent and I'm getting help. But you are both the parent. Yea, so and I've forgotten this word, it is part of your, how we are brought up, that it is assumed and it is changing a mindset. But we talk about the management of TechComp, if we go back to that. And I have to admit I, I often question what is my future in TechComp. I see all these corporate photos of people, of events, and you know when they are out and about it is all white men. And I am like, when will this change? It should

be, who is the best person for the role of any color, any sex, is it really always the same? It can't be.

I: Yea, it is, yea, you're right. I think another issue is that women still have to deal with this greater visibility in the workplace that I mentioned earlier. And not just when it comes to dealing with family issues during the day. It is also when it just comes to just dealing with the job. There is just so much more pressure for women to deal with it all, for men it is just assumed that they are ok, they'll just do it. For women it is always a question mark. Can she do it, will she be able to deal with it all, can she handle a family and job. And just last week I had another interview with a woman who is 32 and she is now wanting to have a first child and she said that it is shocking that in her team that there is a lot of women of her age and none of them have had children so far and she wonders where this is coming from. Is this...she also said it is a taboo, you can't talk about having a child soon and family planning in general.

J: Yea and you are almost scared. I am, the one thing I have never ever done, is that, and I'm more open now but especially when I first had my children very early on. I made sure I never had a picture of my children on the desk and I never spoke about them. And this was because I didn't want to be judged in my job by the fact that I had children so I just, that's it, I never spoke about them, if I needed to speak to them I made sure it was not public not within the office environment and nobody would have known if they didn't ask.

I: So you did manage your boundaries much more strictly once the children were there.

J: Yea. Yes. Yea, that's, haha. It is a little bit more open now, because I have a colleague within the office, a few colleagues, and in fact the men as well and they all talk openly about their children, you seem, you kind of follow what the team is doing. As this lady said, she wants a family and nobody talks about it so she probably doesn't talk about it, if they are all talking about it, then you are more open to talk about it. It is funny the team we are in is such a mobile team and we all have to move about but we do all have family.

I: I wonder what about the technology side of this all, do you think that TechComp equips you with the necessary technology to deal with your job and to be able to be flexible and work from home and so on.

J: Yea, absolutely. I mean even when I was a temp, you know, I wasn't even a permanent employee, I landed at the desk and there is your mobile phone, there is your laptop, and you

can work anywhere and those things have good and bad connotations. Especially the phone, especially the phone because you are often tempted to just take the phone with you everywhere you go and never switch off. Ehm that is why I am very, no, that's it, switch off your phone, it will interrupt you the whole night, I can be sitting watching TV and I can hear it and I'm ahhhh, it is an email, I have to go see that email, so I have to turn it off, otherwise I have to see that email. Haha.

I: So you do get a lot of emails out of hours as well?

J: Yes, occasionally, yea.

I: And just the sound...

J: Yea.

I: Yea, there is research that says that this is like a Pavlovian stimulus. Have you heard of this? As soon as...a lot of people react like this as soon as they hear the noise of a new email coming in they have to check it and I'm the same, I do that too. It is hard not to do it. So for you it has just been the strategy to turn off and it works for you.

J: That's my strategy for 2015, hahaha.

I: So you started in this role you said, you've been with TechComp for 5 years but this role has been...

J: This role has been for 2 years, where I have a boss from HQ in XXXX and I have a UK boss as well, a manager, two managers. Basically.

I: So the first two years, the first year and a half you did leave your phone on in the evenings?

J: Sometimes I did, sometimes I logged off, the first role I had I would be working weekends on bank holidays all over the place because it just required it by the deadlines. Being an accountant you have a lot of month end deadlines or yearend deadlines, you have to just work whatever you have to work to get it done so I was more online than on the phone but now.



I: In that time, how did your family react to you working during bank holidays and these very unconventional situations?

J: I mean, they don't have a problem with it, it is probably very difficult if it is a weekend and your child comes and says can you play this game. And you are like sorry I'm just doing this, so basically it infringes on your time with them because you only get evenings and weekends and that means it is less of evenings and weekends. I...but I was at home, on the plus side I was at home, previously, 10 years ago, you had to be in the office. I wouldn't have even seen them. So it is kind of, it was bad but it is not as bad as it could have been because I was at home doing that work and if I needed to see them or I wanted to play with them for two minutes and come back then I could. So that's not as bad, I really don't mind juggling those sorts of things and as the children get older it is a lot easier to do that sort of thing but the travelling obviously, if you are away, you are away, you are not there.

I: So when there is a situation that you have to work from home do you have something you, do you have clear management strategies in place that you know signal to your family now you have to work and they shouldn't interrupt you or how do you deal with it? Because I can imagine that it is difficult as well.

J: I don't work during the weekend now unless I have to. Ehm, but the children are a lot more self-managing, so they know we have rules, like I have my phone, if this phone rings you do not talk or make a noise and I'm on the phone and concentrating on the phone. On a Monday I pick them up from school so there is obviously a time when they are back from school when I'm working, but I have things that they can do and I say you go off and do that and that and that and I'm working until that time. Yea, I do manage them for that but I think it would be difficult to have a whole day at home with the children. I think...Cause they would just be on electronics all day, hahaha, it is not good for them to be honest on a school day.

I: So that works when you give them something to do like watching TV or play on the computer or something.

J: Yea, you just go, you know, an hour and a half until I log off, you go and do that you go and do that. Or whatever.

I: Does your husband ever work from home?

J: Yea, he actually went through a phase when he was working from home quite a lot and you know it is the same, the same applies really.

I: But again you're the default parent, you are more, you then take over.

J: Yea, absolutely. I probably even, I manage the children a lot more than he does. So for example, if I go travelling I manage who is doing what and I just tell him that's happening then, this is what you have to do. So I'm kind of his PA, haha, whereas he would never do that for me when I was travelling, or if he was travelling, he would not go like, I made all these arrangements. This is what you have to do. It wouldn't be like that.

I: And you think this is just because he is the main breadwinner and has a bigger salary or is it just in a way just traditional gender roles.

J: I think this is how it's fallen within our family relationship, and ehm, and I suppose that's how it fits and works for us. I'm really good at organizing and making sure the children are locked up and that everything is paid for, who looks after them, picks them up and drops them off. It is actually easier if one person manages certain activities for them. So for example he manages all the football, if there is something football related that he couldn't do he would have to ask me to do it but otherwise I will assume that he's done it. Ehm, but otherwise I do it.

I: OK

J: I think this is in each family, this is what the default is in your family.

I: Yea, so for him it is a few leisure activities that he mainly manages such as football and you are more the routine person for day to day.

J: Yea, you know I pay for the school dinners and I pay for the sports things and I make sure that things are booked and everyone is happy. I'm the peacekeeper, which is the role women take, isn't it? We make sure everybody is happy.

I: The thing is, that this is all, was this your plan from the beginning that you would manage it this way or did you want it to be more evenly shared.

J: I would ideally like to have it more evenly shared. Yea, I would like to have it more evenly shared, I would like him to do a few more things around the house without me asking him. You know men don't...I don't this isn't a singular problem to me, men don't really take the initiative around the house to say, I'm going to...I'm just gonna pick up the basket of washing and put it on, they'll do it if you ask them but you have to ask them. In some ways I kind of think well, instead of me just constantly going, nag, nag, nag, I don't want to do this, I just get on and do it and put the schedule together and we all know where we stand, so I just take control of the whole thing. Yea. And I know this is a problem this a problem even in some families where the women works and the men doesn't work, he is at home, stays at home and I know the women still has to take control of aspects because they haven't quite got to grips with putting in their order.

I: I think this has to do with how we are brought up and that we are still brought up in the mindset that it is women who manage the household and men are just trained to look out for these things when they are children. I mean what do women play with, with dolls and you these things, and we learn from the earliest of ages how to do this and men...

J: I also think that women naturally have this more caring and empathy side of it, and they want to...It is maybe just how we are tuned, how we are wired that we want to take on this role of caring for people and making sure that everybody is happy whereas men may not have that correct specificity.

I: I think it may be that there is a biological side to it, but I think that the social side is much, or equally strong because basically, what do boys play and girls play with when they are little, they play with what the society asks them to play with and if boys played much more with dolls they would also develop these social skills, they would, because that is what you train but it is not socially accepted for a boy to play with a doll, so they don't do it. So they go and play with technology and they play with Legos and cars when they are little.

J: You know you are absolutely right, I remember my son he was maybe 3 years old, it was in a previous company I was working for and I would, I said to this other mom, oh my son really likes prams, you know they have a child pram. I'm thinking of buying him a pram in blue for him to push it around. And she said you can't do that, it is impossible, don't buy him one, when he goes and plays at nursery, or at his friends house where there is a girl then he can play with it there but you mustn't buy him a pram, haha.

I: See.

J: Yes!

I: Isn't that incredible, as if it is something negative you know, and it is something negative because it is female work and female work is not appreciated by society. It is so sad. It annoys me so much.

J: It does, it annoys me so much.

I: So did you buy him one?

J: Yea. The only thing I have now decided is, the only thing I can do is to teach my son to play more of a role within the household and that it is not one person's role, it is both persons' role and together you decide but mommy and daddy are not necessarily your example to go by.

I: Yea, it is difficult, it is interesting to just watch what is happening with this current generation that is now starting families. You know it is said that this generation has grown up much more egalitarian and that things will be much different now but I don't think that things are going to change because I can see it now with people in their late twenties who are having children now and they are just falling into these same gender roles again, it is not a simple thing to get out of.

J: It isn't. You know in the UK now men can have 3 months paternity leave. Did you know that?

I: I did not but in XXXX [headquarter country] [not disclosed for reasons of anonymity of TechComp] ... Do you know how it is in the UK now, is it something popular that men do?

J: You know I only recently heard about it because a colleague of mine is having a child in July, and he said that he is going to take 4 weeks. And I said oh that is fantastic, and he said yea, my manager is lucky I'm not taking the 3 months that I'm allowed to take. And I thought why don't you take the 3 months? Do you know what I mean. It is because it doesn't matter if they don't, the child will still need the mother in order to survive. Ehm, it's strange, you know, why doesn't he? Because it will you know restrict his career or what, I don't know.

I: I think we talked about women and visibility in the workplace, I think when it comes to this, men are much more visible, if a man decides he will take paternity leave for longer than the conventional 2 or 3 weeks or so then people will frown at him and will be like, oh, why is that, are you sure you want to do that? I mean for women, women have to deal with it as well but it is more accepted because it is more expected, I think it needs some time to become normal for men as well.

J: I agree, it needs some time for more men to start doing it and to take, you know a good junk of time to get to know their own child, just like the mother would and until that happens it is. It'll still be a big question, anyway.

I: I have one last question. When you had your children you were not with TechComp yet?

J: No, no.

I: Did you take a long time out after each child?

J: No I took 6 months for both of them.

I: OK, did you have any problems when coming back in terms of being, I don't know, downgraded in your position?

J: On the first one no, I was with a certain company on the first one, on the second one it was slightly different because just before I had left to go on maternity leave the company, it was a top 10 mortgage lender, and you know it was the mortgage crash in 2007 and I took maternity in 2008 so by the time I had come back the company had shrunk and my role had easily been absorbed into the remaining people so I didn't have a role to come back to but I am not sure if that was a consequence of the maternity or if that would have happened anyway by natural attrition.

I: OK.

J: So I did leave this company quite soon after I had come back from maternity and that's when I came to TechComp.

I: Yea. Well, just a final comment about this. Last week in another interview, there was another lady telling me that she took time out when she had her child and when she came back her manager had told her that, she wanted to do part time 3 days a week, and her manager had told her look, no, that's a full-time role. You have to leave and she was made redundant and that was at TechComp.

J: Ohh, oh my, in the UK?

I: Yea, shocking stories there, you know. It is sad to hear this, when you, as you said, when you look at all the corporate stuff, all the corporate material, "we are so good at all these things" but then when it comes down to management, you know, it is at the end of the day, it is your direct manager who determines what will happen and all the policies that are in place will not save you if your manager is not supporting it.

J: Absolutely and I do think, I feel that about my HQ manager.

I: Is there something you can do about it, can you talk about it with your UK manager?

J: I think I am going to, I have a one to one with her tomorrow but to be honest I get that general feeling that what HQ wants HQ gets. And if you are not fitting or conforming to what they want, well it is there way or the highway. So, for me, my conversation with my manager will be what's my next step, where am I going now, because I don't think I have a future in this role but I would like to stay with TechComp if possible.

I: Does your female manager have children?

J: Yes.

I: So she would understand, or is she one of them who buy themselves out of their responsibility.

J: I don't know how she does it. If she has a nanny or what but...and I don't know what her husband does. We've never spoken about this. I know that her children are at the same age as mine, they are in the same school year, ehm, but I don't know. I don't know. But she does, she travels every couple of weeks and it seems ok. So...

I: It is interesting that you don't talk about this.

J: I know, I know. I know. I eh, it is strange isn't it. I don't know why. I feel like it is not of my business.

I: Well she probably feels the same, but I wonder where this taboo is coming from, I'm sure that if men are amongst themselves, they probably talk about their children because there is no stigma attached to it when men talk about it.

J: Yea.

I: I think that's maybe the reason why it is a taboo, you don't want to be judged because of it. Even amongst women who are in similar situations, it is interesting that you don't talk about it.

J: I think even we talked about men having the social, I've got to remember the word, you know when you brought up this social casting, we can't forget that women are too, and sometimes women judge women out of the same hand, that's...which is very unfortunate.

I: Yea, that is true. Would it be ok for you, if I follow up with you in a few months time, to hear what has happened, just because I want to know how this is going to continue, because I find it very important to see what happens over time. It would be very interesting to see.

J: Absolutely. Absolutely. Ehm, maybe it is my imagination that I am ... maybe not, lets see, I don't know. Maybe it will all be fine.

I: So for that reason, just to find out what really happened, it would be cool if I could follow up with you.

J: I am very interested in the results and what people have to say, you must be hearing some very interesting things.

I: It is interesting but it is also so frustrating. I look at this from an outsiders perspective and as a researcher and it just shows to me that I wouldn't want to work in the corporate world because it is such a male environment and I have to say working in academia is also very male dominated but in a way you have more flexibility because you make your own schedule. You have no supervision that tells you you have to clock in and out and for that reason I have the

feeling that I would have more flexibility in academia. I have to see once the PhD is done what is gonna done but for now I am like I don't know if I want to work in the corporate world.

J: I know it is hard. It is hard. OK, good. It has been really good talking to you. Thank you very much! Quite therapeutic in a way, haha.

I: If you want to talk more you can always call me, you have my skype id. I really like to talk to women about this. Because I want to collect stories that need to get heard.



## 8.3. Appendix Chapter 4

### 8.3.1. Assumptions

1. Independence of Observation: Independence of observation is guaranteed based on the research design. Data were collected in form of a web-survey that was sent out to unique email addresses of employees. No employee received the survey twice and the data were collected cross-sectionally.
2. Linear relationship of variables to connectivity level (see analysis section figures 17-29):
  - a. Linearity was assessed using crosstabs and respective charts (due to mainly ordinal data, scatterplots were not suitable), all variables show a linear relationship except for mobile work and telework, pressure and number of children, for the first 3 variables a squared component has been added for each and number of children has been included in form of dummy variables.
3. Multicollinearity: Tested using correlations see the correlation table (see table 30) shows that there isn't except for the third space work squared variable. In addition, I also checked the collinearity statistics (VIF and Tolerance, VIF cannot be greater than 10, Tolerance not smaller than 0.1). Initial multicollinearity of the squared variables has been eliminated by centering the affected variables on the mean (see table 29).
4. Due to the large sample size, outliers have been removed that are  $\pm 4$  Standard deviations away. A total of 4 outliers has been removed.

There are no points with leverage greater than 0.2, so no point needs to be removed.

There are no Cook's Distance points above 1, so no need to remove any points.
5. Normality: The residuals of the data are normally distributed, this has been assessed using a histogram and a normal p p plot (see figures 37-38).
6. Homoscedasticity: Heteroskedasticity has been identified in the model, using a Breusch & Pagan test. This has been addressed using heteroskedasticity adjusted standard errors (Hayes & Cai, 2007). See tables 32-33.

### 8.3.2. Coefficients & Multicollinearity Statistics

| Coefficients             | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | 95,0% Confidence Interval for B |             | Correlations |         |       | Collinearity Statistics |       |
|--------------------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|--------------|---------|-------|-------------------------|-------|
|                          | B                           | Std. Error | Beta                      |        |      | Lower Bound                     | Upper Bound | Zero-order   | Partial | Part  | Tolerance               | VIF   |
| (Constant)               | 2.218                       | .059       |                           | 37.787 | .000 | 2.103                           | 2.333       |              |         |       |                         |       |
| Autonomy                 | .066                        | .009       | .041                      | 7.655  | .000 | .049                            | .083        | .232         | .057    | .038  | .862                    | 1.160 |
| Male                     | .098                        | .015       | .036                      | 6.611  | .000 | .069                            | .127        | .132         | .049    | .033  | .833                    | 1.200 |
| Middle Management        | .212                        | .016       | .073                      | 12.991 | .000 | .180                            | .244        | .247         | .096    | .065  | .801                    | 1.248 |
| Senior Management        | .329                        | .035       | .050                      | 9.523  | .000 | .261                            | .397        | .153         | .070    | .048  | .907                    | 1.102 |
| Own Company Smartphone   | .530                        | .017       | .216                      | 31.511 | .000 | .497                            | .563        | .472         | .227    | .158  | .531                    | 1.884 |
| Permission private use   | .087                        | .020       | .027                      | 4.452  | .000 | .049                            | .126        | .320         | .033    | .022  | .676                    | 1.480 |
| Infrequent collaboration | .062                        | .017       | .020                      | 3.621  | .000 | .028                            | .096        | -.002        | .027    | .018  | .794                    | 1.259 |
| Frequent collaboration   | .133                        | .017       | .047                      | 8.065  | .000 | .101                            | .166        | .080         | .060    | .040  | .723                    | 1.383 |
| Constant collaboration   | .246                        | .019       | .076                      | 12.900 | .000 | .209                            | .284        | .166         | .095    | .065  | .723                    | 1.384 |
| Audit                    | .217                        | .130       | .009                      | 1.669  | .095 | -.038                           | .472        | .017         | .012    | .008  | .896                    | 1.116 |
| Strategy                 | .303                        | .082       | .021                      | 3.693  | .000 | .142                            | .464        | .036         | .027    | .018  | .738                    | 1.354 |
| Procurement              | .009                        | .050       | .002                      | .187   | .852 | -.088                           | .106        | -.033        | .001    | .001  | .300                    | 3.331 |
| Sales                    | .202                        | .047       | .051                      | 4.331  | .000 | .110                            | .293        | .200         | .032    | .022  | .181                    | 5.534 |
| R&D                      | .018                        | .049       | .004                      | .380   | .704 | -.077                           | .114        | -.080        | .003    | .002  | .259                    | 3.864 |
| Real Estate              | .118                        | .118       | .005                      | .998   | .318 | -.113                           | .349        | .017         | .007    | .005  | .874                    | 1.144 |
| Quality Management       | -.047                       | .052       | -.008                     | -.903  | .366 | -.148                           | .055        | -.052        | -.007   | -.005 | .360                    | 2.781 |
| Project Management       | .034                        | .048       | .007                      | .701   | .483 | -.061                           | .128        | .083         | .005    | .004  | .234                    | 4.266 |
| Product Management       | .124                        | .064       | .013                      | 1.940  | .052 | -.001                           | .249        | .039         | .014    | .010  | .570                    | 1.754 |
| Marketing                | .174                        | .057       | .022                      | 3.054  | .002 | .062                            | .286        | .059         | .023    | .015  | .463                    | 2.158 |
| Internal Services        | -.159                       | .048       | -.032                     | -3.277 | .001 | -.253                           | -.064       | -.156        | -.024   | -.016 | .256                    | 3.903 |
| Legal                    | .199                        | .072       | .017                      | 2.762  | .006 | .058                            | .339        | .014         | .020    | .014  | .665                    | 1.503 |
| IT                       | .002                        | .047       | .000                      | .038   | .970 | -.091                           | .095        | -.006        | .000    | .000  | .215                    | 4.654 |
| HR                       | .121                        | .061       | .014                      | 1.995  | .046 | .002                            | .240        | .006         | .015    | .010  | .532                    | 1.879 |
| General Management       | .097                        | .059       | .012                      | 1.654  | .098 | -.018                           | .212        | .032         | .012    | .008  | .487                    | 2.051 |
| Finance                  | .081                        | .048       | .017                      | 1.695  | .090 | -.013                           | .174        | -.038        | .013    | .008  | .243                    | 4.122 |
| Health & Safety          | .078                        | .071       | .007                      | 1.096  | .273 | -.061                           | .216        | .006         | .008    | .005  | .654                    | 1.529 |
| Engineering              | -.016                       | .044       | -.005                     | -.368  | .713 | -.103                           | .071        | -.092        | -.003   | -.002 | .116                    | 8.640 |
| Customer Service         | .079                        | .046       | .020                      | 1.722  | .085 | -.011                           | .170        | .068         | .013    | .009  | .187                    | 5.361 |
| Communications           | .154                        | .076       | .012                      | 2.016  | .044 | .004                            | .304        | .009         | .015    | .010  | .703                    | 1.422 |
| US                       | .315                        | .028       | .127                      | 11.432 | .000 | .261                            | .369        | .146         | .084    | .057  | .203                    | 4.923 |
| UK                       | .240                        | .031       | .066                      | 7.813  | .000 | .180                            | .300        | -.086        | .058    | .039  | .352                    | 2.842 |
| DK                       | .255                        | .036       | .052                      | 7.116  | .000 | .184                            | .325        | -.012        | .053    | .036  | .461                    | 2.168 |
| CH                       | .151                        | .030       | .051                      | 5.100  | .000 | .093                            | .209        | -.021        | .038    | .026  | .254                    | 3.932 |

|  |       |      |       |         |       |       |       |       |       |       |      |       |
|--|-------|------|-------|---------|-------|-------|-------|-------|-------|-------|------|-------|
| IN                                       | .116  | .032 | .030  | 3.588   | .000  | .052  | .179  | -.055 | .027  | .018  | .358 | 2.796 |
| RU                                       | .240  | .048 | .030  | 5.028   | .000  | .147  | .334  | -.012 | .037  | .025  | .725 | 1.379 |
| Pressure squared (centered)              | -.103 | .005 | -.110 | -20.407 | .000  | -.113 | -.093 | -.078 | -.149 | -.102 | .866 | 1.155 |
| 1 child                                  | .069  | .015 | .025  | 4.630   | .000  | .040  | .098  | .021  | .034  | .023  | .831 | 1.203 |
| 2 children                               | .119  | .018 | .035  | 6.667   | .000  | .084  | .155  | .076  | .049  | .033  | .889 | 1.125 |
| 3 children                               | .091  | .036 | .013  | 2.559   | .011  | .021  | .161  | .053  | .019  | .013  | .947 | 1.056 |
| 4 children                               | -.006 | .065 | .000  | -.094   | .925  | -.134 | .121  | .020  | -.001 | .000  | .981 | 1.019 |
| 5 children                               | .206  | .198 | .005  | 1.040   | .299  | -.183 | .595  | .004  | .008  | .005  | .997 | 1.003 |
| 6 children                               | -.249 | .193 | -.006 | -1.291  | .197  | -.627 | .129  | -.011 | -.010 | -.006 | .996 | 1.004 |
| More than 6 children                     | -.077 | .147 | -.003 | -.525   | .599  | -.366 | .211  | -.003 | -.004 | -.003 | .995 | 1.005 |
| Pressure                                 | .441  | .007 | .366  | 61.390  | 0.000 | .426  | .455  | .484  | .414  | .307  | .702 | 1.424 |
| Telework (centered)                      | .228  | .006 | .391  | 36.429  | .000  | .216  | .240  | .356  | .261  | .182  | .217 | 4.603 |
| Telework <sup>2</sup> (centered)         | -.036 | .001 | -.289 | -28.933 | .000  | -.039 | -.034 | .096  | -.210 | -.145 | .250 | 3.999 |
| Third space work (centered)              | .109  | .008 | .188  | 14.288  | .000  | .094  | .124  | .330  | .105  | .071  | .144 | 6.921 |
| Third space work <sup>2</sup> (centered) | -.013 | .001 | -.109 | -8.888  | .000  | -.015 | -.010 | .167  | -.066 | -.044 | .167 | 5.987 |

**Table 29 – Appendix Chapter 4**

### 8.3.3. Correlations

| Pearson Correlation 1/2    | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 PWCS                     | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2 Autonomy                 | .232  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3 Male                     | .132  | .018  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4 Middle Management        | .247  | .135  | .104  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5 Senior Management        | .153  | .092  | .025  | -.101 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6 Own Company 7 Smartphone | .472  | .218  | .065  | .222  | .151  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 8 Permission private use   | .320  | .171  | .089  | .146  | .138  | .535  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 9 Infrequent collab.       | -.002 | .001  | -.003 | .009  | -.012 | .021  | .012  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 10 Frequent collab.        | .080  | .058  | .003  | .057  | .046  | .079  | .036  | -.279 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 11 Constant collab         | .166  | .099  | .000  | .081  | .070  | .083  | .066  | -.219 | -.254 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 12 Audit                   | .017  | -.004 | -.005 | .004  | .003  | .022  | .008  | .018  | .001  | .008  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 13 Strategy                | .036  | .024  | -.026 | .016  | .032  | .043  | -.007 | .003  | .027  | .022  | -.004 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 14 Procurement             | -.033 | -.007 | -.063 | -.016 | .001  | -.014 | -.031 | -.006 | .009  | .017  | -.012 | -.020 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |
| 15 Sales                   | .200  | .100  | .039  | -.004 | .008  | .145  | .140  | -.006 | -.012 | -.005 | -.017 | -.029 | -.080 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |
| 16 R&D                     | -.080 | -.009 | .036  | -.015 | -.011 | -.110 | -.068 | -.008 | .048  | .013  | -.013 | -.023 | -.061 | -.089 | 1.000 |       |       |       |       |       |       |       |       |       |       |
| 17 Real Estate             | .017  | .013  | -.015 | .022  | .011  | .015  | .015  | -.007 | -.001 | .000  | -.003 | -.005 | -.013 | -.019 | -.014 | 1.000 |       |       |       |       |       |       |       |       |       |
| 18 Quality Mngt            | -.052 | -.015 | -.028 | -.010 | .000  | -.027 | -.039 | .009  | .009  | -.029 | -.010 | -.017 | -.048 | -.069 | -.053 | -.011 | 1.000 |       |       |       |       |       |       |       |       |
| 19 Project Mngt            | .083  | .038  | .016  | .230  | -.007 | .093  | .040  | .002  | .023  | .023  | -.014 | -.024 | -.066 | -.095 | -.073 | -.015 | -.057 | 1.000 |       |       |       |       |       |       |       |
| 20 Product Mngt            | .039  | .022  | .011  | .040  | .016  | .040  | .010  | .012  | .002  | .029  | -.006 | -.011 | -.030 | -.043 | -.033 | -.007 | -.026 | -.036 | 1.000 |       |       |       |       |       |       |
| 21 Marketing               | .059  | .026  | -.010 | .010  | .029  | .022  | .011  | -.009 | .002  | .015  | -.008 | -.014 | -.037 | -.054 | -.042 | -.009 | -.032 | -.045 | -.020 | 1.000 |       |       |       |       |       |
| 22 Internal Services       | -.156 | -.094 | .044  | -.019 | -.022 | -.118 | -.074 | -.035 | -.070 | -.076 | -.013 | -.023 | -.062 | -.090 | -.069 | -.014 | -.053 | -.074 | -.034 | -.042 | 1.000 |       |       |       |       |
| 23 Legal                   | .014  | .003  | -.065 | -.009 | .032  | .037  | .014  | .020  | .009  | -.004 | -.005 | -.009 | -.024 | -.035 | -.027 | -.006 | -.021 | -.029 | -.013 | -.017 | -.027 | 1.000 |       |       |       |
| 24 IT                      | -.006 | .021  | .029  | -.039 | -.023 | -.045 | -.026 | -.031 | .056  | .124  | -.015 | -.026 | -.070 | -.102 | -.078 | -.016 | -.061 | -.084 | -.038 | -.048 | -.079 | -.031 | 1.000 |       |       |
| 25 HR                      | .006  | .021  | -.132 | -.003 | .006  | .009  | -.005 | .003  | -.022 | .005  | -.007 | -.012 | -.033 | -.047 | -.036 | -.008 | -.028 | -.039 | -.018 | -.022 | -.037 | -.014 | -.042 | 1.000 |       |
| 26 General Mngt            | .032  | .007  | -.037 | .043  | .112  | .035  | .033  | -.007 | .001  | -.001 | -.007 | -.013 | -.035 | -.051 | -.039 | -.008 | -.031 | -.042 | -.019 | -.024 | -.040 | -.016 | -.045 | -.021 | 1.000 |

Table 30 – Appendix Chapter 4

| Pearson Correlation 2/2                     | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    | 35    | 36    | 37    | 38    | 39    | 40    | 41    | 42    | 43    | 44    | 45    | 46    | 47    | 48    | 49    | 50    | 51    |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 27 Finance                                  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 28 Health & Safety                          | -.030 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 29 Engineering                              | -.139 | -.053 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 30 Customer Service                         | -.094 | -.036 | -.169 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 31 Communications                           | -.026 | -.010 | -.048 | -.032 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 32 US                                       | -.006 | -.027 | .015  | .081  | .018  | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 33 UK                                       | .018  | .017  | .137  | -.041 | -.013 | -.299 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 34 DK                                       | -.028 | .065  | .000  | -.042 | .003  | -.210 | -.101 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 35 CH                                       | -.024 | -.002 | -.131 | .030  | -.007 | -.403 | -.193 | -.136 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 36 IN                                       | .001  | -.024 | .008  | -.039 | -.019 | -.279 | -.134 | -.094 | -.180 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 37 RU                                       | .032  | -.013 | -.015 | -.022 | .017  | -.120 | -.058 | -.040 | -.078 | -.054 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 38 SA                                       | .006  | .006  | .014  | -.002 | .003  | -.077 | -.037 | -.026 | -.050 | -.035 | -.015 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 39 UAE                                      | .006  | -.005 | .028  | -.017 | .002  | -.100 | -.048 | -.034 | -.065 | -.045 | -.019 | -.012 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 40 Pressure squared (centered)              | -.022 | .011  | .023  | .041  | .000  | .013  | .043  | .002  | -.019 | -.014 | -.009 | -.003 | -.005 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |       |
| 41 One child                                | -.020 | -.003 | -.055 | .003  | -.002 | -.178 | -.074 | -.046 | .280  | .056  | .012  | -.014 | -.009 | -.027 | 1.000 |       |       |       |       |       |       |       |       |       |       |       |
| 42 Two children                             | .011  | -.001 | .023  | -.018 | -.003 | .028  | .028  | .087  | -.134 | .019  | -.011 | .036  | .036  | -.001 | -.256 | 1.000 |       |       |       |       |       |       |       |       |       |       |
| 43 Three children                           | .002  | .002  | .004  | -.008 | .000  | .053  | -.017 | .074  | -.070 | -.045 | -.017 | .076  | .040  | .015  | -.109 | -.076 | 1.000 |       |       |       |       |       |       |       |       |       |
| 44 Four children                            | -.015 | .001  | .010  | .005  | -.003 | .042  | -.006 | .001  | -.038 | -.022 | -.014 | .075  | .016  | .007  | -.058 | -.040 | -.017 | 1.000 |       |       |       |       |       |       |       |       |
| 45 Five children                            | -.001 | .014  | .003  | -.004 | -.003 | .005  | -.001 | -.008 | .002  | .001  | -.005 | -.003 | .011  | -.003 | -.019 | -.013 | -.005 | -.003 | 1.000 |       |       |       |       |       |       |       |
| 46 Six children                             | -.009 | -.003 | .002  | .001  | -.003 | .004  | -.012 | -.001 | -.003 | .011  | -.005 | .015  | -.004 | .000  | -.019 | -.013 | -.006 | -.003 | -.001 | 1.000 |       |       |       |       |       |       |
| 47 More than 6 children                     | -.011 | -.004 | .003  | -.005 | -.004 | -.019 | -.008 | -.006 | .015  | .019  | -.006 | .010  | -.005 | .000  | -.025 | -.017 | -.007 | -.004 | -.001 | -.001 | 1.000 |       |       |       |       |       |
| 48 Pressure (centered)                      | -.054 | -.003 | -.065 | .068  | -.018 | -.010 | -.156 | -.168 | .198  | .094  | -.017 | .050  | .040  | .240  | .082  | -.003 | .019  | .013  | -.001 | .007  | .005  | 1.000 |       |       |       |       |
| 49 Telework (centered)                      | -.029 | -.003 | -.094 | .072  | .008  | .132  | -.039 | -.033 | -.061 | -.026 | -.047 | .001  | .002  | -.013 | -.010 | .033  | .043  | .012  | .011  | .011  | -.003 | .198  | 1.000 |       |       |       |
| 50 Telework <sup>2</sup> (centered)         | -.033 | -.002 | -.038 | .053  | -.004 | .095  | .011  | -.048 | -.056 | -.001 | -.042 | -.005 | -.006 | .045  | -.021 | .003  | .024  | .003  | .014  | .008  | -.010 | .071  | .833  | 1.000 |       |       |
| 51 Third space work (centered)              | -.112 | -.002 | .019  | .183  | -.022 | .062  | -.002 | -.052 | -.005 | -.039 | .001  | .018  | .008  | .017  | .009  | .015  | .017  | .020  | .006  | -.006 | .008  | .230  | .222  | .081  | 1.000 |       |
| 52 Third space work <sup>2</sup> (centered) | -.076 | -.010 | .043  | .184  | -.019 | .081  | .006  | -.053 | -.033 | -.027 | -.019 | .001  | .007  | .050  | -.001 | .007  | .011  | .017  | .010  | .001  | .005  | .137  | .112  | .059  | .888  | 1.000 |

**Table 31 – Appendix Chapter 4**

### 8.3.4. Normality of Residuals

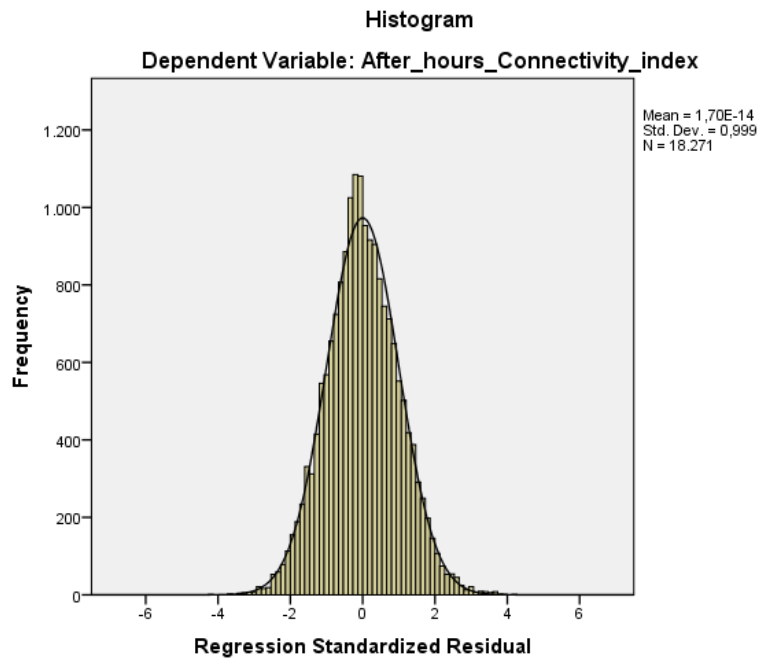


Figure 37 – Appendix Chapter 4

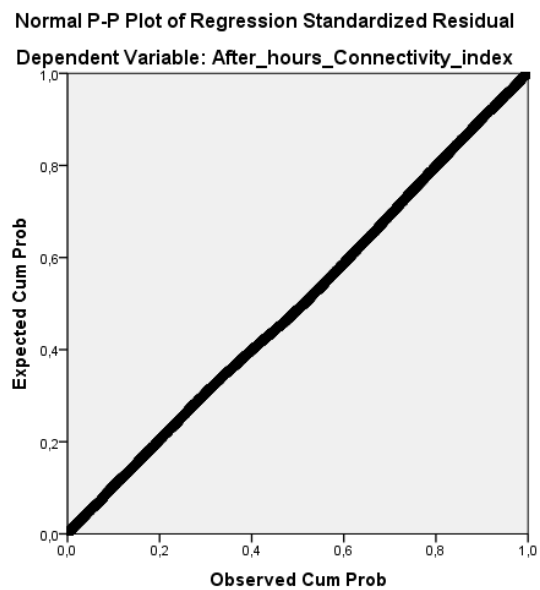


Figure 38 – Appendix Chapter 4

### 8.3.5. Homoscedasticity

| Model Summary Heteroscedasticity adjusted (HC) |          |    |          |       |
|--|----------|----|----------|-------|
| Model  | R Square | df | F        | Sig.  |
| 1  | 0.5441   | 50 | 571.2868 | 0.000 |

**Table 32 – Appendix Chapter 4**

|   | Coefficients | Std Error (HC) | t       | P> t   |
|---|--------------|----------------|---------|--------|
| Constant                                  | 2.2183       | 0.0609         | 36.4452 | 0.0000 |
| Autonomy                                  | 0.066        | 0.009          | 7.3122  | 0.0000 |
| Male                                      | 0.098        | 0.0147         | 6.6656  | 0.0000 |
| Middle Mngt                               | 0.2119       | 0.0165         | 12.8476 | 0.0000 |
| Senior Mngt                               | 0.329        | 0.033          | 9.9796  | 0.0000 |
| Own Company                               |              |                |         |        |
| Smartphone                                | 0.5303       | 0.0174         | 30.5137 | 0.0000 |
| Permission to use<br>work phone privately | 0.0872       | 0.0197         | 4.4237  | 0.0000 |
| Infrequent global<br>collaboration        | 0.0621       | 0.017          | 3.6576  | 0.0003 |
| Frequent global<br>collaboration          | 0.1333       | 0.0165         | 8.0957  | 0.0000 |
| Constant global<br>collaboration          | 0.2462       | 0.0196         | 12.5689 | 0.0000 |
| Audit                                     | 0.2172       | 0.1312         | 1.6558  | 0.0978 |
| Strategy                                  | 0.3031       | 0.0819         | 3.7018  | 0.0002 |
| Procurement                               | 0.0092       | 0.0526         | 0.1759  | 0.8604 |
| Sales                                     | 0.2017       | 0.0495         | 4.0765  | 0.0000 |
| R & D                                     | 0.0185       | 0.0516         | 0.3577  | 0.7205 |
| Real Estate                               | 0.1176       | 0.1461         | 0.8049  | 0.4209 |
| Quality Mngt                              | -0.0467      | 0.0542         | -0.8616 | 0.3889 |
| Project Mngt                              | 0.0338       | 0.0514         | 0.6569  | 0.5113 |
| Product Mngt                              | 0.124        | 0.0678         | 1.8275  | 0.0676 |
| Marketing                                 | 0.1743       | 0.0605         | 2.8825  | 0.0039 |
| Internal Services<br>(Support)            | -0.1585      | 0.0518         | -3.0583 | 0.0022 |
| Legal                                     | 0.1985       | 0.0726         | 2.7361  | 0.0062 |
| IT  | 0.0018       | 0.0515         | 0.0351  | 0.9720 |

|   |         |        |          |        |
|---|---------|--------|----------|--------|
| HR  | 0.1212  | 0.0636 | 1.9065   | 0.0566 |
| General Mngt                                  | 0.0968  | 0.0596 | 1.6236   | 0.1045 |
| Finance                                       | 0.0808  | 0.0504 | 1.6019   | 0.1092 |
| Health & Safety                               | 0.0775  | 0.0713 | 1.0869   | 0.2771 |
| Engineering                                   | -0.0163 | 0.048  | -0.3394  | 0.7343 |
| Customer Service                              | 0.0794  | 0.0498 | 1.5944   | 0.1109 |
| Communications                                | 0.1539  | 0.0744 | 2.0685   | 0.0386 |
| US  | 0.315   | 0.0246 | 12.826   | 0.0000 |
| UK  | 0.2401  | 0.0284 | 8.452    | 0.0000 |
| Denmark                                       | 0.2546  | 0.0348 | 7.3124   | 0.0000 |
| China   | 0.1508  | 0.0268 | 5.6237   | 0.0000 |
| India   | 0.1156  | 0.0309 | 3.739    | 0.0002 |
| Russia  | 0.2402  | 0.0495 | 4.8566   | 0.0000 |
| Saudi Arabia                                  | 0.2254  | 0.0638 | 3.5312   | 0.0004 |
| UAE   | 0.3289  | 0.0544 | 6.0455   | 0.0000 |
| Centered pressure                             | 0.4405  | 0.0077 | 56.9025  | 0.0000 |
| Centered pressure squared                     | -0.1027 | 0.0054 | -19.1472 | 0.0000 |
| One child                                     | 0.0691  | 0.0149 | 4.6227   | 0.0000 |
| Two children                                  | 0.1195  | 0.0184 | 6.5023   | 0.0000 |
| Three children                                | 0.0913  | 0.0349 | 2.6171   | 0.0089 |
| Four children                                 | -0.0061 | 0.0636 | -0.096   | 0.9236 |
| Five children                                 | 0.2062  | 0.2087 | 0.9881   | 0.3231 |
| Six children                                  | -0.2491 | 0.1867 | -1.3345  | 0.1821 |
| More than 6 children                          | -0.0773 | 0.1449 | -0.5332  | 0.5939 |
| Telework (centered)                           | 0.2282  | 0.0067 | 33.8342  | 0.0000 |
| Telework squared (centered)                   | -0.0364 | 0.0013 | -27.1595 | 0.0000 |
| Amount of work third space (centered)         | 0.1094  | 0.0079 | 13.854   | 0.0000 |
| Amount of work third space squared (centered) | -0.0126 | 0.0014 | -8.7236  | 0.0000 |

**Table 33 – Appendix Chapter 4**