

REMOTE CONTROL: ORGANISATIONAL CONTROL AND  
MONITORING IN DISTRIBUTED TEAMS

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# 1 ABSTRACT

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Qualitative data from interviews and diaries show that for managers in distributed teams, monitoring their team's attitudes is vital. Monitoring attitudes is theorised to be a necessary part of enacting informal controls, essential for knowledge work where formal behaviour and output controls are likely to be insufficient. This suggests an extension to Ouchi's (1977) influential Behaviour-Output framework to incorporate monitoring attitudes. Impression management and lack of physical proximity is shown to be a potential disruptor of attitude-related monitoring for managers. *Pastoral control* is then introduced to explain how managers utilise relational techniques to solicit information necessary for monitoring attitudes, and the role of context in enacting organisational control is explicated.

## 2 INTRODUCTION

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The world is smaller than ever. Individuals and communities anywhere in the world can communicate with more richness and immediacy than has been possible at any time in human history. Events that occur on one side of the world have immediate effect on the other and global politics now feel local. Organisations are also caught up in this change: collaborating with distant colleagues, people you may never meet in person, is increasingly commonplace.

In part, this is because the nature of work is becoming more virtual: many teams now use technology to collaborate via email, file sharing, and online collaboration tools. Advances in communication technology and a shift to increasingly computer-based work has created new benefits for organisations by enabling collaboration across distance. For global companies, international collaboration simplifies managing operations in overseas markets, and organisations can overcome local skills shortages by recruiting globally without incurring relocation costs. Distributed collaboration can also attract and retain employees as it allows organisations to offer employees work that provides flexibility, autonomy, and time with family (Gilson et al., 2015; Golden, 2006).

Consequently, companies increasingly use teams that collaborate across distance. In these *distributed teams*, members are separated by physical distance, rely on technology to communicate, and rarely see each other in person. The Society for Human Resource Management (SHRM) found that 46% of surveyed organisations use distributed teams (Minton-Eversole, 2012) and a recent Gallup poll reported a four-fold increase between 1995 and 2015 in telecommuting (Jones, 2015). The United States Bureau of Labor Statistics found that 24% of employees did some or all their work for their primary job at home in 2015 (Bureau of Labor Statistics, 2016) and that 29%

of wage or salaried employees could work at home in their primary job (Bureau of Labor Statistics, 2019). While not all home-based workers will work in distributed teams, an increase in the ability to work away from the office facilitates distributed work. Other numbers suggest that distributed work could become the new norm: Gilson et al. (2015) cite statistics that suggest approximately 66% of surveyed multinationals already use distributed teams and 80% believe that number will increase (Gilson et al., 2015, p. 1314). The use of distributed work is wide-spread in organisations and therefore understanding this type of work is a current concern for organisational scholars and practitioners alike (e.g. Gilson et al., 2015; Maynard et al., 2019; Raghuram et al., 2019; Schinoff et al., 2019; Watson-Manheim, 2019).

As distributed teams cross geographic, temporal, cultural, and often organisational boundaries, and rely on technology for communication, distributed teams are not equivalent to traditional, co-located teams. These teams show different development patterns, characteristics, and outcomes (Gilson et al., 2015; Webster & Staples, 2006). Distributed teams may, for example, develop less trust, be slower to develop communication norms, be less effective at some task types, and find knowledge sharing more difficult (Gilson et al., 2015; Henderson et al., 2016; Webster & Staples, 2006). Given that some outcomes for distributed teams (for example, less effective knowledge sharing) are undesirable, and assuming managers are able to influence outcomes for their teams, this suggests that managing a distributed team differs in some way from managing a co-located team. Organisations have many reasons to use distributed teams, but it is not yet clear how to manage these teams to achieve the best outcomes.

This research explores an important but under-examined (Powell et al., 2004) aspect of managing distributed teams: how managers enact organizational control when managing geographically distant staff. Organisational control is

a central concern for organisations. Indeed, control is at the heart of managing organisations. As Langfred and Rockmann (2016) summarise:

*“Organizations, by their very nature, are intended to provide some level of control and coordination. In fact, the very word “organization” implies a certain degree of structure. If an activity had no need for centralized control or coordination, there would be no need for an organization” (p. 632)*

Or, put differently, to effect organisation is to effect control of some type. Groups of individuals are unlikely to work together in perfect coordination: individuals are likely to have somewhat different goals and even when goals are shared, individuals may have different understandings of the goal or how best to achieve it. Indeed, organisations are interesting because “one finds within them an important juncture between the individual and the collectivity” (Tannenbaum, 1962, p. 237). To reap the benefits of collective action, organisations must ensure their members are working in concert towards the organisation’s goals, which requires a degree of control to coordinate members’ actions.

Within organizational control, that is: “the mechanisms that managers use to direct attention, motivate, and encourage individuals to act in ways that support the organization’s objectives” (Cardinal et al., 2017, p. 559), research has traditionally suggested an essential relationship between control and monitoring, and a dichotomy between monitoring output and monitoring behaviour. Behaviour control has traditionally relied at least in part on the ability to observe the behaviour of workers (Bernstein, 2017). In distributed teams, physical, in-person observation is no longer possible.

While geographic separation prevents straightforward observation-based monitoring and control of remote staff, managers can still use behaviour

controls such as procedures or rules (Piccoli & Ives, 2003). However, little is known about the behavioural controls that managers employ in distributed teams and, more crucially, whether managers in distributed teams must adapt or create control mechanisms to compensate for the lack of observation. The research presented here addresses this empirical gap.

To do so, this exploratory research utilises qualitative interview and diary data gathered from 34 managers and eight employees who work in distributed teams. The data is analysed to inductively develop theory grounded in the data (Gioia et al., 2012). Starting with the assumption that monitoring is an essential component of, and a necessary condition for, organisational control (e.g. Ouchi, 1977) and that monitoring is the component of control most likely to be affected by an absence of direct observation, data was collected exploring how managers monitor their teams to ensure that individuals are acting “in ways that support the organization’s objectives” (Cardinal et al., 2017, p. 559). Actions managers take to alter employees’ behaviour would be based on the information gathered via monitoring, so a change in monitoring will have implications for organisational control overall.

The research findings presented in this thesis show that distance changes how managers enact organisational control monitoring and consequently, how they enact organisational control. Monitoring behaviour shifts to primarily monitoring communication behaviour because communication is the most observable type of behaviour in distributed teams. However, behaviour monitoring was also found to be more complex than suggested in extant literature. Communication was monitored for two separate purposes: monitoring for work-related activity and monitoring for behaviour that might indicate a change in attitude. Thus, rather than understanding monitoring as falling into one of two categories, either monitoring behaviour or monitoring output, control-related monitoring can be understood as monitoring either

output, work-related behaviour or attitude-related behaviour. This finding introduces a crucial new dimension in understanding organisational control.

Linked to monitoring attitudes is a second finding that indicates managers place considerable emphasis on developing and attending to relationships with their remote staff. This research theorises that the emphasis on monitoring attitudes and the emphasis on relationships are motivated by a lack of observability. A critical difference between remote and co-located teams is the ability for managers (and peers) to use observation to check the veracity of espoused attitudes. Goffman (1971) notes that when we interact with others, to some degree we manage our own behaviour to influence the impression we will make, an effort called *impression management*. However, because we each know that others are likely to be managing their behaviour to make a specific impression, we rarely take that impression entirely at face value. Instead, we also look to see if their unguarded behaviour indicates a possible discrepancy between what they are saying and what they are really feeling. In distributed teams, there are reduced opportunities for observing unguarded behaviour, which makes it more difficult to identify when an employee might be attempting to ‘put up a good front’ when in fact a problem exists.

This difficulty in verifying that espoused attitudes match true attitudes leaves managers exposed to the risk that important information, information necessary to effectively enact organisational control, may be withheld. This in turn drives an emphasis on monitoring communication behaviour for attitude-related information as a diagnostic tool, indicating where the manager’s attention may be needed. It also encourages a greater emphasis on relationships, as relationships provide managers with access to more information about each individual and can encourage discretionary information sharing by, for example, developing a stronger personal

connection whereby individuals feel confident sharing information with their manager that they might otherwise choose to withhold.

The emphasis on relationships also highlights the importance of context when considering the role of information in organisational control. Physical proximity is an effective way to establish shared context and extant research suggests that distributed teams have reduced context information (e.g. Cramton, 2001; Gross, 2013). This reduction in context has implications for understanding organisational control mechanisms, particularly for behaviour controls where knowing more about the individual and understanding the context the action occurred within is likely to assist in interpreting the meaning of an individual's actions. Organisational control research categorises controls in different ways: as, for example, formal or informal, direct or indirect, coercive or enabling (Adler & Borys, 1996; Cardinal et al., 2017; Errichiello & Pianese, 2016). This research shows that to identify how and where controls should be used, it is also necessary to understand controls as highly context-dependent or more context-independent. As remote work is a low or reduced-context environment, the use of highly context-dependent controls may not be advisable.

Establishing deeper relationships with staff has instrumental outcomes for managers: it provides more context, encourages discretionary information sharing, and increases knowledge of each individual. It can also generate personal outcomes for managers. Establishing deeper relationships takes more time and effort and often requires the manager to connect at a personal level, sharing personal information and modelling the kind of sharing and vulnerability the manager would like to see in the relationship. Paradoxically, this can lead to managers feeling closer to staff that are physically distant, as they use relationships to 'manage' the distance between them.

The remainder of this thesis is structured as follows. In the next chapter, literature on distributed teams is introduced and definitions used in this thesis are clarified. This overview demonstrates the need for more organisation-based research on distributed teams and more research into the managerial experience of managing remote staff. The chapter then introduces extant literature on organisational control, providing definitions and theoretical conceptualisations of control that will be used throughout the thesis. This includes an examination of the role of information and context as used in the organisational control literature, which I return to in the Discussion chapter. The Literature Review concludes with a survey of extant research on organisational control in the specific context of distributed teams, which demonstrates the need for more exploratory, theory-building research such as the research presented here.

In the Methodology chapter details of the data collection and analysis are provided. The Findings chapter then introduces the results of the data analysis; presenting participant quotes to demonstrate key themes that emerged during analysis. These themes are integrated, and their relationships and significance are explained in the subsequent Discussion chapter. In the Discussion chapter, themes emerging in the Findings chapter are also connected with existing distributed team and organisational control literature, and new theoretical concepts such as *pastoral control* are introduced. In closing, the limitations, practical implications, and potential for future research are discussed before a final summary of the thesis is presented at the conclusion. Information and consent forms and research instruments (semi-structured interview schedule, diary and survey questions) are available in the appendices.

In the next chapter, I will begin by discussing extant research into distributed teams.



## 3 LITERATURE REVIEW

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### 3.1 DISTRIBUTED TEAMS

As noted in the Introduction, the increasing use of technology in workplace collaboration has reduced organisations' reliance on physical presence and proximity to accomplish work. Put simply, work can now occur anywhere, and it does: organisations show an increased tendency to use distributed teams where members collaborate across geographic distance (Gilson et al., 2015), and therefore need information on how to manage such teams. Existing research on this topic is introduced here.

#### 3.1.1 Types of Distributed Work

As the interest in distributed work has increased for organisations, so too has it increased for organisational scholars. Raghuram et al. (2019) note, however, that scholarly knowledge of distributed work has developed in several, at times disconnected, silos. In reviewing current literature on what the authors term *virtual work*, Raghuram et al. (2019) find that research has clustered into three areas: telecommuting, virtual teams, and computer-mediated work.

Raghuram et al. (2019) argue that these three research areas - telecommuting, virtual teams, and computer-mediated work – share two underlying dimensions that represent “virtuality”: the degree or type of *dispersion*; and a dependence on *technology*. However, the individual research clusters treat those two dimensions somewhat differently, resulting in distinct research emphases. Raghuram et al. (2019) suggest that telecommuting research implicitly assumes that telecommuters split their time between a central office and other locations, whereas virtual teams are assumed to be separated by geographic distance. They note that telecommuting research has tended to “primarily emphasize a division between office versus non-office contexts,

[while] virtual team researchers assume that team members work in different types of office contexts (e.g., in different countries)” (p. 316). This represents a difference in how dispersion is treated. Similarly, research differs on how temporality is treated: “In telecommuting research, temporality is conceptualized as temporal flexibility available to employees to structure their work hours. Virtual team researchers focus on temporal dispersion between team members, which refers to time zone differences among team members” (pp. 317-318). Telecommuting research assumes shared location and temporal flexibility, whereas virtual team research assumes geographic separation and inflexible time zones. For computer-mediated work (CMW) research, the emphasis rests with the technology: “Much of the research in the CMW domain is theoretical and focuses on the technological context (features of the technology), while downplaying the organizational context” (Raghuram et al., 2019, p. 317).

This thesis draws on work from all three research areas but primarily relies on research in the virtual team domain and, in keeping with this literature, participants’ distributed teams included members who work at a geographic distance and often across time zones. The difference between telecommuting and geographically distributed work is particularly relevant when considering organisational control for several reasons. First, as telecommuters work in the office as well as other locations, managers of telecommuters can fall back on traditional, observation-based styles of management while the telecommuter is in the office. Managers can also recall the worker to the office if problems occur (Felstead et al., 2003). Because these alternatives are not available with geographically distributed staff, managers of distributed teams may experience a greater need to adapt how they enact organisational control. Second, telecommuters can defer anything that proves difficult to do remotely and instead deal with it when they get into the office, so problems caused by working remotely may not be as apparent. Lastly, with full-time remote

workers, it may be significantly more difficult or costly to induct them into ‘office culture’ before they begin to work remotely; a tactic used when managing telecommuters (Felstead et al., 2003). These factors all suggest that use of geographically distributed teams will encourage more adaptation than telecommuting, and therefore constitute a better site for researching organisational control in distributed work.

### 3.1.2 Definitions

Given the complexity of research occurring in different areas, with different research traditions (Raghuram et al., 2019), and different definitions (Gilson et al., 2015), any research into distributed work benefits from clarity about the intended meaning of the terms used.

As mentioned earlier, this research draws primarily on extant research in the domain that Raghuram et al. (2019) term *virtual teams*. Raghuram et al. (2019) conclude there is “considerable conceptual overlap” (p. 312), in research on virtual teams, distributed work, and distributed teams and so treat research in these areas as a single cluster they call ‘virtual teams’. In this research I have opted for the term *distributed teams* rather than virtual teams. Watson-Manheim, Chudoba, and Crowston (2002) point out that while the term *virtual team* has perhaps the longest lineage in research, the term ‘virtual’ is now overloaded and unclear, as it “has been used to identify a variety of emergent work forms that differ from traditional work on numerous dimensions, such as: the location of the workers; where and how work is accomplished; and the basis for relationships between workers and organizations and between organizations” (p. 192). Because the term *virtual team* can refer to temporary project teams that cross organisational but not geographic boundaries, long-term teams separated by geographic distance, or even short-term or contingent employment relationships (Watson-Manheim et al., 2002), the term *virtual team* can create confusion unless further specified. As such, I use the term *distributed team* rather than *virtual team*.

My research refers to individuals as *remote* when they work at a geographic distance from their manager (and often from their teammates), and to teams as *distributed* when the team includes at least one member who is geographically separated from their team and their manager. I will sometimes refer to *remote work* or *distributed work* when discussing the context of conducting work via technology mediation and across geographic distance. These two terms should be treated as interchangeable.

Furthermore, while this thesis uses the term *distributed team*, it draws on existing research on virtual teams. When referring to work from the virtual team literature, I will use the authors' original term and so will occasionally refer to *virtual teams* in relation to that literature. Unless specified otherwise, this should be taken to be interchangeable with the term *distributed team* in this context.

Defining individuals as *remote* when they work at a geographic distance to managers is similar to the definition used in Barsness et al. (2005), where *remote work* is defined as "the proportion of time a respondent spent working in a different location than his or her supervisor" (p. 407). They argue the proportion of time spent in the same physical location represents "the supervisor's ability to directly observe the subordinate's activities and performance" (p. 408), thus the relevance of this definition to organisational control research. While Barsness et al. (2005) studied work arrangements that Raghuram et al. (2019) would term telecommuting, where employee and supervisors are sometimes co-located, here I am interested in situations where such co-location is rare.

Working remotely means that neither the manager nor employee can rely on in-person interactions. Geographic distance enforces infrequent in-person interaction, and requires the use of technology to communicate, so most interactions between the employee and their manager are technology-

mediated. Technology mediated communication and time zone differences mean that distributed teams often rely on *asynchronous communication*, where communication can encompass delays in receiving and responding to messages, and does not require copresence (for example, written communication is asynchronous, as compared to a telephone call which is synchronous).

While the terms *remote work* and *distributed teams* do not capture the full complexity of configurations that distributed teams can embody, they invoke the key elements of ‘virtuality’: geographic distance and reliance on technology.

### 3.1.3 Virtuality

Research into distributed work is relatively recent and definitions are still to be agreed upon. It is difficult to say precisely what qualifies as a distributed team because distributed or virtual work has rarely been defined or operationalised the same way. Gilson et al. (2015) note that while there is still little consensus on what virtuality is, geographic distance and reliance on technology are the two most consistently used dimensions. Earlier researchers have tended to treat ‘virtuality’ as a binary categorisation: teams were ‘virtual’ or not. Now, however, most organisational teams use technology to communicate to some degree and geographic dispersion can be anything from being on a different floor in the same building to working on different continents. For example, research shows that daily interaction and informal communication tends to drop off beyond distances of just 30 metres (Kiesler & Cummings, 2002; Kraut, Egidio, & Galegher, 1988). As both distance and technology use can occur in virtual teams and traditional, co-located teams, it makes more sense to treat ‘virtuality’ as a continuum rather than a category (Gibbs, Sivunen, & Boyraz, 2017). Instead of saying ‘this team is virtual whereas that team is co-located’, it makes more sense to say, ‘this team is

more virtual than that team'. Therefore, definitions of what qualifies as a 'virtual team' are shifting.

Supporting this, Gibson et al. (2014) examined recent research for definitions and operationalisations of virtuality. While most definitions of virtuality were found to include multiple dimensions, the number and type of dimensions varied (and therefore, so did the definition). The authors found the operationalisation of virtuality was also varied: although 97.5% of papers surveyed used multiple dimension to define or conceptualise virtuality, only 11.2% operationalised virtuality using more than one dimension (Gibson et al., 2014). These differences in definition and operationalisation increase the difficulty in synthesising existing research in a meaningful way. More work is needed to clarify these definitional and operationalisation issues in empirical research. Gilson et al. (2015) identify this problem as one of ten top research opportunities in virtual teams.

#### 3.1.4 Previous Virtual Team Literature

When considering virtual teams, the first question that needs to be addressed is: are virtual teams different from traditional face-to-face teams? Should they be studied separately, or can we simply apply what we know about traditional teams? There is considerable evidence that virtual teams do differ from traditional teams. For example, virtual teams may take longer to develop trust and it may develop differently (Jarvenpaa & Leidner, 1999; Mitchell & Ziguers, 2009). Virtual teams may perform better or worse than traditional teams depending on the task and context (Gilson et al., 2015; Pinsonneault & Caya, 2005), may be less effective in knowledge sharing (Henderson et al., 2016; Kotlarsky & Oshri, 2005), less effective in developing shared understanding or common ground (Cramton, 2016; Hinds & Weisband, 2003), and communication norms and performance may develop at different rates compared to traditional teams (Gilson et al., 2015; Henderson et al., 2016; Jarvenpaa & Leidner, 1999).

Webster and Staples (2006) review research comparing virtual teams to traditional, face-to-face teams. The authors develop nine propositions for differences between traditional teams and virtual teams. They suggest that the type of team (virtual versus traditional) alters the relationship between group outcomes or processes and the following features: observable diversity, team duration, task type, task routineness, communication media, training, leader behaviour modelling, and transformational leadership.

### 3.1.5 Inconsistent Research Designs

However, understanding the difference between distributed and traditional teams is not entirely straight-forward because contradictory evidence exists for many findings. These different results may be partly explained by differences in research design. Purvanova (2014) reviews literature on virtual teams, comparing experimental literature that uses controlled laboratory experiments with field studies that are organisation-based. By comparing experimental studies to field studies, she shows that experimental findings for virtual teams are typically negative, saying: “the experimental literature provides little reason to be positive about virtual teams. This literature shows that virtual teams perform worse, reach less accurate decisions, are less efficient, communicate less, share less knowledge, take longer to complete tasks, are less likely to agree, and are less satisfied” (p. 10). In contrast, field studies of virtual teams show positive performance outcomes for organisations and positive psychosocial outcomes for team members (though both sets of studies agree that trust outcomes are lower for virtual teams).

Purvanova further examines experimental and field studies to determine if methodological differences contribute to conflicting research findings. She compares experimental and field studies on four characteristics: type of participants, type of task undertaken, project length, and communication media. Overall, she finds significant differences between the design of

experimental studies and typical teams found in organisations. She summarises:

*In brief, the typical actual virtual team is comprised of 12 to 13 highly trained and skilled professionals who interact via asynchronous technologies as they work on complex business or engineering problems for an average of 1 to 2 years. In contrast, the typical experimental study uses student participants grouped in three- to four-member teams who communicate via synchronous technology in order to complete an unrealistic or inconsequential task in about 1 hr. (Purvanova, 2014, p. 22)*

Purvanova (2014) concludes that experimental research into virtual teams has largely failed to replicate organisational contexts. Therefore, generalisation from experimental research to organisational contexts should be approached with caution.

Gibbs et al. (2017) reinforce this conclusion. They examine three areas where virtual team findings “seem to be especially conditioned” by research design and team type (virtual or traditional): cultural composition, technology use, and leadership (Gibbs et al., 2017, p. 592). They find that student teams are more likely to show negative outcomes from cultural diversity and subgroup formation compared to organisational teams. They note that student teams often “lack a common history of working together or with the tools provided” (p. 598), which may contribute to the different outcomes from both cultural diversity and technology use compared to organisational samples. Regarding technology use, they note that differences in the technology used between studies – for example, “voice-based versus text-based, asynchronous versus synchronous, single media versus multiple media” – are often confounded



with differences in team type – “student versus organizational, project-based versus functional, and short-term versus long-term” (p. 597) making it difficult to make comparisons or synthesise across studies.

Furthermore, looking at leadership, Gibbs et al. (2017) note that in general for student samples “there is no formally designated leader or larger organizational structure, students are peers and have expectations to work in an egalitarian fashion, and team members are randomly assigned and have no pre-existing relationships with one another” (p. 599). This is reflected in their comparison of findings: they find research using student samples typically highlights emergent leadership whereas research using organisation-based samples typically highlights the importance of formal, vertical leadership styles and considers a wider range of leadership and organisational factors including planning, reward systems and career development. Gibbs et al.’s findings underscore the importance of organisation-based research, such as the research in this thesis, when considering organisational control in distributed teams.

Gibbs et al. (2017) note that while several reviews of the virtual team literature exist (e.g. Gilson et al., 2015; Hertel et al., 2005; Martins et al., 2004), these reviews tend to take for granted that findings will generalise across experimental and field studies, student and organisational samples, task type, short or long-term teams, and varying technologies. If this is not in fact a valid assumption, then current summaries of the state of knowledge for virtual teams may be misleading, highlighting the need for further studies into distributed work, such as the research conducted here.

Furthermore, most research into distributed work explores the effects of geographic distance on employees, often in terms of job performance or satisfaction, or the effect on the overall team (Raghuram et al., 2019). In contrast, relatively few studies explore the effects of distributed work on

managers, particularly how managers fulfill the unique requirements of their roles. This thesis contributes to our understanding of the managerial perspective.

### 3.1.6 The Role of Physical Proximity

One critical difference between distributed teams and co-located teams is a lack of physical proximity and a consequent need to rely on technology. Researchers often fall into one of two camps: either taking the perspective that the body is necessary for truly effective communication or that the body is not necessary and can be replaced (or perhaps superseded) by sufficiently advanced technology (Vidolov & Vidolov, 2019). To some degree, a willingness to use distributed teams at all implies a belief that technology can take the place of the body as a communication channel. That may be one reason why distributed teamwork appears to be associated with technology-oriented industries. This more technology-optimistic perspective suggests that the problem is simply that we have not developed the right technology yet.

The more pessimistic (from the point of view of distributed teams) perspective suggests that the body or physical proximity is necessary to truly connect with other human beings (e.g. Olson & Olson, 2000). For example, we can communicate via a letter but it lacks something compared to speaking in person. Body and proximity are closely related concepts. ‘Proximity’ has most commonly referred to physical proximity (e.g. Kiesler & Cummings, 2002; for alternate conceptualisations of proximity see for example Boschma, 2005)); in human relations that refers to the physical nearness of two people, two bodies. And when one considers the importance of the body in communication, it is the physically present and proximate body that is considered, not the body in and of itself but the body in relation to those with which it communicates.

The body is naturally important for communication. We are highly skilled at communicating through speech, body language, proximity, timing of actions and words: “The body emits information (intentionally and involuntarily; consciously and unconsciously; and verbally and nonverbally)” (Schultze, 2010, p. 436). As Biocca (1997) points out, the body is “the primordial communication medium” (p. 13). Our senses, our eyes, ears, etc, allow us to receive communication, our bodies allow us to express communication. Arguably, our body is also fundamental to interpreting the world, including communication (Schultze, 2010):

*“...the body as represented in the brain, may constitute the indispensable frame of reference for the neural processes that we experience as the mind; that our very organism rather than some absolute experiential reality is used as the ground of reference for the constructions we make of the world around us and for the construction of the ever-present sense of subjectivity that is part and parcel of our experiences...” (Damasio, 1994, cited in Biocca, 1997).*

Thus, our body provides the frame of reference for the understanding we build of our experiences in the world, including how we interpret communication with others. So central is the body to communication that many theories explaining the effect of technology mediation on communication subscribe to “the same metatheory that the social effects of communication technology are caused by the disembodiment of interpersonal communication” (Tanis and Postmes, 2007, cited in Schultze, 2010, p. 436).

Taking a phenomenological perspective, Feenberg (2003) argues that disembodiment does not tell the full story, however. He argues that as well as physical embodiment, we experience an “extended body” through the use of objects or technologies. Through the use of a cane, a blind man senses and

interprets the world around him. Others know that he is blind because they see he uses a cane, and he knows others are aware of his blindness for the same reason (Feenberg, 2003). Feenberg says:

*“Sartre notes that our objectivity before the gaze of the other extends beyond our skin out into the world of things by which our presence is signified. We are objects of the one from whom we are hiding in the cracking of a branch underfoot. Our body extends to the glow of the cigarette that gives our presence away, or, to give a contemporary example, the ringing of the cell phone that embarrasses us in the middle of a lecture. This is the extended body in its simplest form.*

*On the Internet we experience our self as exposed to the gaze just as surely as the hiding subjects in Sartre's examples. Like them our physical body is invisible. But also, like them, our presence is signalled and our objectivity established through signs. In this case the signs are intentional and complex and consist in written messages” (paragraphs 18-19, Feenberg, 2003).*

Thus, by this reasoning, our awareness of others perceiving us, and our sense of self, can extend beyond our physical body in simple ways (the cigarette example) or complex ways, like online communication. As Feenberg notes, “disembodiment does not adequately describe online self-presentation” (paragraph 14, 2003). Thus, while the body is our first and most important communication tool, even without the body we are still present in online communication in a meaningful way.

If we assume that in-person communication is the most effective way to communicate, that communication is crucial, and that distributed teams lack

in-person contact, the rational consequence is that virtual teams should be less effective than co-located teams. This does not appear to consistently be the case; as Purvanova (2014) and Gibbs et al. (2017) demonstrate, apparent shortfalls in distributed teams' effectiveness may be conditioned by research design rather than reflecting actual outcomes of distributed teams. Therefore, it may be advisable to adopt a middle ground, acknowledging the unique contribution that the body and physical proximity make to communication but without overlooking how effectively we can adapt to technology-mediated interactions. I will return to physical proximity and its contribution to communication in the Findings and Discussion chapters.

### 3.1.7 Conclusions

Organisations are adapting to the availability of new ways, and places, of working and as such embracing the use of distributed teams. Initial research suggests that distributed work has outcomes for teams and consequently, for organisations, that differ from those of traditional co-located teams. Furthermore, the variety of definitions, operationalisations, research designs, and conflicting findings in distributed work research reveals the relative immaturity of the research area. As a result, more research is needed overall and specifically, more research is needed in organisational settings. As much of the research to date has focused on how working remotely alters team processes and the effect of working remotely on team members, more research is particularly warranted to understand how working remotely may alter managerial processes. The research presented here begins to address these gaps.

## 3.2 ORGANISATIONAL CONTROL

### 3.2.1 Overview

Organisational control is considered a fundamental function of management (Sitkin et al., 2020) and a fundamental component of organisational life.

*“In formal terms, control corresponds to mechanisms that managers use to direct attention, motivate, and encourage individuals to act in ways that support the organization’s objectives” (Cardinal et al., 2017, p. 559).*

Cardinal et al.’s definition implies that the controller is “taking some action in order to regulate or adjust the behavior of the controllee” (Kirsch, 1996, p. 1).

This definition highlights several important facets of organisational control: control is deliberate; control seeks to influence the actions of individuals within the organisation; and control is used in service of the organisation’s objectives. While the execution of control is not limited to managers, this definition limits the use of *organisational* control to managers. Cardinal et al. (2017) argue that, “Control as a phenomenon studied by organizational control scholars is manager-centric — it is top down in orientation rather than more peer oriented” (Cardinal et al., 2017, p. 60). This definition does not suggest that *control* within organisations is only available to or only effected by managers; however, it does focus attention on the control that managers wield. This is an important and useful restriction because within a hierarchical organisation, managerial control has a distinctive feature that other forms of control, for example peer control or self-control, do not: it is legitimated and supported by the organisational authority that comes with the manager’s role.

I will highlight a further defining feature of this approach to organisational control: control seeks to influence *individuals* within the organisation. This is

different to the control that managers may have over the budget, supply chain, vendors, or other stakeholders external to the organisation. These are important parts of managerial work and undoubtedly under a manager's influence, but these are the focus of research streams such as operations or supply chain management. They become the focus of organisational control scholars only when their execution also influences the actions of individuals within the organisation.

This distinction may seem superfluous but becomes important when we consider the role of information and monitoring in control processes. Without a clear emphasis on individuals, it is too easy to simplify control and consider it in a more *cybernetic* sense, where control is considered "a homeostatic machine for regulating itself" (Beer (1964), quoted in Ansari, 1977, p. 102) with objective information inputs, predictable adjustments, and deterministic feedback loops. Individuals tend to be more complex and difficult to predict than true cybernetic systems. Merchant (1988) argues that some researchers define control relatively narrowly, focussing on cybernetic-type processes where the emphasis is on measurement and feedback. For example, Long and Sitkin (2018) provide a reward and sanction oriented definition of control: "Controls are generally defined as the mechanisms used by individuals and organizations to specify, measure, monitor, and evaluate others' work in ways that direct them toward the achievement of desired objectives" (Long & Sitkin, 2018, p. 725). Other researchers, Merchant argues, use the concept of control "in a broader, behavioral sense to include everything that helps ensure that the people in the organization are acting so as to implement properly the strategy that has been agreed upon" (p. 40). This research takes the broader, behavioural view of control, per Cardinal et al.'s definition given above.

### 3.2.2 Control Definitions

Cardinal et al. (2010) further separate and define the components of organisational control as follows. *Control mechanisms* are the individual

instruments used to implement control - for example rules, output standards, or norms. *Control systems* are configurations of control mechanisms. As Cardinal et al. (2017) note in a recent review, Ouchi's (1979, 1980) work has been highly influential in how control systems are conceived in the literature. Ouchi describes three control systems: *market control systems* that rely on internal pricing mechanisms; *bureaucratic control systems* that rely on rules, legitimate authority, and monitoring; and *clan control systems* that rely on socialisation which "effectively eliminates goal incongruence between individuals" (Ouchi, 1979, p. 833) via shared norms and values. Lastly, Cardinal et al. (2010) define *control targets*. Control targets are the "specific elements of organizational transformation processes (i.e., inputs, behaviors, or outputs) to which control mechanisms are intended to be applied" (p. 58). Cardinal et al. (2010) define three broad target categories as follows:

*"Managers select input targets ('input control') to direct how material and human resource elements of their production processes are qualified, chosen, and prepared ... Managers choose behavior targets (referred to as 'behavior control' or 'process control') - such as process rules and behavioral norms - when they want to ensure that individuals perform actions in a specific manner. Finally, managers employ output targets ('output control') - such as profits, customer satisfaction levels, and production volumes and schedules - to align output quantity/quality with specific production standards" (2010, p. 59).*

Extant control literature does not use these definitions universally but understanding control as made up of mechanisms that can be combined into systems and categorised by the part of the production process they target provides a useful framework for discussing the different components of control.



### 3.2.3 Formal and Informal Control Mechanisms

Control mechanisms, the individual instruments of control, can be further understood as *formal* or *informal* mechanisms (Cardinal et al., 2017; Kirsch, 1997). The body of research on informal control is still relatively small (Cardinal et al., 2017; Long & Sitkin, 2018; Sitkin et al., 2020). Within this research, there have been two main ways of defining informal control. Following Kirsch (1997), some researchers have argued that informal controls differ from formal control because “they are based on social or people strategies” (Kirsch, 1997, p. 3). In this stream of research, informal control is categorised as either being clan control (following Ouchi (1979, 1980)) or self-control. Self-control examines how individual objectives and standards lead employees to control their own actions. Clan control, on the other hand, relies on selection and socialisation to ensure that individuals within the organisation share values and beliefs central to the organisation, and adopt the organisation’s goals as their own (Ouchi, 1979, 1980). As other forms of control in Ouchi’s frameworks rely on being able to specify either appropriate behaviours or agreed-upon outputs, clan control is theorised to be an appropriate form of control when behaviour and output controls are difficult to define.

Other researchers have categorised informal control based not on where the control comes from (above or the group, in the case of clan control, or the self), but instead on the form of the control mechanism itself. These researchers differentiate based on whether the control is explicit and codified, or ‘unwritten’. Cardinal et al. (2004) define formal control mechanisms as “officially sanctioned (usually codified) institutional mechanisms, such as written rules, standard operating systems, and procedural directives—visible, objective forms of control” (p. 414). They define informal control mechanisms as comprised of “unwritten, unofficial values, norms, shared values, and beliefs that guide employee actions and behavior - less objective,

uncodified forms of control” (Cardinal et al., 2004, p. 414). Using this categorisation, it becomes possible to conceptualise formal and informal behaviour control, formal and informal output control, and formal or informal input control (Cardinal et al., 2017). As Kreutzer et al. (2016, p. 237) observe, informal control mechanisms may not be codified but they are still deliberate attempts to exert influence.

However, it should be acknowledged that some authors (e.g. Long & Sitkin, 2018; Sitkin et al., 2020) argue the current control literature exhibits both false differentiation and false consensus in how these conceptual terms are used. Long and Sitkin (2018) offer informal control as an example of false differentiation, where different terms are used to describe the same concept, arguing that:

*One example of false differentiation is displayed in how scholars have used many different labels such as “social controls” (Inkpen & Currall, 2004), “clan controls” (Dekker, 2004), “relational governance mechanisms” (Cao & Lumineau, 2015), and even “trust control” (Bradach & Eccles, 1989) to describe how individuals are directed by “informal controls” through agreements about values, norms, and goals (Ouchi, 1980). (Long & Sitkin, 2018, p. 729)*

Furthermore, within critical management studies, informal types of control have been theorised under terms such as *social*, *normative*, *neo-normative*, and *concertive* control (Barker, 1993; Fleming, 2005; Fleming & Sturdy, 2009; Kärreman & Alvesson, 2004; Kunda, 2006). With an emphasis on altering employee emotions and values via socialisation and organisational culture (Garrety, 2008), these often overlap with Ouchi’s (1980) clan control (Kärreman & Alvesson, 2004; Long & Sitkin, 2018). Typically, the critical

management literature focuses on the power effects of these types of control, whereas traditional control literature focuses on understanding control mechanisms and the outcomes for productivity. At the risk of minimising the complex and interesting work in the critical literature on control, in subsequent sections I will generally refer to that body of literature under the term *normative control*.

Within this research, I will rely on Cardinal et al.'s categorisation, where formal and informal controls are differentiated based on explicitness and visibility of the control mechanism (Cardinal et al., 2017; Cardinal et al., 2004). It should also be noted that while some categorisations of informal control equate it with peer control (typically those that consider informal control and clan control to be largely equivalent), here informal control refers to the non-formalised controls enacted by managers. To date, organisational control research has tended to focus on formal controls with Cardinal et al. (2017) arguing that formal control has dominated empirical research to date, and calling for more emphasis on the role and nature of informal controls (Cardinal et al., 2017; Sitkin et al., 2020).

#### 3.2.4 Global and Situational Control

As outlined above, organisational control as traditionally conceptualised is often “control without consideration of individuals” (Chauvet, 2012, p. 50) – where there is an emphasis on the systems and the mechanics of control. As such, conceptualisations of how control works tend to be based on assumptions of universal human traits that can be used as levers to influence behaviour: the assumption of action driven by self-interest, of common needs and wants that can be used to motivate action, of predictable responses to social pressure. Control based on the existence and strength of these common traits works to the degree that these assumptions hold true: that is, they work for most people, most of the time. However, more fine-grained, more

effective control of individuals requires more knowledge of the individuals in question.

Furthermore, much control research focuses on identifying and understanding broad and structural control. Organisational control is often conceived of as a kind of ‘nested doll’: control targets are influenced by control mechanisms; control mechanisms are aggregated into an organisation’s control system (and control systems can be organised into types). While these descriptors are useful, this view tacitly assumes that controls are set up once at the top of the organisation and enacted again at all levels of the organisation. However, this may not be a useful or accurate simplification.

Organisations do tend to have controls that provide broad guidance over long periods of time: rules and procedures, pay scales and job descriptions, understandings about who can work from home and who cannot, how to go about hiring, areas of responsibility and authority. These are often formal, codified, negotiated. They tend to overlap with the organisational structure and apply broadly in an organisation. As such, hopefully they offer a degree of objectivity, consistency, and predictability. Stanko and Beckman (2014) call these *global controls* and suggest that:

*“Global controls are more abstract and general constraints that serve to limit or shape all behavior, and may include bureaucratic, normative, or other types of control. For example, global control efforts might include rules stating that individuals must punch in on a time card when they arrive at and leave work, or socialization that instills work-appropriate norms about how many hours an individual should work a week” (p. 714).*

As such, these controls are unlikely to change quickly. Changing rules about work behaviour, role descriptions, or expectations for how roles interact is

often highly disruptive to the people affected and requires a great deal of communication for the change to occur smoothly. As such, these global controls tend to be ‘steady-state’ controls that operate at a general level and may persist for long periods of time. They provide continuity for sense-making and decision-making within the organisation. They are like the guardrails that define the edge of the road the organisation is travelling. They define what is inside and outside the bounds of acceptability. This has been called systemic control (Orlikowski, 1991) or global control (Stanko & Beckman, 2014).

However, much control is enacted in small, day-to-day interactions. Stanko and Beckman (2014), citing Ocasio and Wohlgezogen (2010), differentiate between global controls and “situational controls—namely, those organizational efforts designed to capture attention, and thus to shape behavior, in the moment or in a particular context” (Stanko & Beckman, 2014, p. 713). Situational controls are “guided by the momentary and local pressures of the situation - resulting from the particular, temporal, and spatial circumstances” (Ocasio & Wohlgezogen, 2010 cited in Stanko & Beckman, 2014, p. 714).

*Importantly, situational control implies that control is necessarily occurring at different levels (organization, unit, work group, and supervisor) within the organization, because different levels are uniquely positioned to observe and manage different situations (Stanko & Beckman, 2014, p. 714)*

Much organisational control literature focuses on global controls with less consideration given to how managers enact control situationally. However, a variety of circumstances and decisions occur day-to-day where systemic, steady-state controls cannot help, because to do so would require specifying

controls to cover every situation that might arise. Because global controls are designed to be general enough to persist over long periods of time, simply monitoring for instances of the rules being broken and correcting those instances would not ensure every individual in the organisation was working effectively towards organisational goals. Instead, a great deal of control is enacted through day-to-day decisions and actions, particularly those of actors, like managers, who have authority within the organisation. This is a process of monitoring local organisational activity and asking not just “have the rules been broken?” but “are we working towards the organisation’s goals as effectively as possible?” As such, this day-to-day control is likely to entail small course corrections. These control decisions tend to be more localised and contextual. For example, while the organisation may have specified a 24-hour response time requirement for customer complaints, a manager might decide that because her team deals exclusively with high value customers, the team should endeavour to respond more quickly and in a more personalised manner. She may monitor the response time her team provides and if a member is slow to respond, she may provide feedback that a faster response time is better, even though the slow response is within the organisational rules.

Furthermore, these small, localised control enactments may adapt global controls to accommodate individual circumstances. If a team member has taken on an unusually large task, he may not be able to meet the usual metrics that his job description calls for. However, as the manager has asked him to take on the extra temporary work, she is likely to make some dispensation for his failing to meet the required output metric while he works on the extra task he has been assigned. While these small adjustments may be too varied, too numerous, and too contextual to categorise into control mechanisms, they are the building blocks that create the ultimate effects of control. For the most senior managers in an organisation, their control efforts may be associated

with designing the organisation's systemic, steady-state controls. For a line manager, they may have very little influence over the steady-state, global controls and more of their control enactment will be focused on situational control of their direct reports as a team and as individuals. As the managers in this research were asked to discuss control relating to their direct reports and in their capacity as line managers, the role of situational control is important to acknowledge.

### 3.2.5 Other Categorisations

Control mechanisms can be categorised in different ways. Perhaps the most common categorisation is, as described above, to understand control as either formal or informal. However, other categorisations also occur in the organisational control literature. Errichiello and Pianese (2016) find controls have also been categorised as *direct* or *indirect*, based on whether the control applies via direct observation of the employee's activity or via an indirect lever such organisational culture (p. 286). Kärreman and Alvesson (2004) categorise controls as *socio-ideological* if they attempt to control workers' beliefs and *technocratic* if they attempt to control behaviour. Control can also be understood as *coercive* or *enabling*, highlighting that while control necessarily limits others' autonomy, it can also be beneficial for communicating expectations, guiding actions, and coordinating (Adler & Borys, 1996; Cardinal et al., 2017). From this we can see that control can be categorised in a variety of different ways, depending on different criteria and purposes. For this research, the important distinctions are between formal and informal control mechanisms, as will be addressed in the Discussion chapter, and between global and situational control enactment, as mentioned above.

### 3.2.6 Monitoring

Whether your focus is global and structural or local and situational, monitoring is a central concern for control. For example, Ouchi's influential (1977) work depicts control and monitoring as intimately related:

*In controlling the work of people and of technologies, there are only two phenomena which can be observed, monitored, and counted: behavior and the outputs which result from behavior. Thus, control systems can be regarded as being based essentially on the monitoring and evaluation of one or the other. (p. 97)*

Here Ouchi suggests that monitoring and control are so closely linked that in essence what can be controlled is dictated by what can be monitored. This is not an unreasonable conclusion: it is difficult to argue you are in control if you have no information whatsoever about the state of the object you claim to control. Therefore, monitoring is a crucial aspect of control.

#### 3.2.6.1 *The Relationship between Control Targets, Monitoring, and Control*

There is a great deal of conceptual overlap between monitoring, control targets, and control itself in the organisational control literature. Because this research leverages monitoring as an analytic frame, it is necessary to take a moment to clarify the relationship between these concepts.

As mentioned above, control *mechanisms* are the individual instruments used to implement control - for example the rules, standards, or norms an organisation has in place. Control *mechanisms* are directed at specific control targets – to different parts of the production process (Cardinal et al., 2010; Sitkin et al., 2020). For example, rules and procedures are the control mechanisms that target behaviours and guide work as it occurs. Metrics or standards specify the amount or quality of work and target the output to be produced. Rather than being part of the control process itself, a control target



is a categorisation of control mechanisms. Control targets do not alter production processes, they categorise the mechanisms that do.

Furthermore, control mechanisms, in and of themselves, do not alter behaviour. The purpose of organisational control is to alter people's behaviour so that rather than entirely following their own prioritisation, individuals can act in concert and will act in the interests of the organisation i.e. to change people's behaviour from whatever its default would be to whatever suits the organisation, for both coercive and enabling purposes. If, for example, rules, procedures, metrics, and other control mechanisms exist but there are *no consequences* whether one chooses to follow them or not, they are unlikely to influence people's behaviour.

Thus, to influence behaviour, a control mechanism must link an action to an outcome - a consequence. Organisational control exists to influence people to act in the organisation's interests rather than their own, so the organisation must be able to control the outcomes of actions. To control the outcome of actions requires monitoring so that the appropriate outcome can be created given the action.

Therefore, for a control mechanism to exist, there must be the basis or expression of the mechanism itself (e.g. the rule or output metric), monitoring to see whether the mechanism-appropriate event has occurred, and some kind of outcome – a reward or sanction – that can be applied depending on the results of the monitoring process. As control mechanisms are often categorised into input, behaviour, or output controls (based on their control targets), monitoring is often also categorised into behaviour and output (it is less clear what is monitored with input controls – is it whether the specified inputs are actually being selected? Whether the selected inputs having the desired effect? Though arguably these are behaviour and output monitoring, respectively).

In summary, for any control mechanism to be effective, it must have: a basis for the mechanism (e.g. the rule), monitoring, and also an outcome. Describing a control mechanism by its basis alone or by its target does not sufficiently describe how that mechanism creates control. Instead, one must also consider the integral role that monitoring plays.

#### *3.2.6.2 The Functions of Monitoring*

As Ouchi's description above implies, monitoring provides information that managers can use to assess performance and to identify problems. It also communicates to employees what is valued by the organisation. White (1985) notes that in tying monitoring to compensation, compensation provides agents with information about what they are expected to do; information that is likely to be interpreted with great care by the agent.

As well as communicating expectations to employees, monitoring also influences employee behaviour directly and indirectly. Much of the control literature assumes that if the employee is aware the manager is monitoring their efforts, the employee will be discouraged from self-interested behaviour (Eisenhardt, 1989). Jensen and Meckling (1976) suggest that monitoring will "limit the aberrant activities of the agent" (p. 308), and hence provides control for the principal – directly affecting the employee's behaviour.

Indirectly, simply being aware that one is subject to monitoring can alter a person's behaviour. Foucault (1979) suggests that the mere awareness of monitoring creates power effects, causing the subject to modify her own behaviour, for example, in Bentham's panopticon (Foucault, 1979). Indeed, Foucault contends that systems of power require "hierarchical observation and normalizing judgement" (Jacobs & Heracleous, 2001, p. 125) and calls surveillance a "power process" (Foucault, 1982, p. 787). Monitoring itself is a mechanism that brings about control.

Monitoring is a source of information necessary for managers to enact control, providing the basis for assessments and the use of incentives to direct employee behaviours. Monitoring also communicates expectations and alters employee behaviour directly and indirectly. As such, it is central to the existence of organisational control. Thus, understanding control requires understanding monitoring.

### 3.2.7 Behaviour Monitoring

Monitoring is often tacitly conceptualised as objective and measurement based. Even with behaviour control, there has been a tendency to focus on explicit and identifiable actions. However, a great deal of control is more subjective. A researcher might identify a behavioural rule that staff must follow: “always smile as customers enter the store” or “ensure you file a progress report at the end of every month” but evaluating these behaviours is always somewhat subjective. Does the smile look friendly or forced? Does the progress report contain enough detail? Is it prepared with enough care and professionalism or is it simply lip-service? This subjective aspect of behavioural control resists specificity and uniformity, and goes counter to long-held notions of the “objectivity” of management that have persisted in organisational control literature since the advent of rational control and Weberian bureaucracy (Cardinal et al., 2017; Seeck & Kantola, 2009). However, this subjectivity is none the less intrinsic to behaviour control.

The category of *behaviour control* has typically described controls that specify how work is accomplished, for example, formal behaviour control such as procedures for completing a task or informal behaviour control such as norms that guide prioritisation. Behaviour control has been defined as a form of direct, personal surveillance (e.g. Kreutzer et al., 2016; Ouchi, 1977) or as regulating how work is accomplished, generally via rules or procedures (e.g. Cardinal et al., 2018; Das & Teng, 1998; Kirsch, 1996; Kurland & Cooper, 2002; Piccoli et al., 2004; Snell, 1992). Other than the disciplinary

effects of being observed, defining behaviour control as direct, personal surveillance seems to define control in terms of the means or medium rather than the phenomenon itself. Furthermore, for some behavioural controls, such as requiring regular project plans and regular reports (e.g. Piccoli & Ives, 2003), it is not necessary to observe the behaviour of creating the plan or report, it is enough to be able to read the report once it is complete. It is enough to know that the behaviour has occurred without seeing it occur. As such, defining behaviour control as direct, personal surveillance may cause researchers to overlook important facets of behaviour control.

However, based on the data presented in this research, I would argue that defining behaviour control as regulating how work is accomplished is also insufficient. Or, more specifically: to suggest that behaviour control regulates how work is accomplished suggests that behaviour monitoring assesses only behaviour that accomplishes work. This research shows that behaviour is monitored for reasons that do not directly relate to the accomplishment of any specific task or responsibility. Instead, as well as monitoring behaviour to assess the quality and progress of tasks, managers monitor behaviour to assess employees' mental, emotional, and relational states; to assess their attitudes. Thus, rather than two fundamental types of control monitoring - behaviour and output - there are three: work-related behaviour, attitude-related behaviour, and output.

### **3.3 INFORMATION AND CONTROL**

The previous section introduced control in the organisation, and the role of monitoring in control. If control is at the heart of organising, then information is at the heart of control. This section will explore the role of information in control in more depth. This exploration is necessary for the Discussion chapter, where I will make the argument that to identify how and where organisational controls should be applied, it may be necessary to understand

the degree to which different control mechanisms rely on context to be effective.

### 3.3.1 Information

While information is central to control, it is not always easy to understand what is meant by the word ‘information’. Adriaans and van Benthem (2008) begin their introduction to the *Philosophy of Information Handbook*, by observing that information is “a high-frequency and low-content phrase”, so widely used that “its meaning has long eroded” (p. 3). They briefly survey information’s role in several disciplines and find wide and varied usage. This wide and varied usage, they suggest, means that one must question whether information might in fact be a metaphor rather than a specific concept. If that is the case, the metaphor may lead to vague analyses, analogous to the way metaphors such as ‘system’ or ‘game’ have (p. 9). They ultimately conclude that although information is used in a variety of ways, the multiple uses and definitions do not automatically mean the concept is vague or meaningless. Instead, while there is a widely understood and general use of the term ‘information’ that does not provide much analytic traction, this co-exists with more specialised and precise usage (Adriaans & van Benthem, 2008).

Adriaans and van Benthem (2008) discuss examples of more specific uses, including the difference between information in the semantic sense, which relates to knowledge and meaning (as it may be used in epistemics or linguistics) versus information in information theory, where meaning is not considered - instead signals are analysed for the *quantity* of information that can be conveyed (but not the content of the information). In information theory, for example, the amount of information a signal contains can be expressed as a mathematical formula, whereas meaning cannot be expressed quantitatively in any existing theory. Both information theory and semantics provide specific uses of the concept *information*, often examined in great

detail, in a way that contrasts with a broader, less well-defined and more general usage.

In the organisational control literature information is used in the broader sense, as a widely used and understood concept that does not necessarily need definition. While information is central to control, apart from some work in agency theory (discussed later) and economics work on incentives, the concept of information is rarely defined.

### 3.3.2 Information in Organisational Control Literature

To understand the current state of control research, Cardinal et al. (2017) reviewed empirical organisational control research published between 1965 and 2015 in high-quality, high-impact journals. From this, the authors identify seven principal frameworks that have influenced organisational control research in the last 50 years: Tannenbaum's control graph (Tannenbaum, 1956, 1962); Ouchi's behaviour-output framework (Ouchi, 1977; Ouchi & Maguire, 1975); Ouchi's control systems (Ouchi, 1979, 1980); Hoskisson, Hitt, and Hill's (1993) macro controls; Simon's (1991) levers of control; and two frameworks from Cardinal and Cardinal et al. that describe formal and informal controls (Cardinal, 2001; Cardinal et al., 2004). Of the seven frameworks identified, Ouchi's behaviour-output and control systems frameworks have been the most influential by a significant margin, with more citations than the other frameworks combined (Cardinal et al. (2017) identified 1169 citations for Ouchi's two frameworks, 940 for his control systems framework alone, versus 714 for all other frameworks combined). Below, using their review as a guide to fundamental perspectives in organisational control, I discuss how information is treated and the role it plays in each of these frameworks.

### 3.3.2.1 *Information in Ouchi's Frameworks*

Because of the disproportionate impact of Ouchi's work, I review the role of information in his work first.

#### 3.3.2.1.1 Ouchi's Behaviour-Output Framework

Ouchi's initial work (Ouchi, 1977; Ouchi & Maguire, 1975) focused on the role of behaviour controls and output controls. It begins with the premise that monitoring is a necessary condition for control. Ouchi argues that because only behaviour and output can be monitored, control systems must therefore be based on either behaviour controls or output controls (Ouchi, 1977, p. 97). Behaviour controls in this conceptualisation operate through direct observation. To be able to implement behaviour controls, the manager in question must also understand the relationship between actions and the desired outcome<sup>1</sup>. This allows the manager to guide employees to take the correct action to achieve the appropriate outcome. Ouchi describes this as understanding "the means-end relationship" (Ouchi, 1977, p. 97) (also called *task programmability* (e.g. Eisenhardt, 1989a)). Because monitoring and evaluation of behaviour control relies on the manager's assessment, behaviour controls include a degree of subjectivity and idiosyncrasy. This subjectivity makes behaviour controls less useful in communicating and comparing performance across different functions within larger businesses, where the means-end relationship may not be easily understood or compared between different functions or business units, and in communicating performance up the organisational hierarchy.

Output controls, on the other hand, do not require agreement on the means-end relationship, only on the desired outputs; they require that "a reliable and

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<sup>1</sup> Throughout this thesis I have tried to use the term *output* when referring to organisational controls, and the term *outcome* when referring to the results of control.

valid measure of the desired outputs” be available (Ouchi, 1977, p. 97). Using output controls, managers do not manage how their employees achieve their work, only that they achieve the required level of output (Ouchi, and Ouchi & Maquire, note that managers are unlikely to use pure behaviour or pure output controls, instead the two types of control act as complements to each other). Because output controls appear less subjective, they may be perceived as more legitimate evidence of performance if the manager’s supervisor is unfamiliar with the manager’s role, and as noted above, may provide more robust common standards for comparing performance in different organisational functions. Here Ouchi is in agreement with Simon (1991, 1994) and Hoskisson et al. (1993) that different levels within the organisation require different types of information from their control systems.

The Role of Information in Ouchi’s Behaviour-Output Framework. Information takes a central position in Ouchi’s Behaviour-Control framework. Control systems are defined primarily by their monitoring and evaluation function, and the type of information available dictates the type of control system that can be used: “The control system itself consists primarily of a process for monitoring and evaluating performance, while the preconditions specify the reliability and validity with which such comparisons can be made” (Ouchi, 1977, pp. 97-98). Preconditions, in this case, being the availability of means-end knowledge or the measurability of desired outputs: “In short, the exercise of control relies upon monitoring either behavior or output. Which one forms the basis of control depends upon the accuracy with which each can be measured” (Ouchi, 1977, p. 100). Thus, within this framework, control systems design is dictated by the availability of different types of information, and the ability of the receivers to interpret this information (e.g. the ability for other parts of the organisation to successfully interpret the information the control system generates).



#### 3.3.2.1.2 Ouchi's Control Systems Framework

Ouchi's later work (1979, 1980) builds on the earlier Behaviour-Output framework and focuses on how control mechanisms combine to form the *control system* as a whole. In his earlier framework we see hints of the later control systems ideas. For example, in Ouchi (1977), the author discusses the importance of ritual and ceremony in organisations where "correct behaviors and outputs cannot be identified" (p. 98) and the importance of employee selection (e.g. input control). In this later work, Ouchi identifies three types of control system: market, bureaucracy, and clan. Moving beyond a purely informational prerequisite and more explicitly outlining the role of information, Ouchi identifies two requirements that define these control systems: informational prerequisites and social prerequisites.

The three control systems Ouchi identifies are as follows. *Market control systems* use pricing and competitive internal bidding to measure the efficiency of their employees' actions. Ouchi notes that it is almost impossible for organisations to arrive at perfect transfer pricing, and that market control systems are the most demanding in terms of their informational requirements (and the least demanding in terms of social prerequisites). Because perfect transfer pricing and its associated information requirements are difficult to achieve, market control systems are often supplemented with rules and norms of legitimate authority and hence tend to become *bureaucratic systems*. In bureaucratic systems, "the fundamental mechanism of control involves close personal surveillance and direction of subordinates by superiors" (Ouchi, 1979, p. 835) and expectations are communicated via rules. *Clan systems*, rather than relying prices or rules, rely on socialisation to eliminate goal incongruence between the individual and the organisation. Shared goals, Ouchi suggests, mean individuals will act in the organisation's interests without strict enforcement or monitoring.

*The Role of Information in Ouchi's Control Systems Framework.* Ouchi's later framework more explicitly addresses the role of information in the selection of control systems, with information being one of two key determinants for the type of control used. Prices are described as "a highly sophisticated form of information for decision making" (Ouchi, 1980, p. 138), rules are comparatively crude as a large number are required to control organisational responses (Ouchi, 1980, p. 138), and traditions "may be the crudest informational prerequisite, since they are ordinarily stated in a general way which must be interpreted in a particular situation" (Ouchi, 1980, p. 139). All three types of information are considered both in terms of their ability to communicate expectations to staff and the role they play in performance evaluation (Ouchi does argue that with sufficient socialisation in clan control systems, "auditing of performance is unnecessary except for educational purposes, since no member will attempt to depart from organizational goals" (1980, p. 138). To me, this seems unrealistic as it does not account for the need to monitor for mistakes, honest misunderstandings, well-intentioned but poor decision making, etc. It seems likely that even in well-socialised clan control systems some monitoring and auditing will be beneficial).

Ouchi also notes that information in control systems can differ in terms of its explicitness. Explicit information systems are more readily accessible to newcomers but more limited in their ability to convey complete information or fully capture underlying dimensions of performance which may "defy measurement" (1979, p. 839). Implicit information systems take longer for newcomers to understand "the decision rules used in the organization" but do not require "an army of accountants, computer experts, and managers" (1979, p. 840). In fact, Ouchi goes so far as to argue that while explicit information systems must be created and maintained intentionally, an implicit information system "often 'grows up' as a natural by-product of social interaction" (1979, p. 839) and is "just there" (1979, p. 840). Here, again, I would disagree

somewhat with Ouchi that these implicit systems do not require intentional guidance, having seen organisations that have failed to create a successful or coherent internal culture. However, in Ouchi's consideration of explicit and implicit information we see links to the later definitions in control literature of control mechanisms as formal (written down, explicit) and informal (unwritten, implicit).

Overall, the emphasis in Ouchi's work, both his earlier Behaviour-Output framework and his later Control System framework, is on information as an antecedent of control, and as a determinant of control system design. Even though information is central to Ouchi's work on organisational control, the term itself is not defined. Instead, two types of information – behaviour and output – are defined based on what can be monitored or measured.

### 3.3.3 Information in Other Control Frameworks

Below, to further explicate how information is theorised in the organisational control literature, I review the role of information in the other principal frameworks, following Cardinal et al. (2017).

#### 3.3.3.1 *Tannenbaum's Control Graph*

Tannenbaum's Control Graph (Tannenbaum, 1956, 1962) provides an analysis of the perceived quantity and distribution of control in organisations. The control graph provides information about the 'shape' of control in the organisation but does not focus on what control is or how it is implemented. While the control graph provides information *about* the organisation, the role of information within organisational control is not explored.

#### 3.3.3.2 *Hoskisson, Hitt & Hill's Macro-controls*

Hoskisson et al. (1993) focus on how diversification in multidivisional organisations leads to a tendency to focus on financial rather than strategic controls. The authors argue that financial controls appeal because in highly diversified organisations, managers often have little operational knowledge

of the various divisions that report to them (p. 328). Financial controls, over strategic controls, are argued to reduce the ‘information processing’ requirements for managers. Hoskisson et al. (1993) argue that strategic controls require more direct operational knowledge from the manager and are more subjective and richer in detail than financial controls. They suggest that in less diversified firms, managers can pay attention to fewer divisions, therefore having greater immediate knowledge of those divisions. This allows managers to be more open and subjective in judging division performance and may facilitate risk taking (p. 328). Financial performance is easier to communicate up and across the organisation, and more easily understood by those outside the division in question.

This echoes Ouchi and Maguire’s (1975) observation that a manager’s choice of controls may be influenced by her or his superior’s knowledge of the manager’s role, where if the person to whom they report has less expertise in the manager’s domain, the manager may opt for more objective-seeming output controls rather than subjective behaviour controls. It also echoes Ouchi’s (1977, p. 100) observation that “An output control system will at least provide the appearance of yielding more readily comparable units of performance”. In addition, the reasons behind the choice of difference controls begins to introduce the concept of *context* and its importance in interpreting organisational control information, which I will discuss in more depth below and in the Discussion chapter.

The Role of Information in Macro-controls. Overall, in Hoskisson et al.’s (1993) Macro-controls framework, we again see a central role for information. Hoskisson et al. (1993) argue that use of financial controls causes executives to “lose some of the rich operational information” necessary to encourage risk taking (p. 338) because these controls only communicate a subset of the available information, which can affect decision making and performance. Additionally, executives’ ability to process

information influences the type of control that is implemented: “In highly diversified firms, corporate executives are no longer able to fully understand the operations of the multiple and diverse divisions. Thus, they must not only decentralize operating authority to divisions, but they also cannot use strategic criteria to evaluate division managers. As a result, they begin to emphasize financial control” (p. 325). However, compared to Ouchi’s frameworks, in Hoskisson et al. (1993) there is somewhat less emphasis on individual decisions and outcomes and more attention directed to the structural causes and effects of control systems. Cardinal et al. (2017) conclude that while the Macro-controls framework has influenced corporate governance research, ultimately its impact on organisational control research has been limited.

#### ***3.3.3.3 Simons’ Levers of Control***

In contrast to Ouchi’s frameworks, where information is considered primarily as an antecedent of control, Simons’ (1991, 1994) Levers of Control framework more directly emphasises information as a consequence of the control system: it highlights what the use of control systems communicates to the organisation. Simons’ framework considers how managers use control systems to direct organisational attention and learning (Simons, 1991, 1994). The author argues that by emphasising certain controls systems over others, managers signal to the organisation which activities and information matter at that point in time. Control systems are used to communicate the need for change, to convey performance expectations, to communicate the manager’s commitment to new changes, and to focus attention in specific areas of uncertainty. Control systems are also used to communicate managerial credibility, both upwards and down the organisational hierarchy (again, echoing Ouchi’s (1975) observation about the use of output controls to convey credibility).

In comparison to Ouchi's frameworks, Simons' work puts more emphasis on the outcomes of control systems and categorises them in terms of what they are used *for*: establishing boundaries (communicates risks to be avoided), defining beliefs (communicates core values), diagnostic checks (collects information on critical performance variables) and interactive checks (collects information on strategic uncertainties) (e.g. see Figure 1, Simons, 1994, p. 173). Simons argues that these different types of control system are used differently, depending on what managers need to achieve; dramatic strategic change may require different control system use than gradual strategic evolution.

In both Simons' and Ouchi's work there is agreement that control systems are used to direct organisational activity. While Ouchi's frameworks focus heavily on the role of monitoring and tend to leave the mechanisms that explain how monitoring influences behaviour unexamined, Simons focuses on how the communicative or signalling properties of control systems allow managers to enact change. Put differently, Simons' work focuses on how managers create change while Ouchi's work is more oriented to how managers establish and maintain the status quo. Simons also exclusively considers formal control systems, while in later work Ouchi integrates informal control into his Clan control system.

Interestingly, Simons' draws a strong connection between organisational control and learning, as does Bernstein (2017) later. Bernstein notes that neither learning nor control are possible without timely and accurate information.

The Role of Information in Levers of Control. Information also features centrally in Simons' control framework. He defines control systems as "the formal, information-based routines and procedures used by managers to maintain or alter patterns in organizational activities" and explicitly makes

the point that “management control systems are *information-based* systems. Formal routines and procedures that do not convey information (internal accounting controls, for example) are excluded from my analysis” (Simons, 1994, p. 170, emphasis in original). However, as noted earlier, rather than considering information as an antecedent condition that dictates the use of control systems, Simons’ focuses on what information the control systems can convey and how that alters the behaviour of others in the organisation. Simons’ view of control systems includes both information from monitoring internal activity and information originating external to the organisation. This is arguably a broader definition of control systems as something that control the organisation, rather than something that controls individuals (compared to Ouchi, for example).

#### **3.3.3.4 Cardinal’s Formal Control Targets**

Cardinal (2001) explores the use of formal input, behaviour, and output controls in innovative research and development work in the pharmaceutical industry, echoing a context that Ouchi (1979) associated with clan controls. According to Cardinal et al. (2017), this categorisation of formal controls as input, behaviour, or output emphasises *when* the control is applied, with input controls applied at the beginning or at critical resets for projects or teams, behaviour controls during work execution, and output controls at milestones or at the completion of units of work. Cardinal (2001) derives definitions of behaviour and output control from Ouchi (1977) and related work (p. 23) and as such, largely inherits Ouchi’s perspective on the role of information in control.

#### **3.3.3.5 Cardinal et al’s (2004) Formal and Informal Control Targets**

Cardinal et al. (2004) builds on Cardinal (2001) by exploring both the formal and informal implementations of input, behaviour, and output controls. Cardinal et al. (2004) largely inherits a conceptualisation of information in

control from Cardinal (2001) and therefore Ouchi (1977) (though Cardinal et al. (2017) note that by specifying both informal and formal aspects of these three control mechanisms, Cardinal et al. (2004) “moves past” Ouchi’s earlier framework (p. 567)).

Thus, via these seminal frameworks, we can see that information plays a central role in theorising on organisational control.

### 3.3.3.6 Agency Theory

While agency theory is not included in Cardinal et al.’s (2017) comprehensive review, its unique emphasis on the role of information in control justifies consideration here.

In their seminal paper, Jensen and Meckling (1976) define an agency relationship as

*a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. (p. 308)*

The authors note that the contract need not be explicit and that an agency relationship can arise in any cooperative effort, within or without an organisation. While a good deal of work using agency theory has focussed on the relationship between a firm’s owners and the firm’s Chief Executive Officer, agency relationships in organisations can occur at any level (Jensen & Meckling, 1976). In organisational settings, most typically the firm or the manager is considered the principal in the relationship, and the employee or subordinate as the agent.

Agency theory attempts to determine the optimal contract structure to align the agent’s (employee) interests with the principal’s (firm or manager) and thereby minimise agency costs (for a more complete review of agency theory



see, for example, Eisenhardt, 1985; Eisenhardt, 1989a). From the principal's perspective, if outcomes are measurable then the simplest solution is a contract where the agent is paid for the outputs they produce; e.g. paid a commission for sales or a piece-rate per widget produced. With outcome-based contracts, it is in both the principal and agent's interests for the agent to produce the desired outcomes. However, agency theory recognises that outcomes are not exclusively reliant on the agent's effort. Other factors, for example a slow economy or supply shortages, can impact outputs. In an outcome-based contract, this introduces risk for the agent as output may be reduced by factors beyond their control. Because the principal is unable to observe all the agent's actions, these factors also introduce risk for the principal; the agent may put in less effort but blame the lower output on environmental factors instead. Agency theory assumes that as the agent is less able to diversify their risk (e.g. may not easily and costlessly find another job), the agent is more risk averse than the principal. An entirely outcome-based contract moves risk to the agent. The agent may be unwilling to accept that risk, leaving the principal with no-one to work on their behalf, or may only be willing to accept the risk if they are paid a much higher rate. As such, in some circumstances it will be in both parties' interests to use a contract that is based at least in part on behaviour rather than outcomes, for example using a fixed wage where the principal can fire the agent if they fail to behave as required for the role. In this instance, the principal's monitoring efforts are directed at observing the agent's behaviour rather than purely measuring outcomes. The emphasis on output and behaviour as the only two forms of control indicates Ouchi and Jensen and Meckling's common theoretical lineage drawing on transaction cost theory and economics.

Agency theory assumes that agency relationships create agency costs for the principal because there is *information asymmetry*: the principal and the agent possess different information, and only the agent knows all of the agent's

actions (Bergh et al., 2019). Clearly the optimal solution from an agency theory perspective is a situation of complete information, where the principal knows all the agent's actions and is aware of all relevant environmental factors and their impact. With complete information, no agency problem exists. Agency theory assumes that information cannot be acquired without cost, however, so there is a trade-off between the cost of acquiring complete information and the agency costs of incomplete information. This highlights the centrality of information in agency relationships.

The nature of the work being delegated influences how readily information is available. One extension to the basic agency model suggests that task programmability and the measurability of task outcomes alters the information available to the principal and therefore whether an outcome- or behaviour-based contract is most appropriate (Eisenhardt, 1985, 1989a). Programmability is "the degree to which appropriate behavior by the agent can be specified in advance" (Eisenhardt, 1989a, p. 62) and bears considerable resemblance to Ouchi's means-end relationship. The more programmable the task, the more easily the principal can observe and evaluate the agent's work, effectively making information about the agent's actions more readily available (Eisenhardt, 1989a). The same logic holds for tasks where the outcome is easy to measure. However, as Eisenhardt (1989a) notes, for tasks that are complex, on-going, that produce 'soft outcomes', or where the outcome is the product of team effort, it may be very difficult to measure any given agent's contribution to the outcomes.

Comparing Ouchi's Behaviour-Output Framework and Agency Theory. With the emphasis on behaviour and output controls, and on information availability as an antecedent condition in the selection of control mechanisms, there are obvious similarities between Ouchi's Behaviour-Output framework and Agency Theory. Both draw from similar theoretical foundations in economics. Indeed, Cardinal et al. (2017) note that much current

organisational control literature has carried through underlying assumptions from means-ends contingency theory, transactional cost economics, and agency theory (p. 560). Eisenhardt (1985) compares and integrates economic and organisational approaches to control, using agency theory and Ouchi's (1979) Behaviour-Output framework. She notes that both approaches "are rational, efficiency approaches which are concerned with the determinants of control strategy. Both are information based. Both distinguish between two types of performance evaluation control: behavior based and outcome based control" (Eisenhardt, 1985, p. 138).

*Agency Theory Summary.* While agency theory has been subject to strong criticisms (see, for example, Ghoshal, 2005; Granovetter, 1992; Heath, 2009; Lubatkin, 2005; Sen, 1977) its explicit consideration of information in control is useful because it surfaces features of information that exist in other organisational control literature, especially research influenced by Ouchi's work. Specifically, agency theory highlights that the manager and employer (principal and agent, respectively), may have access to different information, that the manager requires information about the employee's actions to effectively exert control, and that control-related information is sufficiently important that managers will incur costs to acquire it (Eisenhardt, 1989a). Importantly, agency theory also highlights that information is neither free or complete – as Hölmstrom (1979) notes, "generally, full observation of actions is either impossible or prohibitively costly" (p. 74). Organisations, and managers, must decide where and how much to invest in collecting information about employee performance, trading cost and effort for completeness, timeliness, and accuracy of the information gathered. Logically, then, one can assume that the more cost or effort a manager is willing to commit to gathering a given type of information, the more important the manager must perceive that information to be.

### 3.3.4 Conclusions

Across these key frameworks, outlined above, we see some consistency in how information is treated. The first notable point is that *what information is* is not defined. In this sense, information is taken, as mentioned earlier, to be a widely used and understood concept that does not require definition. Second, different organisational control frameworks position the role of information in control differently. While information tends to take a central role (Tannenbaum's Control Graph is a notable exception, though its influence in organisational control research has been limited (Cardinal et al., 2017)), the frameworks differ on whether information is an antecedent of control, a product of control, or perhaps both. No framework has integrated these different perspectives (although agency theory perhaps comes closest with its more explicit consideration of information).

Third, there is a tendency to focus on formal and explicit information. This aligns with the control literature's emphasis on formal control mechanisms. Cardinal et al. (2017) found that control research has historically put considerable emphasis on formal control: "formal control is featured in all seven of the frameworks [in their review], and it is exclusively featured in five of seven. As a result, 70 out of the 73 empirical studies in our review have included one or more formal control mechanisms, with almost two-thirds exhibiting an exclusive emphasis on formal control" (Cardinal et al., 2017, p. 567). The authors note that while researchers are increasingly including informal control in their work, given the changing nature of organisations, this may require more emphasis still. As will be covered in the Discussion chapter, this research contributes to our understanding of informal controls.

Lastly, information is presented as relatively unproblematic. A control system gathers (collects, synthesises and perhaps summarises) information from a variety of sources, and if a control system exists to collect it, then a given type

of information is available to the manager. This minimises complexities in the accuracy and timeliness of how the information is gathered, the ability of control system information to meaningfully represent important variables within the organisation, and the subjectivity of the managers' interpretation. This simplification is understandable, however. There are entire fields of scholarly research dedicated to exploring how information operates (e.g. epistemology, philosophy of information, branches of linguistics). If each research study on organisational control was required to deeply understand and completely define information, it is likely no progress would be made in understanding control itself. Many things about organisational control can be understood without a deep consideration of the nature of information. This suggests there may be a middle ground where the nature of information can be considered somewhat more deeply and in doing so, we may be able to highlight new dynamics in organisational control. In the following sections, I will provide more in-depth definitions of information, and of context, which I will build upon in the Discussion chapter to highlight a new way to understand the role of context in organisational control.

### 3.4 DEFINING INFORMATION

To understand what information is, it helps to differentiate information from related concepts. A commonly used framework is the data-information-knowledge-wisdom (DIKW) hierarchy (Ackoff, 1989; Liew, 2013; Rowley, 2007). Rowley (2007) describes DIKW as "one of the fundamental, widely recognized and 'taken-for-granted' models in the information and knowledge literatures" (pp. 163-164). DIKW describes a hierarchy where each higher level transforms the previous level and in doing so, adds value, meaning, or significance. Data is transformed into information, information into knowledge, and knowledge into wisdom (other levels have been suggested but Rowley notes that only the DIKW hierarchy is widely accepted).

### 3.4.1 Definitions in DIKW

**Data** are the raw elements that information is built from: “Data are discrete, objective facts or observations, which are unorganized and unprocessed, and do not convey any specific meaning” (Rowley, 2007, p. 170).

**Information** is data given context and therefore made meaningful: “information is defined in terms of data, and is seen to be organized or structured data. This processing lends the data relevance for a specific purpose or context, and thereby makes it meaningful, valuable, useful and relevant” (Rowley, 2007, p. 172).

**Knowledge** is individualised and exists within the knower; knowledge is “information processed in the mind of an individual” (Rowley, 2007, p. 172). Because knowledge exists within the individual, new information combines with the individual’s existing understanding and experience of the world: “new knowledge is as much a function of prior knowledge as it is of received inputs” (p. 173).

**Wisdom**, Rowley notes, is perhaps the most difficult to define and the least discussed, at least within the information and knowledge management literatures. Definitions typically suggest that wisdom provides the ability to use knowledge well.

An example of each of these elements and their relationships is as follows. Let’s say you receive some raw **data**: the symbols 1001 written on a scrap of paper. To interpret that data, to turn it into information, you need some context. At the very least, you need to understand whether 1001 should be interpreted as the number one thousand and one in decimal, the number 9 in binary, or perhaps interpreted using some other code. If the context indicates that it is a decimal number – you now have a piece of **information** “one thousand and one”. Let us also say your friend in the next valley has promised that, should Attila the Hun’s invading hordes arrive, she will send warning

with the size of the army. Assuming you trust the accuracy of your friend's warning, you now have the **knowledge** that one thousand and one ferocious, armed invaders are headed your way (wisdom would perhaps suggest that now is a good time to leave town). The data 1001 has been contextualised into information, and that information is transformed into useful, actionable knowledge within the knower.

### 3.5 INFORMATION AND CONTEXT

Moving from the broad, undefined use of the concept of information to something more specific like DIKW has an interesting consequence: it highlights the importance of context in understanding the information that is presented to us. The Cambridge Dictionary offers the two following definitions for the word 'context':

*"The situation within which something exists or happens, and that can help explain it"*

Or

*"The text or speech that comes immediately before and after a particular phrase or piece of text and helps to explain its meaning" (Context, n.d.)*

Other dictionaries (e.g. Merriam-Webster, Oxford, Collins) offer similar definitions. Thus, context can be seen to have two (related) meanings: one is linguistic and refers to the meaning imparted to a word or phrase by surrounding words or phrases; and the other is circumstantial and refers to aspects of the setting that help explain an event, statement, etc.

Both definitions have the same underlying concepts. The first underlying concept is the need to attend to surrounding elements, and the second is that the focal element derives its meaning in part from those surrounding

elements. Thus, the meaning of the entity we wish to understand is partly derived from its relationship to surrounding elements; it does not stand alone, its meaning cannot be fully understood ‘out of context’.

As such, context is an expansive, quite abstract, and at heart relational concept. Part of the challenge in using an idea like ‘context’ is that it can be applied at many levels and it is likely that all of these contexts matter, in different ways. For example, we live in a time of rapid cultural, technological, and environmental change. This forms a historical context that influences how we understand our lives. Cultural context is also important – both as an influence within our given culture, and also importantly when we try to understand someone of another culture. Cultural context may have special relevance for distributed teams. As distributed teams are geographically distributed, by nature, it increases the likelihood the team will include people from diverse cultures. Cultural context is a complex topic and I do not believe I could do it justice within the scope of this research so, without diminishing or overlooking its importance, I will put it aside here. Overall, context plays an important role in making information meaningful.

### 3.6 CONTEXT IN EXISTING RESEARCH

Looking at the definition of context, context can be summarised as that which surrounds the focal element and makes the focal element’s meaning understandable. The definition of information in DIKW provides the same role for context: context allows us to make sense of or structure data we receive – to give meaning to raw facts. Without context, information can be difficult to interpret correctly. For some things the meaning can only be derived from the context. This may be because the word on its own does not have enough information to be meaningful (e.g. ‘this’, ‘that’) or because the meaning is ambiguous. Information theory also acknowledges this relationship: a signal only becomes useful information once it is unique



enough for you to interpret it (Dretske, 1981). For example, in spoken language /rəʊd/ could mean ‘road’ or ‘rode’. I won’t know which until you mentioned either a pathway or a horse – until then it will be too ambiguous to be interpreted with any certainty. James Gleick gives the example of African drumming languages where many words use the exact same set of drumbeats. For example, the drum “word” for *moon* is the same as the word for *father*, the word for *fowl* the same as the word for *fish*. Therefore:

*...a drummer would invariably add ‘a little phrase’ to each short word. Songe, the moon, is rendered as songe li tange la manga – “the moon looks down on the earth”. Koko, the fowl, is rendered as koko along la bokiokio – “the fowl, the little one that says kiokio”. The extra drumbeats, far from being extraneous, provide context. Every ambiguous word begins in a cloud of possible alternative interpretations; then the unwanted possibilities evaporate (Gleick, 2011, p. 25)*

I argue the same is true of control information – it is difficult to interpret without context. Say, for example, one of your staff produced 100 widgets this week. Should you give her a raise? Or fire her? The answer depends on a variety of other pieces of information you currently lack. At the very least you would want to know how many widgets she was expected to and agreed to produce, how many is usual for a person in her role to produce, and whether other factors may have contributed to higher or lower output than usual. Even relatively objective facts like the number of widgets a worker produced does not, on its own, produce useful information or actionable knowledge.

In the widget example above, making use of the fact that someone produced 100 widgets relies broadly on two types of additional information: prior knowledge and context information. Prior knowledge would be knowing the

widget output that was expected and agreed upon, and the usual widget output. Context knowledge would be knowing any other factors (weather, shortage of widget materials, absentee days) that might have affected the employee's widget production that week. DIKW identifies prior knowledge and context in the process of moving from data to knowledge. Prior knowledge is used to integrate new information, and context is used to help make raw data meaningful.

### 3.6.1 Information and Context in Organisational Control Literature

As mentioned earlier, the concept of information does not get defined or examined in detail in the organisational control literature (beyond agency theory's acknowledgement that information is not complete or cost-free). Perhaps as a natural consequence of this, the role that context plays in making information meaningful does not get discussed in much detail either – though it does occur implicitly in some control literature, as I will discuss below.

The importance of prior knowledge has been hinted at in the organisational control literature. For example, much of Ouchi's (Ouchi, 1977; Ouchi & Maguire, 1975) Behaviour-Output framework depends on the role of prior knowledge. Ouchi and Maguire (1975) find the more managers already know about the means-end relationship of the tasks of their staff, the more likely the manager is to use behaviour controls. The more expertise (prior knowledge) the manager has about a role, the more likely the manager is to favour behaviour controls rather than output controls – the manager's prior knowledge influences which controls the manager selects. This is also reflected in agency theory, where the task programmability (the degree to which behaviours can be precisely defined i.e. are known prior to beginning work) is found to predict control practices (Eisenhardt, 1985).

The role of context in organisational control is also demonstrated in prior research, though as context is not the focus of these analyses, it is not

discussed in these terms. This is perhaps most apparent in Hoskisson et al.'s (1993) Macro-controls framework. In Hoskisson et al. (1993) the authors establish that as a company diversifies, executives "no longer have the time or possibly the requisite knowledge necessary to understand fully the operational aspects of each division" (p. 335). This encourages a shift from richer and more subjective strategic controls to more abstract, quantitative, and objective financial controls. The authors argue that "corporate managers may not have the information necessary to implement informed strategic controls" (p. 336), with consequences for executive risk taking. Effectively, in these diversified companies, to understand strategic controls in multiple divisions, executives need a significant amount of first-hand knowledge of operations to correctly and usefully interpret strategic control information. The large number of areas the executive would need first-hand knowledge of increases the amount of information executives would have to gather and process beyond what is feasible. Put differently, first-hand knowledge provides the necessary context to correctly interpret strategic control information. Without first-hand knowledge and the context it provides, managers rely on less context-dependent financial controls instead.

If we note that both output and financial controls are more quantifiable, objective, and abstract, and that both strategic and behavioural controls are richer, more subjective, and require more first-hand knowledge, then Ouchi and Maguire (1975) find empirical support that parallels Hoskisson et al.'s assertion, but in smaller organisations. The authors build on prior research, noting that "Ouchi (1975) found that the use of output control in 78 retail companies was a response to large size, vertical and horizontal differentiation, and intradepartmental heterogeneity" (Ouchi & Maguire, 1975, pp. 559-560). They argue that "although behavior control enables the manager to guide and direct his [sic] subordinates as needed, it is so subtle and subjective a process that it is not useful comparing performance between the many and varied

subunits of a large company” and that “the use of output measures is largely a result of the demand for quantifiable, simple measures” (p. 568). They find that behaviour and output control are complementary because organisations have neither “an omniscient executive” who can observe all departments at work, nor “an all-encompassing set of output measures” (p. 569). Ultimately, they argue that output measures serve the organisation by providing data that can be compared across heterogeneous organisational functions, while behaviour control serves managers in individual subunits. As with Hoskisson et al. (1993), Ouchi and Maguire’s (1975) findings can be interpreted to suggest that some types of control information (output controls) require less context and so can be understood by people removed from the day-to-day operation of that organisational function, and some types of control information (behaviour controls) require more context, obtained through first-hand observation.

If we accept that context is important for interpreting information, and that observation or first-hand experience provides richer context information than not having first-hand experience or observation, then increased distance within the organisation, through horizontal or vertical differentiation, reduces the amount of context available from first-hand experience. The lack of context caused by the lack of first-hand experience or observation offers an explanation for why the use of control information shifts to more quantitative output or financial information, as Ouchi and Maguire (1975) and Hoskisson et al. (1993) show. These findings demonstrate that having less first-hand experience or observation – less context – changes the type of control information that is used, and thus demonstrates the essential role of context in interpreting control information.

### **3.6.2 Context in Remote Work**

As well as distance in the organisation caused by horizontal or vertical differentiation, physical distance also affects context. There have been two

streams of literature addressing the role of context in remote work. One has occurred in the computer supported cooperative work (CSCW) literature and the other in the virtual team literature.

#### **3.6.2.1** *Context in CSCW Literature.*

The importance of context has been acknowledged within the CSCW literature for many years. CSCW's interest in context awareness is motivated by a desire to develop technology that supports social interaction and collaboration (Gross, 2013). This contrasts with context awareness in the virtual team literature in organisational research (discussed below) where the emphasis is improving organisational effectiveness. As such, the CSCW literature is centred around the technology to support distributed work (Raghuram et al., 2019). Gross (2013) reviews more than 25 years of research into context awareness (or more generally, the problem of 'awareness' in computer supported work) and concludes that building collaboration technologies that provide more than minimal workplace or context awareness is not a solved problem (Gross, 2013). Within CSCW, 'awareness' does not have a clear definition, although Gross includes the following definitions that demonstrate the relevance of CSCW's concept of awareness to the concept of context used here and particularly to context in distributed teams. From Dourish and Bly (1992):

*“awareness involves knowing who is ‘around’, what activities are occurring, who is talking with whom, it provides a view of one another in the daily work environments. Awareness may lead to informal interactions, spontaneous connections, and the development of shared cultures—all important aspects of maintaining working relationships which are denied to groups distributed across multiple sites” (Gross, 2013, p. 431)*

and

*“we wished to extend the notion of ‘awareness’ outside a single physical location, and thus support awareness for distributed work groups. Such groups, by their nature, are denied the informal information gathered from a physically shared workspace and the proximity, which is an important factor in collaboration between colleagues”. (Gross, 2013, p. 431)*

Gross, citing Dourish and Bellotti, argues that awareness,

*“is fundamental to coordination of activities and sharing of information, which in turn, are critical to successful collaboration. Awareness plays a number of key roles. First, high-level awareness of the character of others’ actions allows participants to structure their activities and avoid duplication of work. Second, lower-level awareness of the content of others’ actions allows fine-grained shared working and synergistic group behavior, which needs to be supported by collaborative applications”. (Gross, 2013, pp. 431-432)*

Gross (2013) notes that when people collaborate closely in workplaces, they may develop “a subtle and complex body of practices for monitoring each other's conduct and coordinating a varied collection of tasks and activities” (p. 429). This monitoring and coordination requires awareness of the other’s activity in the workplace, listening and watching on one hand and production and communication on the other hand, but that the “effort of displaying and monitoring awareness information should be low enough so it can happen in the background and does not interfere with the other activities of the actors” (Gross, 2013, p. 430).

Lower context awareness means that team members have less access to workplace situational information – for example it will be more difficult to tell whether a team mate is having a bad day, which may explain why they were terse in conversation, or that a team mate is overloaded and needs help (Gutwin & Greenberg, 2001). This may increase the likelihood of making dispositional rather than situational attributions, which may impact team cohesion and learning (Cramton, 2001). It also makes it more difficult to initiate informal communication, as it is harder to tell when a team mate is deeply involved in a task, or taking a breather and available to chat (Gross, 2013; Gutwin & Greenberg, 2001). Awareness also allows actors to monitor the “state, progress, [and] direction” of workplace activity to “ascertain whether they are being done and progressing as expected, to determine exactly how one’s own activities need to be adjusted to mesh with the unfolding work of the colleagues, and so forth” (Schmidt, 2002, p. 291), providing a basis for effective coordination, as well as information on the effectiveness and reliability of others’ work. This is, of course, also important to managers who must assess both the quality and direction of their team member’s work to ensure that work meets organisational expectations.

#### *3.6.2.2 Context Awareness in Virtual Team Literature.*

In the virtual team literature, the emphasis shifts away from the mechanisms of context awareness towards the outcomes. Drawing from linguistics, in what is probably the seminal work on context awareness in distributed teams, Cramton (2001) applies the ideas of ‘common ground’ and ‘mutual knowledge’ to distributed teams. In linguistics, ‘common ground’ describes the “great mass of knowledge, beliefs, and suppositions” (Clark, 1996, p. 12) that two (or more) people must believe they share for communication to be possible. Common ground describes the assumptions required to enable one person to craft an utterance that another person will understand. This ranges from quite general assumptions of shared knowledge (believing that the other

person also speaks English, for example) to knowledge that is very specific to a given interaction (a given utterance might reference something that was mentioned earlier in the conversation or something that both participants can see from where they are standing).

In the virtual team literature, and also in the linguistics literature, the phrases common ground, mutual knowledge, and shared understanding are often used in overlapping ways. Allan (2013) notes that in linguistics at least:

*“What seems abundantly clear is that although one might nit-pick differences among them (see Lee 2001), the terms common knowledge, mutual knowledge, shared knowledge, assumed familiarity, presumed background information and common ground are describing essentially the same thing” (Allan, 2013, p. 291)*

Cramton (2001) points out that the phrase ‘common ground’ embeds assumptions of shared physical space in its very choice of words. Cramton (2001) extends the idea of common ground and uses it to explore communication and coordination problems that come about when a team of distributed collaborators fail to maintain mutual knowledge. She identifies five problems that distributed teams can face as a result: “failure to communicate and retain contextual information, unevenly distributed information, difficulty communicating and understanding the salience of information, differences in speed of access to information, and difficulty interpreting the meaning of silence” (p. 346). In particular, she notes that “Although each of the five problems is important, one that has particularly far-reaching implications is the problem when working in a distributed fashion of comprehending and communicating contextual influences on behavior” (Cramton, 2016, p. 6). Cramton found that this lack of shared



context affects how remote collaborators explain or attribute each other's behaviour:

*Through the laboratory study, we showed that collocated collaborators would search the local environment for explanations for why their colleagues did not perform as expected and would take this information into account in their attributions. On the other hand, people working with a remote colleague who underperformed assumed that the colleague faced the same situational conditions as themselves. They tended to fault their partners personally for a team performance failure. (Cramton, 2016, p. 8)*

As discussed above, a lack of shared context has particular relevance for distributed teams. The challenge that a lack of shared context introduces has been used in later research as an explanator for some of the differences or difficulties that distributed teams can face in collaboration.

### 3.6.3 Conclusions

In summary, at a 'micro' level, we can see that context plays a vital role in interpreting and understanding the meaning of information – taking it from raw data to use knowledge. The meaning of a given piece of information is in part derived from surrounding elements and data can only be interpreted using context. The importance of context is also reflected at a more 'macro' level, where both the CSCW and virtual team literatures acknowledge that lack of context can inhibit effective collaboration across distance as it alters collaborators' ability to understand the meaning of events.

Furthermore, while context is addressed implicitly in the organisational control literature, information is given more direct consideration. It is variously identified as an antecedent that dictates control system design, or an outcome of control system use in organisations. In either

conceptualisation, information, delivered via monitoring, is understood to be a necessary condition for control to occur, to the degree that what can be controlled is often equated with what can be monitored.

### 3.7 CONTROL AND DISTRIBUTED TEAMS

Relatively little research exists on organisational control within distributed teams. Powell et al. (2004) note that, at the time of their review, the distributed team literature provided “no guidance” to many control-related questions, including:

*Do traditional managerial control mechanisms remain applicable in the virtual environment? If so, what are the most appropriate managerial controls (formal versus informal)? Can informal control mechanisms be used when teams rarely meet [face-to-face] and are short-lived?*  
(Powell et al., 2004, p. 16)

The authors argue this represents “fertile grounds for future research” (Powell et al., 2004, p. 16). However, only a handful of researchers appear to have taken up this suggestion.

One of the most commonly cited pieces of research on control in distributed teams is Piccoli and Ives (2003). Using an experimental design that manipulated control type, the authors found the use of behaviour controls in distributed teams can increase the salience of instances where members fail to uphold their obligations, thereby reducing trust. Trust is one of the most studied variables in distributed teams research and perhaps because of this, much of the research on control in distributed teams has focused on the relationship between trust and control. For example, Dennis et al. (2012) build on Piccoli and Ives (2003). Whereas Piccoli and Ives (2003) argue that behaviour controls increase the salience of bad behaviours and thereby

undermine the antecedents of trust, Dennis et al. (2012) argue that behaviour controls “amplify the salience of all behaviours (positive and negative)” (p. 546). Using a student sample and an experimental design based on behaviour vignettes, they find that behaviour controls did increase the salience of all behaviours but that the outcomes for trust were not uniformly negative. Instead, they find that predisposition to trust matters; that is, behaviour controls “encouraged participants to see the behavior they were *predisposed to see*” (Dennis et al., 2012, p. 554, emphasis in original). Referencing both Piccoli and Ives (2003) and Dennis et al. (2012), Robert (2016) tests whether internal monitoring (by team members) and external monitoring (in this case operationalised as monitoring by a supervisor outside the team) affect cognitive and affective trust differently in distributed teams. The author concludes that internal and external monitoring decrease the relationship between cognitive trust and performance, but that internal and external monitoring affect the relationship between affective trust and performance differently. It is worth noting that both Dennis et al. (2012) and Robert (2016) use student samples and so, as mentioned earlier, their conclusions should be confirmed in organisational settings to ensure they are generalisable.

Piccoli et al. (2004) take a broader view, comparing self-directed distributed teams to distributed teams that used behavioural controls. The authors hypothesised that self-directed teams would have better outcomes. However, they found mixed results. Their experiment found no effect of control structure (behavioural control versus self-directed) on coordination effectiveness and only weak evidence in favour of self-directed teams being more effective at communicating (p. 374). They found no relationship between communication or coordination and performance, though coordination and communication were positively related to satisfaction. They did find that control structure (behaviour control versus self-directed) affected performance, with self-directed teams performing better, though their design

relied on student samples and as noted earlier, Gibbs et al. (2017) demonstrate that use of temporary teams and student samples may particularly condition leadership-related results. Piccoli et al. (2004) do make one conclusion that particularly supports the need for the research presented here though, when they conclude that it may not be safe to assume that controls which work in traditional, co-located teams automatically translate into distributed teams:

*One important result that emerges from our work is that simply applying behavioral control practices used in traditional teams to the virtual environment may be ineffective, even counterproductive, and suggests that considerable care must be taken in transitioning from co-located teams to virtual ones. (Piccoli et al., 2004, p. 374)*

This highlights the need for more detailed, organisation-based study into the use of organisational controls in distributed teams.

Much of the research on distributed teams generally, and on organisational control in distributed teams, focuses on the experience or outcomes for individual team members or teams (e.g. Dennis et al., 2012; Jackson et al., 2006; Kurland & Egan, 1999; Piccoli & Ives, 2003; Piccoli et al., 2004). For example, Jackson et al. (2006), takes a critical perspective using a case study of remote knowledge workers. The authors explore how professionalism and technology combine to create self-monitoring or self-control in professional knowledge workers; “an ‘inner panopticon’ of professionalism and high performance which transcends external surveillance and sanction” (Jackson et al., 2006, p. 232). Kurland and Egan (1999) explore relationships between monitoring strategies and perceptions of organisational justice in telecommuters. They note that telecommuters tended to communicate more with their supervisors about non-work-related topics and that employees who

believed their supervisor communicated with them informally and casually perceived more distributive, procedural, and interactional justice.

A smaller set of studies have explored how distance changes managerial experiences or processes. Taking the perspective of performance management and managerial control, Errichiello and Pianese (2016) create a theoretical framework linking changes in control to both antecedents of remote work adoption and outcomes in distributed work. Taking a more individual view, Bélanger et al. (2013) argue that distributed work increases autonomy for workers and that increasing worker autonomy results in increased stress for managers. The authors argue that more worker autonomy means less predictable work outputs:

*One likely outcome is a reduction in the predictability of work output. Partially a result of knowledge work in itself, the addition of autonomy will likely make specific predictions in terms of outcomes, volume, quality, and timing of work less accurate and more difficult for managers. This will be a source of stress and dissatisfaction for many managers, especially as the bureaucratic nature of organizations demands reliability and predictability in operations, and managers will feel pressure to provide that. (Bélanger et al., 2013, p. 645)*

However, assumptions of increased autonomy in distributed work are not universal. Sewell and Taskin (2015) focus on teleworkers, where employees work from home one or two days per week, with an emphasis on employee experience. The authors argue that teleworking may result in more monitoring and, as such, employees may perceive they have less autonomy rather than more. Noting that the technologies that have enabled teleworking have simultaneously enabled new forms of surveillance, they suggest that “there is

still support for Webster and Robins' (1986) 'neoLuddite' argument that the technology may change but the employment relationship is not substantially altered" (Sewell & Taskin, 2015, p. 1509). The authors find that in some cases employees are in fact willing to accept more control than they may be subject to in an office, in acknowledgement of their reduced visibility.

Dimitrova (2003) looks at how supervisory practices changed when some members of the case study organisation moved to teleworking. The author found that control was achieved using "a mix of various mechanisms" (p. 190) including formal and informal rules, procedures, and monitoring. Dimitrova (2003) found that the shift to telework neither created greater autonomy nor more stringent controls, though did find some evidence of work intensification as teleworkers tended to work more hours. Felstead et al. (2003) found a similar outcome, where concern over visibility of work effort can lead home-based workers to over-work. Felstead et al. (2003) found that managers respond to home-based work by introducing new forms of surveillance – either new methods or "reshaping" how existing methods were used, setting more output targets, visiting people's homes, or emphasising trust. Overall, Felstead et al. (2003) note that when direct surveillance is impossible, it is common practice to recommend a shift to output based control. However, the authors conclude that based on their observations, simply recommending a shift to output controls may not be sufficient: "Our paper casts a sceptical light on these recommendations, indicating that they are not so much wrong as over-simplified since they gloss over problems and contradictions inherent in the structure of the social relations that they advocate" (Felstead et al., 2003, p. 261). As such, recommendations to shift emphasis to output based controls may be unhelpful.

While Felstead et al. (2003) found evidence of new managerial control practices, Kurland and Cooper (2002), on the other hand, found little evidence of change in organisational control processes. However, where Felstead et al.

(2003) looked at how specific *practices* had changed, Kurland and Cooper (2002) looked for evidence of the use of three established *categories* of organisational control: output, behaviour and clan control, and found evidence of all three. Similar to Dimitrova (2003) and Felstead et al. (2003), Kurland and Cooper (2002) find that how visible employees feel may be influenced by the types of organisational control used, and that the use of some organisational controls and a sense of isolation in remote workers may be related. This suggests that organisational control may also have productive outcomes for remote workers in that, used well, organisational controls can provide a channel for employees to demonstrate their value.

### 3.7.1 Summary

Overall, what little research exists on the nature of organisational control in distributed teams shows mixed and, at times, contradictory findings on how organisational control processes and outcomes may differ when control occurs across distance. This may be in part because researchers tend to approach the topic with different assumptions about what the nature of working remotely entails for employees and particularly for managers in terms of worker autonomy. Additionally, given the dearth of research and contradictions in these assumptions, organisational control in distributed teams warrants further research, particularly exploratory and grounded research that can shed light on the experience of working and managing remotely.

## 3.8 CONCLUSION

Based on the literature reviewed above, one can conclude that deepening our understanding of distributed work will be of value to organisations and organisational scholars. However, to date research has been based on a variety of research definitions and designs, contributing to contradictory findings. This lack of clear findings makes it difficult to draw strong conclusions or

provide guidance to practitioners on the best way to manage distributed teams. More organisation-based research is needed, and particularly research that reveals the managerial perspective on working remotely.

Furthermore, more research is needed to understand how organisational controls are applied in distributed teams. Therefore, the questions that guide this research are: *Can organisational controls that work in co-located environments be applied in distributed environments, or must managers adapt organisational controls to account for working at a distance? If adaptations do occur, what are the reasons for, and outcomes of, those adaptations?* And lastly, *does this setting – where direct observation is rare, and context is reduced - reveal new perspectives on the role of information and observation in organisational control?*

This research begins to address those questions using an exploratory approach to develop theory grounded in the data. In the next section, I will describe the research methodology used to achieve this.



## 4 METHODOLOGY

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### 4.1 RESEARCH PHILOSOPHY

This research relies primarily on interview data. In Charmaz (2014), the author notes that interviewing, as a means of collecting reliable data has been criticised as not providing accurate access to participant experiences:

*Numerous critics attack the aims and assumptions underlying research interviewing. Paul Atkinson and David Silverman's (1997) ground-breaking article crystallized an array of these criticisms. A number of their criticisms and those who follow them turn on notions of accuracy. Interviews consist of retrospective narratives. What people say may not be what they do, have done, and would do in the future. Interviews are performances that research participants give for particular purposes.*

*Thus the critics warn researchers not to assume that interviews forge direct links to authentic experience and immediate disclosure of the research participant's private self. (Charmaz, 2014, p. 78)*

However, Charmaz ultimately concludes that interviews can provide a powerful experience and remain the most appropriate means of collecting data for some research questions. They are also, she notes, the most common form of data collection in qualitative research (Charmaz, 2014). Brinkmann (2018) goes further, noting that “Our reality is a conversational reality, and the conversation is a fundamental mode of human relationship” (Brinkmann, 2018, p. 583). He makes the point that “Humans have thus used conversations for knowledge-producing purposes (about themselves and their world) as

long as they have had language and communication, and in this sense, the interview is as old as humanity” (Brinkmann, 2018, p. 583).

The use of language and conversation to understand our own experiences gives interviews a particular importance as a research tool. But the criticisms also stand; interviews are retrospective narratives that are influenced by the somewhat unnatural context of the interview, and are not a “perfect” access to previous experiences. However, this concern is somewhat predicated on the assumption that there is some perfect, singular version of the subject’s experience, one that perhaps could be accessed through some other, better method; that the data provided in an interview is only valid and dependable if it exactly matches the subject’s experiences. I am not convinced this assumption holds.

Rather than pursuing some other singular, perfect version of a subject’s experience, I would argue that people’s experience of themselves is complex and multifaceted. In the words of Walt Whitman:

*Do I contradict myself?  
Very well then I contradict myself,  
(I am large, I contain multitudes.)*

*(Walt Whitman, in Hass & Ebenkamp, 2010)*

As such, in an interview, participants will report (for the most part truthfully, I believe) whichever facet or assemblage of their experience seems appropriate for the circumstance. In an interview context, this will ‘assemble’ the participant into an interview subject, searching for the parts of their experience that are appropriate and useful in the context of this particular conversation. Conversational expectations or rules, for example, mean that we assume conversation is a cooperative venture and, to use language in a way that helps achieve common goals, we expect conversational

contributions to be relevant to the topic being discussed (Grice, 1989, cited in Sinnott-Armstrong & Fogelin, 2014, pp. 31-32). While the participant's experience of the topic they are discussing will be complex and multifaceted, they are likely to report whichever aspect of it seems most relevant and useful for the interview.

That this reported facet is not a complete or whole reflection of the participant's experience does not negate the validity of whichever aspect of their experience they choose to report in that circumstance. It is simply a recognition that our lives and experiences are complex and manifold and that it is unlikely that, even to ourselves, we are able to report on them as a whole or in their entirety. We may not be able to, and may not need to, integrate them into a single whole that accurately mirrors some external 'true' experience. This does not mean that what is reported in an interview is necessarily untrue, misleading, or untrustworthy; just that our experiences and our understanding of these experiences does not easily boil down to a single story that can be conveyed.

If we accept that human experience is multifaceted, that we can have multiple 'true' experiences (understandings, interpretations) of any given event or part of our lives, this has some implications for research. Numagami (1998), for example, makes the argument that there is likely no point in searching for invariant laws in social phenomena. He argues that as management practitioners are able to learn from management research, management research, like other research in social domains has "the distinctive feature of double hermeneutic that characterizes the link between theory and practice" (Ghoshal, 2005, p. 77); any knowledge that is developed in management research can alter management practice and thereby disrupt the conditions that sustain any apparently stable patterns in social phenomena. Numagami (1998) states:

*I do not argue that there are no stable patterns in social phenomena. We are able to observe various stable social patterns. What we must not forget, however, is that stable macro patterns in social phenomena are stable not because they are supported by inhuman forces, but because they are reproduced by human conduct. Most observable stability and universality are not generated by invariant and universal laws, but are supported by the stability of knowledge and beliefs... (Numagami, 1998, p. 10)*

As this is the case, Numagami argues, there are no truly invariant laws in social phenomena and, therefore, using criteria that validate results as evidence of invariant laws, drawn, for example from the physical sciences, may be misleading. It may cause us to overlook valid and appropriate evidence.

The non-existence of invariant laws in social phenomena raises, for me, questions about the purpose and value of research and theory-building. I had imagined that theory was the identification and description of underlying laws, for the purpose of prediction. What is theory then, if there are no universal and invariant laws that we can identify in the social realm? For me, the answer lies in the same set of conditions that give rise to the problem: the social nature of the phenomena we study. If we seek to understand, to improve, to explain, to examine the fine detail of social phenomena “reproduced by human conduct”, as Numagami notes, we can only do so by understanding, in as much depth and detail as possible, the experiences of the humans that create these phenomena: how they make sense of their experiences, what matters to them, and how they explain it. Only then can we explain broader social phenomena, which are made up of these individual actions and understandings that ‘support and reproduce’ them. And then perhaps we can, within some limited time and context, and based on our

explanations, predict or alter the situation. Even if the only outcome is a better understanding of each other, and not the identification of invariant laws, that still seems a worthwhile endeavour.

Chia (2008) suggests that Western philosophy can be divided into two fundamental ontologies: an ontology of *becoming* that sees the world as processual, emergent and changing; and an ontology of *being* that considers the world as permanent and entitative. Chia suggests the prevalence of a *being* ontology in Western thought has instilled in management researchers a tendency to “construe theories as being ‘about’ an externally existing and pre-ordered reality” (p. 25). This could also be labelled a ‘realist’ ontological view (Burrell, 1979). While recognising that social phenomena have a changeable nature, for the reasons given above, ontologically many assumptions in the research presented here stem from this ‘being’ or realist ontology. For example, I assume that organisations, teams, the act of managing, and relationships between managers and their staff are “ontologically real, i.e. they exist prior to the research act itself” (Harvey, 2009, p. 2). I also assume that organisational control is “an externally existing and pre-ordered” phenomena (Chia, 2008, p. 25) that I can approach through my research.

So, in my research I tend to believe there is an objective reality “out there” but that our experience of it is not singular or unitary. When asked, as social and conversational creatures we will assemble, consider, and report whatever parts of our experience make sense in the context of that conversation or reflection. There is no easy (or perhaps no possible) way for us as individuals to convey to someone else (and possibly not even to ourselves) the entirety of our experience of this “out there” objective reality that we interact with, but that does not negate its existence. Instead, we select, fit, and interpret parts, dimensions, or facets of our experience to fit what we are thinking and talking about at the time. This means that some phenomena can be treated as “being”, as existing without us and capable of being approached via research, but our

ability to communicate our experience of that thing is partial and selective. This is an unavoidable aspect of researching social phenomena.

This research philosophy might be broadly termed as ‘interpretivist’, particularly with its emphasis on complex and manifold experiences and its stance towards the difficulty of developing invariant laws for social phenomena (e.g. Hatch & Yanow, 2003). However, it differs from some definitions of interpretivism in ways that should be acknowledged. Some descriptions of interpretivism do not appear to encompass a realist ontology (e.g. Burrell, 1979), unlike the research presented here, which does make some realist assumptions as discussed above. Furthermore, interpretivism focuses on participant meaning, which was not an explicit consideration that guided the selection of the research aims, data collection methods, or analysis for the thesis. Thus, while much of this research is interpretivist in nature, it differs from some descriptions of interpretivism (e.g. Lincoln et al., 2011; Schwandt, 1994).

Tsoukas and Knudsen (2005) argue it is important to remember that paradigms are themselves not invariant laws but instead categorisations that we, as researchers, have developed to help us consider and understand the research process:

*...a researcher may have multiple paradigmatic sympathies and, at any rate, subscribing to a paradigm means that one is more likely to be inspired and sensitized by it, than to be buying wholesale into it. It is surprising how often it is forgotten that paradigms are our own constructions—artifacts we have invented ex post facto to make sense of competing sets of assumptions social scientists habitually make—and, as such, they are somewhat idealized descriptions. When we engage in research we do not*

*necessarily buy into an entire paradigm; more realistically, we are oriented by it to explore particular kinds of questions. Moreover, the effective carrying out of research into particular topics of interest entails the 'reworking' of key paradigmatic assumptions in concreto ('in specific sites') and this reworking may well bring about new concepts and syntheses (Tsoukas & Knudsen, 2005, p. 13)*

As such, paradigms ultimately serve to sensitise researchers to specific types of question (Schwandt, 1994), and to answer those questions in specific ways.

Because my interest is in understanding people's experiences, data collection was motivated by the desire to give participants the medium and opportunity to voice their experiences and raise themes that were important to them in their own words. Hence the use of dairies and semi-structured interviews, as discussed below. Analysis focused on first identifying themes participants raised without recasting or "explaining" them on the participants' behalf any more than necessary for analysis to proceed. Having identified these themes, the question driving analysis became: *Are these themes related to each other in some way? Is there some underlying phenomenon occurring that would explain why these themes are important to participants in this research context?* Thus, finally, connecting the participants' voice to the theoretical literature. This process is explained in more detail below.

## 4.2 RESEARCH DESIGN OVERVIEW

### 4.2.1 Interviews

Interviews were chosen as the primary method of data collection, with diary entries complementing the interview data. Collecting data when participants work in disparate locations presents some challenges; in-person observation is difficult without considerable travel and even then, only a portion of the

team, perhaps only one person, could be observed in their normal work environment at any given time. Furthermore, teams often work across multiple time zones. If the researcher and the participants are in different time zones, requesting on-going contact between the researcher and the participants may create a larger burden for the participants than research in the same geographic location or time zone.

Fortunately, distributed work offers considerable benefits for researchers too. It widens the pool of available participants, and participants are already accustomed to collaborating online. For many remote workers, getting on a video call, even with someone they have never met before, is a normal part of their day and not an unusual imposition. For example, one manager opted to meet via video conferencing even though we were based in the same city because it was more convenient for them. Therefore, interviews were chosen as the primary method of data collection for the following reasons: interviews can be conducted via video calling software with participants anywhere in the world; they are (relatively) easy to schedule even in multiple time zones and do not put an undue burden on the participant; and video calling was already a familiar medium for participants. As a researcher, interviewing via video calling offered an additional benefit, in that most video calling software offers the means to record both audio and video streams. This was helpful for analysis because I could replay the video and re-watch both the participant's and my own body language and facial expressions.

Interviews are appropriate for exploring managers experiences because, as King (2004) notes, "The qualitative research interview is ideally suited to examining topics in which different levels of meaning need to be explored. This is something that is very difficult to do with quantitative methods, and problematic for many other qualitative techniques" (p. 21). Eriksson and Kovalainen (2016) suggest that qualitative interviews can be "informal, open, and narrative in nature" (p. 95), which was the case with the semi-structured



interviews in this research. They further suggest that “This type of interview is useful for exploring the research subject in depth and from the participant's point of view” (p. 95), thus making interviews a suitable method of data collection for this research, where the intention was to develop theory grounded in managers’ own experiences of managing distributed teams.

Furthermore, distributed work spans multiple locations and time zones, and I wanted my research to reflect that; I did not want to limit the study to participants located near me. I also wanted the methods of my research to reflect my participants’ experiences. By using the same tools that distributed teams use day-to-day to coordinate and meet with participants, I knew that I would experience some of the same challenges and uncertainties they do, and this would deepen my understanding of their experiences.

#### 4.2.2 Diary Study

Diary studies are another advantageous means of data collection for studying distributed work. They can be completed online and are therefore accessible almost anywhere in the world, whenever suits participants in their local time zone. The diaries in this research were available via either desktop or mobile web browser, increasing convenience for participants and the likelihood that diary entries would be completed. They also require little contact between the researcher and participant, which reduces the challenge of scheduling contact across time zones. Some participants did have questions during the diary study. Those participants chose to ask their questions and have them answered via email (though I made clear that I was also available if they preferred to schedule a call). Hewitt (2017) notes that diary studies are most effective when combined with other methods of data collection, e.g. interviews, as was the case in this research.

Diaries offer methodological advantages for studying organisational control as well. They “permit the examination of reported events and experiences in

their natural, spontaneous context” (Bolger, Davis, & Rafaeli, 2003, p. 580). This provides a “dramatic reduction in the likelihood of retrospection” (Bolger et al., 2003, p. 580). While some behaviours are stable over time, others fluctuate from day-to-day and depend strongly on the situation. Diaries provide a means to capture data on fluctuating behaviour by keeping data collection in context and close to the event (Ohly, Sonnentag, Niessen, & Zapf, 2010). Organisational control is likely to be influenced by interpersonal, situational, and organisational factors, making it context dependent and therefore benefitting from a diary approach.

Furthermore, diaries were completed before the interviews with diary participants, meaning that participant responses were not influenced by interview questions about organisational control and distributed work. Data did arise in the diaries, however, that supported themes that developed during the analysis of the interview transcripts, even though those themes were not anticipated or sought at the outset of the diary study. The diaries also provided a way to identify, in participants’ own words and unprompted, similar events that happened to unrelated participants during the diary study, strengthening the likelihood that these events are somewhat common in distributed teams rather than idiosyncratic to any one team. Lastly, while the diaries were not designed to collect process or longitudinal data, some managers did report on the same event spanning several weeks, so it was possible to begin to see organisational control processes and change over time. This was an interesting glimpse into longitudinal organisational control and warrants more research in the future.

#### *4.2.2.1 Limitations of Diary Studies*

Diary studies face some limitations. Diary participation requires more effort from participants than other data collection methods, e.g. interviews. As such, diaries can suffer problems with participation dropout or missing data from skipped entries (Ohly et al., 2010). To minimise this risk, each diary entry

was only five questions that required written responses (plus one checkbox and one optional question). To encourage completion, diary participants were emailed a link to the online diary each week, and a reminder if the diary was not completed. Completion rates are described later.

Diary entries were made convenient by being completed online, and managers were encouraged to complete the diary at whatever time of day suited them. This introduces a delay between the recording and the event being recorded, and therefore more risk of retrospection bias, however the risk was judged to be relatively small compared to the advantage for data collection.

#### *4.2.2.2 Reflexivity and Reactivity*

Researchers have noted that “written diaries allow for more intimate introspection than interactive, face to face accounts” (Hewitt, 2017, p. 348) and allow the participant to reflect on events and their reactions. As such, they may provide more detailed or considered responses, which is helpful for answering ‘how’ and ‘why’ questions (Morgan & Symon, 2004). However, the process of completing the diary and reflecting could cause behavioural changes or reactivity in the participant, thereby altering the research outcome.

Bolger et al. (2003) note that “At present, there is little evidence that reactance poses a threat to diaries’ validity. For example, Litt et al. (1998) reported that although their participants noted being more aware of the monitored behavior, the behavior itself was not reactive” (Bolger et al., 2003, p. 592). This suggests the advantage of considered reflection in diary entries outweighs the risk of reactance. Furthermore, two managers mentioned that they had enjoyed the process of completing the diaries. They felt it provided a rare and valued opportunity for them to reflect on their week. In this sense, the research design allowed the participants to benefit from participating, in some small

way, as well as providing value to the research. Details of the diary data collection process are discussed below.

### 4.3 RECRUITING

#### 4.3.1 Recruiting Participants

The recruitment process took an unexpected turn. Recruitment began using the snow-ball method where I alerted professional and personal contacts via social media that I was looking for participants for research on distributed work. This generated seven contacts – four of whom were currently managing a distributed team, two who had recently left roles where they managed distributed teams, and one employee who worked in a distributed team.

As these initial participants began to take part in the research, a friend made me aware of a conversation on the social media platform Twitter (<http://www.twitter.com>) enquiring about the state of academic research on remote working. In response to this, I published a short article on <http://www.medium.com> collating some research that I thought might interest practitioners and tweeted the article's existence. At the end of the Medium article, I mentioned that I was recruiting for research participants and provided my contact details.

The article was popular. It was published on April 10<sup>th</sup> 2018. Within a day, it had received over thirty thousand “impressions” on Twitter. An impression is defined in the Twitter interface as “Number of times users saw the tweet on Twitter”.

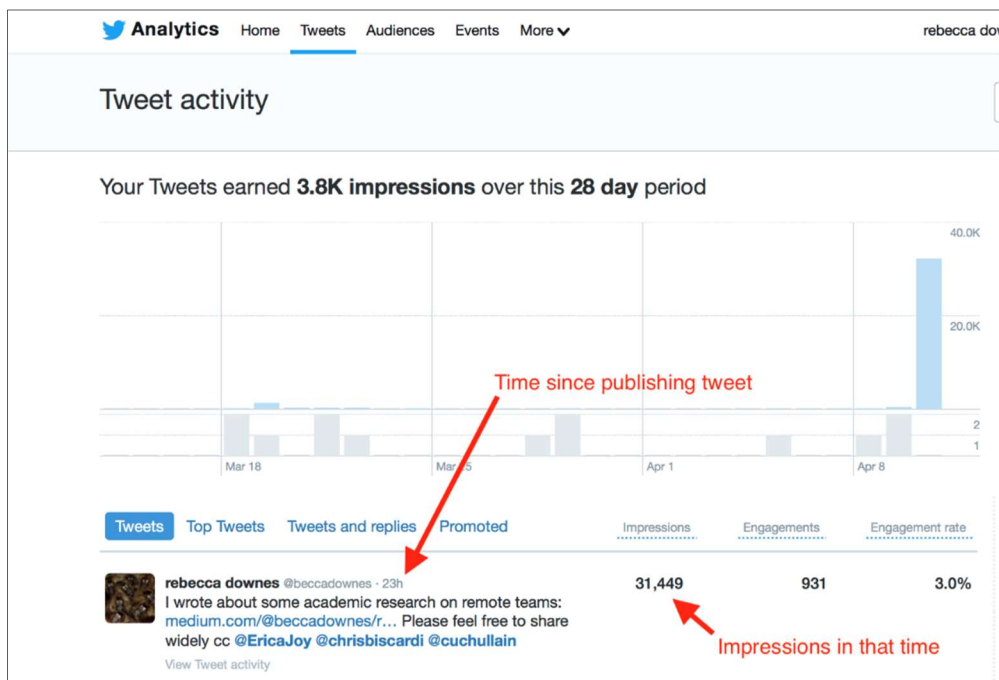


Figure 1: Twitter analytics screenshot 11-04-2018

Within two days, the Medium article had been viewed two and half thousand times, with Medium.com estimating that three hundred people had read the article to the end. Within two weeks, the tweet had received nearly seventy-five thousand impressions and the Medium article had been viewed over eight thousand times, with roughly one thousand people reading the whole thing.

The Medium article spread beyond Twitter. People told me they had come across it on industry newsletters and blogs and shared within their teams and companies on internal mailing lists and in chat rooms.

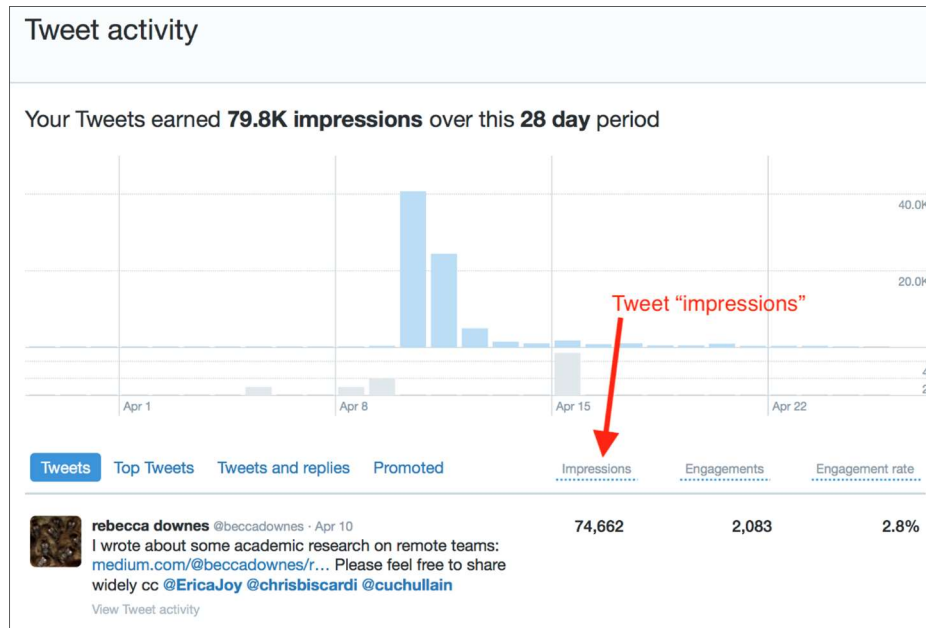


Figure 2: Twitter analytics screenshot from 25-04-2018

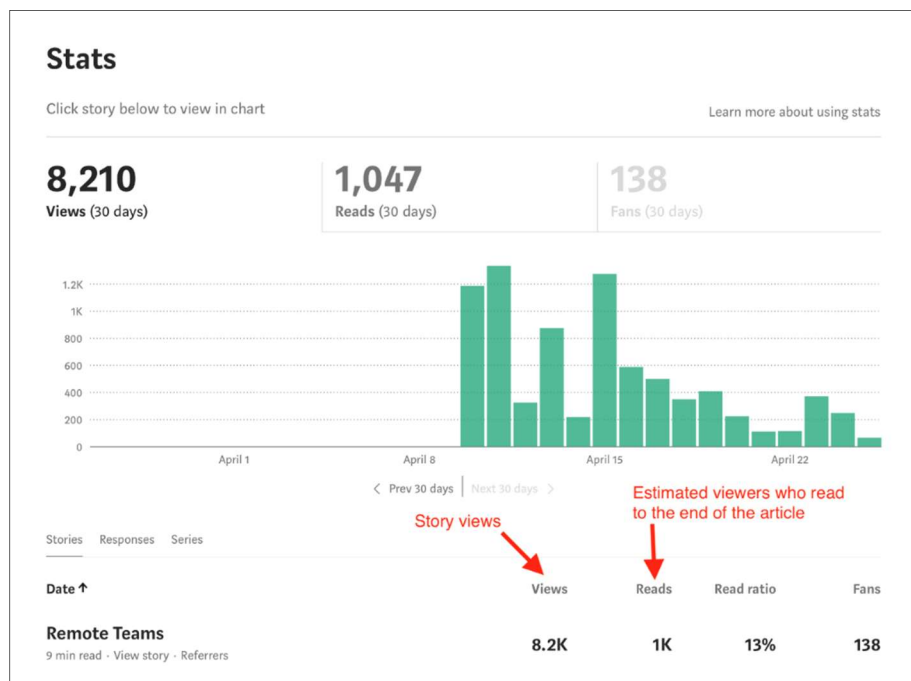


Figure 3: Medium.com "Story Stats" screenshot 25-04-2018

By November 2019, the tweet had received over ninety thousand impressions. The Medium.com article had received nearly eleven and a half thousand views and has been read to the end approximately 1,400 times.

People from all over the world began to contact me, volunteering to participate in my research, and I began on-boarding participants who met the sample criteria.

#### 4.4 SAMPLE CRITERIA

While this research relies on existing virtual team literature, the focus is not how distributed work affects the entire team but specifically how managers undertake the task of managing distributed staff. As such, the key criteria for participation was that the manager had at least one staff member they considered to be remote. The manager's remote staff member(s) also needed to be a direct report, a member of the same organisation, and part of an on-going team rather than a short-term, project-based team.

As the reviews from Gibbs et al. (2017) and Purvanova (2014) identify, there may be important differences between temporary and permanent teams when considering remote work. On that basis, potential participants were excluded because their work was highly project-based and teams were short-lived or because their teams drew members from multiple organisations. Prior to inclusion, managers were asked to describe how many people were in their team, where they were located, how the team worked, and how often they saw their direct reports in person, and were included or not based on their responses.

#### 4.5 PARTICIPANT CHARACTERISTICS

Because the focus of this research was on managerial responses to managing remote staff, I had not initially planned to interview employees. The employee perspective on managerial actions is as important as the managerial

perspective but I was concerned that a research design which depended on recruiting sufficient employees as well as managers would be too ambitious for the time and resources available. When a handful of employees did volunteer to participate in the research, I took them up on the offer. Thus, thirty-four managers and eight employees participated in the research.

The managers' teams ranged in size from two staff to 34, with a median team size of seven. While many of the teams worked in software or technology-enabled companies, other industries include agriculture, public sector, and professional services providers. Table 1 provides an overview of participant team characteristics. Industry classifications are based on Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006. Broad classifications are used to ensure participant confidentiality.



Table 1: Participant Team Characteristics

Manager	Industry Classification	Team Size
Manager 1	Arts and recreation services	2
Manager 2	Other services	23
Manager 3	Agriculture, forestry and fishing	8
Manager 4	Information media and telecommunications	20
Manager 5	Public administration and safety	10
Manager 6	Information media and telecommunications	7
Manager 7	Information media and telecommunications	Varied in different roles
Manager 8	Information media and telecommunications	
Manager 9	Information media and telecommunications	
Manager 10	Arts and recreation services	6
Manager 11	Information media and telecommunications	12
Manager 12	Information media and telecommunications	5
Manager 13	Information media and telecommunications	34
Manager 14	Information media and telecommunications	7
Manager 15	Information media and telecommunications	11
Manager 16	Information media and telecommunications	2
Manager 17	Other services	7
Manager 18	Information media and telecommunications	15
Manager 19	Information media and telecommunications	37
Manager 20	Professional, scientific and technical services	20
Manager 21	Information media and telecommunications	6
Manager 22	Information media and telecommunications	5
Manager 23	Information media and telecommunications	10
Manager 24	Information media and telecommunications	13
Manager 25	Information media and telecommunications	5
Manager 26	Information media and telecommunications	9
Manager 27	Information media and telecommunications	4
Manager 28	Information media and telecommunications	4
Manager 29	Information media and telecommunications	7
Manager 30	Professional, scientific and technical services	6
Manager 31	Information media and telecommunications	5
Manager 32	Information media and telecommunications	6
Manager 33	Information media and telecommunications	4
Manager 34	Information media and telecommunications	6

All managers were currently managing or had recently been managing a team with at least one direct report they considered to be remote. None of the teams had all their members located in the same city. Some teams were located in the same country and others were spread across multiple countries. Some managers worked from home and others worked in company offices. In none of the teams was the manager the only remote member of the team. Instead the manager was part of a team where some or all of the other members worked at a distance to each other.

Of the eight employee participants, seven volunteered from the same organisation after a manager shared details of the research and asked for participants. The eighth employee participant was recruited via a colleague. Some limitations of this sample are discussed later, in the Findings and Conclusion chapters.

#### **4.5.1 A Note About Participant Gender**

In an oversight, I did not ask diary or interview participants to specify their gender identity. As I was to meet participants via video conference, I unthinkingly assumed I would simply “know” which gender applied. However, upon reflection I realised that was not a reasonable assumption on my part. As such, I have not provided a breakdown of participant gender. Furthermore, I have deliberately used gender-neutral language when referring to individual participants e.g. in the Findings chapter. While this can make the writing slightly more difficult to read, it goes some small way to avoid inserting my assumptions about participants into the data.

#### **4.5.2 Participation Type**

As the focus of the research was managerial enactment of organisational control when managing remote staff, most of the data collection focused on managers. As mentioned above, managers could participate in an interview and/or a diary study. There was no minimum or required type of data

collection; managers could choose the type of participation they felt would work for themselves. The type of participation selected did not seem to be influenced by any obvious characteristic of the participant, their team, or organisation. As such, I do not expect systematic differences in the data based on the type of participation they opted for. The number of managers who participated in each type of data collection are indicated in Table 2, below.

*Table 2: Types and Numbers of Managers Participating in Each Part of Research*

<b>Type of Manager Participation</b>	<b>Number of Managers Participating</b>
Interview only	18
Diary only	2
Interview and diary	13
<i>Total</i>	<i>34</i>

Employees, and managers who had recently been (but were not currently) managing a distributed team, were invited to take part in an interview only. Given the diary data collection required the participant to be currently managing a distributed team, this type of participation was not offered to those participants.

#### 4.6 ON-BOARDING PARTICIPANTS

Most potential participants contacted me via email. A small number contacted me initially on other platforms (e.g. Twitter and Slack) but the conversation moved to email almost immediately. If participants met the selection criteria, based on information they initially provided or in response to follow-up questions by email, I invited them to a short video conference meeting. The initial meeting was an opportunity to ask about their work and their team, and for me to describe the research in more detail. This gave participants a chance to understand the research and ask questions before deciding whether to proceed.

Employees, and managers who were not currently managing a remote team, were invited to take part in an in-depth interview. For these participants, a video conference or in-person interview was arranged by email.

Participants who were at that time managers of a team that fit the selection criteria were offered the opportunity to participate in the diary study and/or an interview. For those that agreed to participate, further communication to schedule interviews and/or diary participation was generally via email as this was easier to coordinate across time zones and less disruptive for participants.

## 4.7 DATA COLLECTION

### 4.7.1 Informed Consent

Participants in the interviews and in the diary study were provided with information and consent forms at the outset of the process (provided in Appendix A: *Participant Information and Consent Forms*). I also talked with participants via email and/or met with participants via video conference to describe the research and answer questions before they decided whether to proceed, and made myself available via email and for calls if questions arose during the research. Before starting to record during interviews, I checked verbally that the participant was happy to be recorded and answered any questions they had about the process.

### 4.7.2 Interview and Diary Questions

As discussed in the Literature Review, monitoring is a necessary component of organisational control and the availability of information via monitoring is generally believed to shape control practices in organisations.

To explore control in this research, in the diaries and interviews I asked managers a variety of questions about their hiring and on-boarding practices (input targets), how they identified and addressed issues in their teams, and questions about what they monitored within their teams. I used monitoring

practices as a proxy for control practices for several reasons. First, as discussed earlier, because of the centrality of monitoring to control. Second, my prior experience talking to managers suggested that the term ‘control’ can have negative associations for managers, who often associate it with coercive control and can be concerned that it overlooks the enabling or empowering aspects of their role. With that in mind, I was conscious that using the term ‘control’ may be off-putting for managers. Asking managers about their monitoring practices offered a way to elicit a more complete picture than asking about their control practices, without moving outside of the concept of control. Third, working with the assumption that managers have limited time and attention, it is unlikely that managers gather information unless they feel it could be used. Given that control is a central part of their job, whatever is most salient when they discuss monitoring is likely to be an important part of their control processes. Finally, asking about monitoring rather than specific control practices meant that I did not need to restrict my questions to control practices that have been identified in extant literature (for example, behaviour control via rules). This ensured that managers could talk about monitoring and control practices that fell outside the established categories in the organisational control literature.

However, asking about monitoring rather than control directly may have introduced limitations. For example, there may be control targets that managers utilise that are not reflected in their monitoring practices. As this research did not set out to generate a complete map of control practices, only to identify changes caused by having staff working remotely, I judged this to be a reasonable trade-off. Limitations of the research are discussed in more detail in the Limitations and Future Research section, in the final chapter.

#### **4.7.3 Diary Procedure**

Participant managers were asked to make eight diary entries: one diary entry per week for eight weeks. In the diaries, I used five questions to encourage

the manager to reflect on one instance in the preceding week where they felt they needed to change the behaviour of someone on their team. The question was not intended to focus managers' attention on behaviour controls (and indeed managers reported instances where they had been alerted to an issue via other control mechanisms such as a change in output). Instead, recognising that control involves influencing employee behaviour, the question was designed to bring to mind one instance where the manager needed to enact organisational control.

While diaries can be used to gather data on change over time, that was not the intention here. Instead the diary entries generated multiple data points to build up a picture of organisational control for that manager and to complement or enrich information gathered in interviews.

Diaries were filled out online using a secure electronic form. While diary data is confidential, it cannot be anonymous as the diary entries are linked to individual participating managers and were used to inform subsequent interviews.

For each manager, I created a series of eight short Qualtrics surveys. Each survey constituted one diary entry, with each week's survey containing the same six diary questions: five questions relating to organisational control enactment and one freeform question where they could optionally provide other thoughts or feedback. A copy of the diary questions is provided in Appendix C: *Diary Study Questions*.

#### 4.7.4 Diary Reminders

Diary surveys were set up for participants in advance and reminder emails were sent automatically with links to complete that week's diary. I used Qualtrics' scheduling functionality to automatically email participants a link to each week's diary and if the participant had not completed the diary within 5 days, Qualtrics sent an automatic reminder. I scheduled the emails to arrive

towards the end of each participant's work week, generally on a Thursday afternoon in their local time zone, ensuring enough of the week had passed for reportable events to occur but avoiding asking managers to complete the diary on their weekend, when they may prefer not to reflect on work.

A total of fifteen managers took part in the diary study, generating 62 diary entries (an average of four each) over eight weeks. While every effort was made to keep the diaries quick and easy to complete, only two managers completed all eight entries. Diary entries that were not completed often included notes from the manager to the effect that the manager had been on leave, had been too busy to complete the diary that week, or could not recall an instance of needing to change an employee's behaviour. For example, one diary entry read, "Literally could not think of an issue like that for this week which I guess is a good thing :-)" (the manager in question was able to complete entries for several other weeks). However, because the diaries were generating instance data to complement the interviews, not tracking change over time, missing entries should not skew the analysis.

#### **4.7.5 Interview Procedure**

I used a semi-structured interview protocol. Thirty-two managers and eight employees took part in interviews.

Manager interviews lasted between 30-80 minutes, with an average recorded interview time of 52 minutes and totalling 34.5 hours of recorded audio and video. Manager interviews generated 843 pages of transcribed interview text (just shy of 320,000 words).

Employee interviews were a similar length, with the longest being 57 minutes and the shortest 40 minutes. The average interview duration was 49 minutes. Employee interviews generated just less than six hours and 40 minutes of recorded video and audio, and 166 pages of transcribed text. The semi-

structured interview protocols are available in Appendix B: *Semi-structured Interview Schedule*.

Manager interviews occurred in two sets. Managers who were not participating in the diary study were interviewed at their earliest convenience. These interviews occurred between March 2018 and June 2018. Employee participants were also interviewed during this time. Managers who were participating in the diary study and interviews were interviewed after the diary study was complete. This second set of interviews was conducted between July 2018 and late September 2018. To accommodate participant availability, I could not complete a full analysis of the diaries before the second set of interviews commenced, but I was able to read the completed diaries and use the interviews to check my interpretation of the diary entries.

## 4.8 ANALYSIS

Both the interviews and diaries provided qualitative responses, guided by the research aim to explore organisational control in distributed teams but open enough to ensure participants could raise any themes they considered relevant. Because relatively little research exists on organisational control in distributed teams, the research was designed to be exploratory. Furthermore, I planned to inductively develop theory from the data. With these intentions in mind, data analysis was multi-phase and based on methods derived from grounded theory (Charmaz, 2014; Corbin & Strauss, 2015; Gioia et al., 2012). Through-out the analysis process, I kept notes on the process I was using, the reasoning for the decisions I had made, and the advantages and problems that I encountered as analysis progressed. Much of what is reported below is drawn from those notes.

### 4.8.1 Analysis Overview

I divided the analysis into two phases. In the first phase, I transcribed and analysed the first set of manager interviews. This was an in-depth analysis



designed to surface themes that emerged during the interviews and potential relationships between those themes. There were several steps involved in this phase of the analysis, which I describe in more detail below.

The timing of the interviews was driven by participant availability rather than the research schedule. However, the need to conduct the two sets of interviews at different times (non-diary participant interviews first and post-diary participant interviews later) presented an opportunity to split the data into two parts. That allowed me to use the second set of interview data to test and to refine the theory that had been tentatively developed in the first phase of the analysis. With that in mind, the later set of manager interviews (post-diary study), the diary data, and the employee interviews were held back for use in the second phase of the analysis. The transcription and analysis of the second set of manager interviews, the diary data and the employee interviews occurred after the first phase of the analysis was complete, commencing early 2019.

Once an initial theoretical framework was developed from the first phase of analysis, I converted this into a coding framework designed to test the theoretical framework against the remaining data. The second phase of analysis used the diary, employee, and post-diary manager interview data to refine the theory developed in the first phase. While the second set of data was not, of course, independent of the first set of data, the data in the second set of interviews was collected before the analysis of the first set was complete and before any theory was articulated. Therefore, if the same themes emerged strongly and did not contradict the initial theory, this would provide some confirmation of the theory's fit to the data.

A simplified overview of the research process is provided in Figure 4. It is an artificial convenience to represent analysis as separate from other steps as analysis naturally occurs during almost all contact with the data – during

interviews, during transcription, while writing analytic memos, etc. However, in this diagram analysis is represented separately to indicate periods where the other work of data collection and preparation was complete, and analysis was my primary task. Each of these steps is also explained in more detail in the following sections.

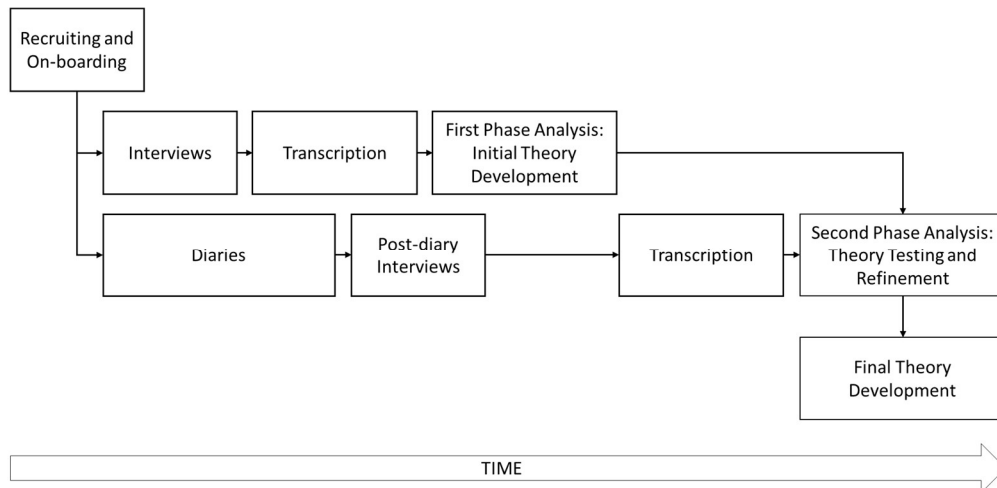


Figure 4: Simplified Overview of Research Process

#### 4.8.2 First Phase Analysis: Theory Development

With the intention to inductively develop theory grounded in the data, analysis was informed by methods such as those described by Charmaz (2014) and Corbin and Strauss (2015) but most closely followed those outlined by Gioia et al. (2012).

The first phase of analysis used transcriptions of 19 manager interviews, more than half the total of 32 manager interviews. I transcribed the first ten interviews by hand using the qualitative data analysis software package NVivo then used an automated online service (<https://www.temi.com/>) to transcribe the rest. The transcripts provided by the automated service were only partially accurate so for each of these interviews I listened to the entire

interview again, checking the transcription word for word and making corrections as needed before beginning analysis.

#### **4.8.2.1 First-Order Analysis: Initial Coding**

As mentioned above, both phases of the analysis had their own coding framework. In the first phase, the coding was developed from the data. As the research was intended to be exploratory and support developing theory from the data, a key consideration was ensuring the analysis allowed participant voice to be heard. Denny Gioia expresses this as follows:

*Beyond a basic assumption that the organizational world is essentially socially constructed, my methodological approach is predicated on another critical assumption that my informants are “knowledgeable agents.” ... that people at work know what they are trying to do and that they can explain to us quite knowledgeably what their thoughts, emotions, intentions, and actions are. (Gehman et al., 2017, p. 291)*

He goes on to say:

*Above all, I’m not so presumptuous that I impose prior concepts, constructs, or theories on the informants to understand or explain their understandings of their experiences. I go out of my way to give voice to the informants. Anyway, my opening stance is one of well-intended ignorance. I really don’t pretend to know what my informants are experiencing, and I don’t presume to have some silver-bullet theory that might explain their experience. I adopt an approach of willful suspension of belief concerning previous theorizing. (Gehman et al., 2017, p. 291)*

With this perspective in mind, interview data was first analysed to identify categories using an Initial Coding approach (Charmaz, 2014; Saldaña, 2016). Following Corley and Gioia (2004), data was coded using “in-vivo or first order codes (i.e. language used by the informants) whenever possible, or a simple descriptive phrase when an in-vivo code was not available” (Corley & Gioia, 2004, p. 183, references removed). In the first cycle of coding, I felt it was important to represent the participants’ emphasis and ‘mental models’ as completely as possible. So, to ensure that I did not overlook subtleties in how participants expressed ideas, comments were coded into categories using participant framing even when the content of the responses might superficially seem the same. For examples, comments about “the benefits of spending time face-to-face” and “the disadvantages of working remotely” were coded separately, even though in many cases these referred to the same or similar concepts but expressed differently (the benefit of one often being the disadvantage of the other when it is missing). This ensured that how participants conceptualised these ideas was not subsumed by how I conceptualised them. Great care was taken to represent participant perspectives in this initial stage.

Furthermore, the first coding cycle attempted to identified as many themes (or what Gioia et al. (2012) call categories) in the data as possible rather than attempting to shape or limit the categories to fit a particular theoretical scheme. In my research diary from this time, I noted that while this approach would generate a lot of categories, many of which would need to be discarded later, all coding schemes highlight some data and throw other data into shadow, and at this early stage it was impossible to tell what would be most important. Charmaz (2014) suggests that the goal of Initial Coding is to “remain open to all possible theoretical directions suggested by your interpretations of the data” (cited in Saldaña, 2016, p. 115). Therefore, I took

the more comprehensive route of coding almost all the themes that emerged in the data.

The first cycle of Initial Coding generated 156 codes. Saldaña (2016) comments that it took years of experience with qualitative data before he felt comfortable coding only what seemed important, rather than all the data, and that novice researchers often code “anything and everything that was collected” (Saldaña, 2016, p. 18). That certainly resonates with my experience. The initial list of categories was somewhat overwhelming, and I look forward to having enough experience that I do not feel the need to code ‘anything and everything’!

However, I did not code every part of the interview transcripts. I did not code the introductions, for example. Furthermore, because the interviews typically started with some background information on the participant and their team, and because participants often illustrated ideas with examples from their own workplace, there was some data that was so specific to one team or one organisation that it was unlikely to contribute to generalizable theory. For example, unless comments specifically related to working remotely, I did not code parts of transcripts where people described their organisation-specific or industry-specific project management workflows (e.g. how they allocated work assignments), generic management-related ideas (“it’s important to hire good people”), discussions about physical workspaces (the importance of having an appropriate workspace when you work from home often comes up when you ask people about working remotely), or individuals’ work histories (unless they used it as an example of a concept or process in the context of remote working). Here, while keeping an open mind, I relied on my professional experience and my pre-existing knowledge of remote work literature to determine what could be excluded. If I was uncertain, I erred on the side of including the data in the coding.

#### 4.8.2.2 Analytic Memos

The content of each category developed in the first coding cycle was then re-analysed and an analytic memo was developed for each category. This process gave me another opportunity to examine the data in depth and to begin to understand the key themes that were emerging. The memos summarised the content of the categories, noted any questions or early observations the data indicated to me, and identified possible relationships with other categories. In some cases, the relationships indicated that two or more categories shared sufficient overlap that they could be combined without losing precision. In other cases, the lack of relationships or sparsity of data indicated that the category could be removed. In the remaining cases, the relationships were simply noted, along with any potential theoretical directions those relationships suggested. Identifying the relationships between categories allowed me to begin to assemble the Initial Coding categories into higher-order themes (Corley & Gioia, 2004). Gioia et al. (2012) note that the process of identifying similarities and differences between the initial codes is similar to Grounded Theory's axial coding.

Once all the categories had associated analytic memos, I was able to combine and remove unnecessary categories leaving just the categories that suggested interesting theoretical directions. At each stage where categories were altered or removed, I created a new version of the data file so that I could retrace my steps if needed. Examples of categories that were combined at this point include: *gossip*, *back channel* and *grapevine*; *getting the human story* and *getting enough or the right information*; *pressure to be available* and *bring present*. Examples of categories that were removed include: *leave policies*; *internationalisation*; *investors*; *mission*; *meetings*; *financial benefits of remote work*; *physical location*; *work-life balance*; and *efficiency*.

#### 4.8.2.3 Phrasal Descriptors

At this point, peripheral categories had been removed and it was time to move into what Gioia et al. (2012) call second order analysis, where the higher-level themes that emerged from the initial categories can be examined. However, before moving onto second order analysis, for clarity it was also necessary to replace the initial in-vivo or first order category names, which were relatively short, with longer titles. Gioia et al. (2012) call these “phrasal descriptors” (Gioia et al., 2012, p. 20). Replacing the shorter category names with longer and more descriptive phrasal descriptors served two purposes: it provided another opportunity for me to examine the data in-depth, and it reduced ambiguity and potential misinterpretation of what the category name represented. For example, an initial category existed called *appreciation*. This was created to group all instances where participants talked about showing or receiving appreciation. In writing the analytic memo, a theme emerged *within* this data and the category name was replaced with a phrasal descriptor that referred to the *Need to intentionally create opportunities for people to show their appreciation of each other*. Rather than simply talking about processes of showing appreciation, participants had talked about how those processes needed to be intentionally supported in remote work.

At this point I had 47 categories represented by phrasal descriptors and was able to begin second-order analysis: examining these categories’ relationships and identifying higher order themes. The initial list of phrasal descriptors is provided in Table 3, along with initial, tentative theoretical implications these categories suggested. Note that some of these categories were dropped, renamed or adjusted in later analysis but are provided here to support transparency of the analysis process.

Table 3: List of Phrasal Descriptors and Tentative Theoretical Implications from First Analysis Phase

Phrasal Descriptor	Theoretical Implication?
There is a need to intentionally create opportunities for people to show their appreciation of each other	Lack of physical proximity has to be compensated for
Asynchronous workflows are seen to be desirable and necessary but require different ways of working	
Culture needs to be created deliberately, it won't 'just happen' the way it might in co-located teams	
Managers feel pressure to be available to staff across multiple time zones outside their 'normal' working hours	
When hiring junior staff, they will "need to go somewhere when they're green"	
On-boarding may require more intentionality because people won't learn as quickly "by osmosis" from the people around them	
Meeting in-person is important for developing and maintaining relationships	



Phrasal Descriptor	Theoretical Implication?
Time zones are frustrating because people want to do some things synchronously (e.g. have meetings, collaborate, social contact). This is so important that it shapes team growth and structure.	
Metrics are difficult to use because they're difficult to define well	Metrics alone are not sufficient
Managers worry more about their team overworking than underworking	
Managers will use peers to check performance, etc.	
There's a lot of information that's made visible but it can be difficult to define metrics that are informative instead of misleading	
Varying degrees of reliance on metrics, some reliance on noticing changes in output	
Awareness that performing well is not just performance, it's also a perception that you're performing well and being seen.	
Work output is measured using: peer review, rework, through-put, delivering on promises, observable metrics. Changes in communication and changes in work output are the two big red flags.	
Visual cues and body language are missed	

Phrasal Descriptor	Theoretical Implication?
Giving feedback on sensitive issues requires as much face-to-face communication as possible (e.g. via video or in person) to avoid misinterpretation	Communication is uncertain
Managers find they become more mindful of 'how you're communicating, how that is going to be received by the person'	
It's easy to misunderstand someone, particularly someone's intent. Video seems to help.	
Video conferencing is highly valued and expected to be "on by default"	
Having to explicitly write everything down can create a kind of efficiency that's valued	Remote work creates large quantities of recorded information
Information is spread across multiple channels - documentation, collaboration tools, Slack, email, etc so there's more effort in keeping up and more risk of missing something	
Writing things down to assist collaboration means access to a lot of information that persists over time, and creates/requires a culture of openness and equality.	
Sense that remote work is harder than co-located and there may be scaling/growth limitations	Managing remote staff takes more work than managing co-located staff
In theory managing remote teams should be less work because "you can just focus on what really matters, which is the work" but actually it's a heavier workload	
Risk of task or direction misalignment caused by ineffective or invisible communication	

Phrasal Descriptor	Theoretical Implication?
You can't trust appearances because remote work context creates barriers to communication and people hold things back	Incomplete information creates risks
It's easy for context information to be missing in remote communication, things become 'out of context'	
In remote work it's more difficult to assess or measure whether everyone's happy than measure whether everyone's performing	
Remote working leads some people to feel more uncertain and seek more reassurance about their performance and place in the team	
Managers monitor for changes in tone and frequency of communication to indicate potential problems. Changes in communication behaviour and changes in work output are the two big red flags.	
Delays in communication can create frustration and a sense that things are out of control	
The ability to communicate clearly is highly valued	Communication is important
Communication in remote work requires intentional effort to be effective	
Side conversations have a light and dark side but seem to function differently in remote teams	

Phrasal Descriptor	Theoretical Implication?
When there's a potential problem, managers tend to want to increase contact with the person in question	Relationships are valued and provide important context
Managers explicitly encourage their staff to communicate with more personality or sharing personal info	
Conveying, managing and monitoring emotions takes on greater salience, which requires emotional energy	
There may be a difference in perceptions of authenticity and genuineness in relationships	
The need to "dig in" to relationships and people, to compensate for risks from lack of other cues	
It is expected and encouraged to bring personal information into the workplace - it helps relationships and provides context	
One-on-ones are given high priority. They're often more frequent and longer than you might expect in a co-located team.	
Relationships are important because understanding the person provides important context and better ability to direct things	
Managers expect remote staff to work with more autonomy	

Phrasal Descriptor	Theoretical Implication?
A desire to provide flexibility as it's a more 'enlightened' way to manage the team, shifting the emphasis from factory-like behaviour to trust and measuring work outputs	Managers believe their staff are more autonomous because they work remotely
Attributes that managers look for: senior, experienced, self-managing, forthright, autonomous, good communicator, have worked remotely before	
Managers explicitly talk about how much they trust their teams. Traditional co-located work is often equated with a lack of trust.	

#### *4.8.2.4 Second-Order Analysis*

Gioia et al. (2012, p. 20) observe that “In this 2<sup>nd</sup>-order analysis, we are now firmly in the theoretical realm, asking whether emerging themes suggest concepts that might help us describe and explain the phenomena we are observing”. The second order analysis moves from participant-centric codes to researcher-centric codes, informed by both participant data and existing theoretical concepts (Gioia et al., 2012). Here I experimented with a variety of ways to visualise and explore the relationships between the codes including mind maps and grouping related codes in a process much like axial coding (Charmaz, 2014; Saldaña, 2016) to attempt to identify the important ‘axes’ or central relationships in the data. This provided another opportunity, and another format for, constant comparative analysis of the data (Charmaz, 2014; Corbin & Strauss, 2015) as I used software tools within NVivo but also printed phrasal descriptors on paper and physically moved them around, allowing me to literally look at the categories from a different angle while also constantly referring back to the source data. Ultimately the method that proved most successful was listing and grouping first-order concepts to identify second-order themes and then analysing second order themes to identify aggregate dimensions, similar to the method presented in Gioia et al. (2012).

#### *4.8.3 Second Phase Analysis*

At this point, the first phase of analysis was complete. Having undertaken the first and second order analysis of the initial set of manager interviews, I was able to articulate a tentative theory to explain the themes that were emerging in the data.

I then moved into the second phase of analysis (indicated in the third row of Figure 4). I created a coding structure designed to test the initial theory against the remaining data: the second set of manager interviews, the diary data, and

the employee interviews. The intention was to identify any areas where the remaining data contradicted or modified the initial theory, and to surface any important themes that were not represented in the initial theory.

#### 4.8.3.1 Coding Structure

The initial, tentative theory identified five main themes: *Control*, *Effort*, *Information*, *Manager Relationships*, and *Risk*. For each of these themes, I coded for sub-themes, designed to test the validity of the initial theorising. For example, the initial set of data suggested that managers find managing distributed teams to be more effort than managing co-located teams. To test this, I created three sub-themes under the main *Effort* theme: *More Effort*, *Same Effort*, and *Less Effort* and coded all mentions of effort into one of these three categories. Similarly, under the main theme of *Control*, I created a sub-theme for *Monitoring*. Within *Monitoring*, I coded for *Behaviour* and *Output Monitoring*, as indicated in existing organisational control theory. I also coded for things managers explicitly mentioned that they did *not* monitor, and created a sub-theme called *Other*, where I could code anything that managers mentioned they monitored that did not fit into the other categories. This ensured that I did not overlook types of monitoring that managers mentioned simply because it did not fit into pre-existing theoretical categories. As discussed later in the Findings section, in this process an additional category of monitoring became apparent, which I added to the coding structure. At the time, I called this category monitoring for *Relationships-Personal State*.

The coding structure developed from the first phase of analysis, used to test the initial tentative theory is provided in Table 4, with codes sorted alphabetically. As this coding structure was developed from the initial, tentative theory, it uses short codes rather than phrasal descriptors.

Table 4: Coding Structure for Testing Theory in Second Phase Analysis

Category		
Control		
	Actions	
	Autonomy	
	Communicating expectations	
	Input-hiring	
	Metrics	
	Monitoring	
		Behaviour
		Isn't monitored
		Other
		Output
		Relationships-Personal S
Effort		
	Less effort	
	More effort	



Category			References
	Same effort		7
Information			
	Context		66
	Explicitness and transparency		65
	Less information		57
	More information		19
	Same information		18
	Sources		149
Manager Relationships			
	Different relationships		39
	Emotional content		10
	Methods of developing relationships		47
	Personal info in workplace		24
	Reasons-Importance		68
	Same relationships		10
	Trust		16

Category			References
	Vulnerability-Intimacy		10
Risks			
	Being ignored		4
	Feeling left out		6
	Hidden information		67
	Insecurity-Morale-Feedback		19
	Misalignment		25
	Misinterpretation		12
	Prioritisation		11
	Relationships		4
	Slowness or turnaround time		3
	Training & on-boarding		6
	Work time and effort		12

#### 4.8.3.2 Theory Adjustment

The five main themes identified in the first phase analysis persisted through the second phase, but the emphasis shifted. In the initial tentative theory, there was a strong emphasis on the role of information, context, and control. After the second phase of the analysis, it became apparent that the relationship between perceived risks and reduced visual cues held more explanatory power, as elaborated in the Discussion chapter. This shift in emphasis suggested that the coding structure should be adjusted to provide more fine-grained analysis. The adjusted coding structure is included below in Table 5, with codes sorted alphabetically. The updated structure provides more fine-grained coding of the reasons participants gave for emphasising relationship building, risks were categorised, and *Relationships-Personal State* category was renamed *Mind-set* (and ultimately renamed again later in the write-up, in an attempt to find the most accurately evocative name for the concept in question – however, the different names are provided here to provide the most accurate representation of the process I used at the time).

Having adjusted the coding scheme, I went back through the first set of manager interviews and recoded them using the new, adjusted coding structure. This process also allowed me to engage in further constant comparison between the different types of data – interviews from the beginning and end of the data collection process, diary data, and employee interviews. There was a near-constant cycling between the multiple data sources, and between the data and the emerging theory (Gioia et al., 2012).

Table 5: Coding Scheme Adjusted After Testing Theory with Data

Category			References
Control			
	Actions		81
	Autonomy		21
	Communicating expectations		59
	Input-hiring		92
	Metrics		40
	Monitoring		
		Behaviour	179
		Isn't monitored	24
		Mind-set	63
		Other	8
		Output	66
Effort			
	Less effort		2
	More effort		92

Category			References
	Same effort		7
Information			
	Context		66
	Explicitness and transparency		65
	Less information		57
	More information		19
	Same information		18
	Sources		149
Manager Relationships			
	Different relationships		39
	Emotional content		10
	Methods		47
	Personal info in workplace		25
	Reasons-Importance		68
	Same relationships		10
	Trust		16

Category			References
	Vulnerability-Intimacy		11
Risks			
	Communication Risks		
		Being ignored	4
		Misalignment	27
		Misinterpretation	12
		Prioritisation	11
		Relationships	4
	Hidden information		69
	Morale Risks		
		Feeling left out	6
		Insecurity-Morale-Feedback	19
	Operational Risks		
		Slowness-Turnaround time	3
		Training & on-boarding	6
		Work time and effort	12

#### 4.8.3.3 Data Structure and Theory Diagram

The first and second order analysis process should result in a data structure, which Gioia et al. (2012) argue allows them to “configure our data into a sensible visual aid”, that also “provides a graphic representation of how we progressed from raw data to terms and themes in conducting the analyses” (Gioia et al., 2012, p. 20). The authors argue that this diagram provides a method to connect the participants’ perspective “with the necessary ‘30,000-ft.’ view often required to draw forth the theoretical insights” (Gioia et al., 2012, p. 21). At this point, I was able to focus on the categories that seemed to offer the most potential for developing theory that could explain managers’ experience working in remote teams, particularly experiences that extant theory did not seem to capture. As such, categories such as *Autonomy* and *Communicating Expectations* shifted out of the model, and the role of *Information* and *Context* took a lower priority.

For this research, the first and second order analyses were supplemented by testing the initial theory against the remaining data, and then making adjustments based on the fit between the initial theory and the remaining data. The resulting data structure was then transformed into a model diagram that captures the key themes and dimensions from the data structure but also indicates the dynamic interrelationships between them; this moves from the data structure, which Gioia et al. (2012, p. 22) describe as a “static picture of a dynamic phenomenon”, to a representation of the processes and relationships involved: “The resulting grounded theory model, then, should be one that shows the dynamic relationships among the emergent concepts” (Gioia et al., 2012, p. 22). The final data structure and theory diagram are presented in Figure 5 and Figure 6 in the Discussion chapter. Data supporting and explaining the categories, themes, aggregate dimensions and final theoretical model are presented in the Findings chapter, below.

#### 4.9 REFLECTIONS ON METHODOLOGY

The research was originally designed with three methods of data collection: interviews, a diary study, and a survey to collect data for social network analysis. Ultimately, due to time constraints, challenges in collecting enough survey data, and with the richness of the qualitative interview and diary data, I did not include the social network data in the final analysis. The social network survey is described here to represent the participants' experience and the progression of the research as completely and accurately as possible.

To collect social network data, a customised survey was created for each participating team using the online survey tool Qualtrics (<https://www.qualtrics.com>). The survey asked each team member for some demographic information, then a series of questions designed to understand that person's relationship with every other member of their team. A draft of the survey questions was vetted by a colleague with expertise in social network analysis to ensure the questions were clear and structured to yield the intended results. Those questions are included in Appendix D: *Example Survey Questions*.

The intention with the survey was to collect data as a basis for social network analysis. Social network analysis "provides a precise way to define important social concepts, a theoretical alternative to the assumption of independent actors, and a framework for testing theories about structured social relationships" (Wasserman & Faust, 1994, p. 17). Rather than focusing on the attributes of individuals, social network analysis focuses on the relationship between actors and how the structure of those relationships relates to other outcomes. This allows researchers to consider both the individual and the context in which they act (Sarker et al., 2011).

Relatively little social network analysis research exists for distributed teams. In their review of virtual team literature, Gilson et al. (2015) note that while



the use of social network analysis in virtual team research is limited, they call it “a promising trend within the empirical studies [reviewed]” (Gilson et al., 2015, p. 1325). I had hoped that data from social network analysis might shed light on structural factors that influence how managers enact organisational control in distributed teams. For example, whether crossing multiple time zones influenced how managers interacted with staff. However, as mentioned above, ultimately the survey data was not analysed for this thesis but is described here to ensure a complete representation of participant interactions.

## 5 FINDINGS

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### 5.1 CONTROL

An essential part of a manager's role is enacting organisational control. Indeed, Kreutzer et al. (2016) note: "organisational control is one of management's most fundamental and pervasive challenges" (p. 235). As mentioned in the Literature Review chapter, in the organisational control literature, control "corresponds to mechanisms that managers use to direct attention, motivate, and encourage individuals to act in ways that support the organization's objectives" (Cardinal et al., 2017, p. 559). Leifer and Mills (1996, p. 114) make the point that: "Assuring that behaviors are oriented to organizational objectives is the central notion of organizational control (Etzioni, 1961)".

To briefly recap, the components of control can be understood as follows. Control *mechanisms* are the individual instruments used to implement control - for example rules, output standards, or norms. Control *systems* are configurations of control mechanisms. Control *targets* are the "specific elements of organisational transformation processes (i.e., inputs, behaviors, or outputs) to which control mechanisms are intended to be applied" (p. 58).

### 5.2 CONTROL TARGETS

#### 5.2.1 Types of Targets

As discussed above, the organisational control literature identifies three key control targets: input, behaviour, and output. Behaviour control mechanisms in their most straightforward form are predicated on direct observation: for example, the factory floor supervisor who watches their staff as they work. However, observing every aspect of every employee's job is neither feasible nor cost effective and, as the idea of "means-end relations" indicates, some

behaviours are not an end unto themselves; they are merely steps that should lead to the desired outcomes. Therefore, it may not be necessary to observe the behaviour occurring. It may be enough to know that the behaviour has occurred (for example, completing a report).

This is an important distinction for distributed work because the opportunities for *direct* observation are restricted to the time spent together on video calls. Given the scarce opportunities for direct observation, one might assume managers would or should instead focus on outputs that can be measured and quantified after the fact, rather than controls that rely on observing behaviour. While some researchers in the virtual team literature have taken this stance (Kurland & Egan, 1999), the research has not borne out this prediction. For example, Kurland and Cooper (2002) found that managers in distributed teams use a variety of control types. Felstead et al. (2003) found that managers responded to reduced visibility of their remote staff by devising and utilizing new forms of surveillance. Piccoli et al. (2004) found no relationship between team control structure and coordination in distributed teams but suggested caution in applying the behavioural controls used in traditional teams to distributed teams.

In the research presented here, managers showed evidence of applying input controls, controls based on monitoring both output and behaviour, and evidence of a type of monitoring that has not been discussed before in the organisational control literature: monitoring individuals' attitudes. Data to support these findings are presented below.

### 5.3 QUOTES

Diary entries are reported as written except where corrections, in the case of typographic errors, were needed for clarity. Corrections have been indicated in square brackets.

Participant quotes presented below are verbatim, except where I have edited them for readability. This involved removing verbal tics such as “um”, “ah”, or repeated use of the word “like”. Where participants have repeated words or phrases while formulating their thoughts, I have removed those duplications. If participants used phrases that could identify themselves or their employer, I have replaced those words and indicated as such with square brackets. Where a participant’s body language seemed particularly important to conveying meaning, I have tried to indicate that in square brackets. In all cases, quotes were left as close to the original speech as possible while preserving anonymity, and when there was a question of readability versus the possibility of misrepresenting speakers’ intent, preference was given to the speaker’s original utterance.

## 5.4 INPUT CONTROL

Interview transcripts and diaries were coded for instances where managers described monitoring or control. Some of these monitoring activities fit categorisations in extant organisational control research, such as applying input control that determines how people enter the organisation (Cardinal, 2001), as discussed here, and behaviour and output monitoring (discussed below).

With regard to input control, hiring staff for remote positions had some requirements that differed to hiring for co-located work. While many of the same requirements applied (e.g. professional competence, collaboration, good team fit) some candidate attributes received extra attention.

### 5.4.1 ‘Only experienced remote workers need apply’

Many managers expressed a preference for hiring staff with previous experience working remotely. This was often an acknowledgement that working remotely does not suit everyone and that candidates may only realise

working remotely does not suit them after they are already in the role, which is likely to be disruptive for the team and the manager.

*I think there's a little bit of a chicken and egg problem, because we look for people who have worked remotely before because it's not for everybody and if you've never done it before, you may realise that this is not something that you want to do. And so, for us, we tend to bias towards people who have worked remotely in the past.*

*(Interview, Manager 4)*

It can be difficult to know in advance if the candidate will be successful working remotely.

*Then you get people who are, like, social animals and you know, they don't really work very well on their own and they're better off with people around. And I have no effective way of asking for that other than directly asking about, which, if someone's applying for a job and they know that they want to work remotely, they'll give me the answer I want, not the answer that's true*

*(Interview, Manager 8).*

The same manager went on to say that having previous experience working with an employee was perceived to increase the likelihood the employee would raise issues if they occurred:

*The people who we have working remotely are people generally who have worked for us before, and therefore hopefully people who we trust would be straight with us and therefore probably people who would tell us if they're*

*unhappy rather than unknown entities where we don't know how they'd behave when they're out there.*

*(Interview, Manager 8).*

Managers are faced with two challenges. One is finding candidates who will be happy to work remotely. The other is to identify when a new hire has realised that working remotely is not a good fit for them, especially if the new hire is hesitant to express their concerns openly.

#### 5.4.2 Communication Skills

While communication skills are widely valued in the workforce, managers suggest they are even more highly valued in remote roles and having good communication skills becomes a key hiring criterion for candidates. For example:

*And I think communication is probably at the key of all of this, or at the heart of all of this. All of these qualities that we look for are great. But if you can't communicate that, and we're looking for that in the interview, then you're not going to survive in remote culture.*

*(Interview, Manager 18)*

*We have definitely rejected remote candidates because we have concerns about their ability to communicate. And it's absolutely fair to say that we have discussions around concerns about communication more often when we're considering hiring somebody remote, right?*

*(Interview, Manager 11)*

Effective communication is necessary to overcome complications introduced by technology-mediated interactions and by asynchronous workflows where

it may take longer to resolve miscommunications (discussed in more detail below). Therefore, managers place more emphasis on communication skills when selecting new staff than they might in a co-located role.

#### 5.4.3 Only Seniors

One of the more striking findings in the research was managers' strong preference for hiring experienced staff. Managers often referred to these as 'senior' employees, as opposed to less experienced 'junior' employee. Based on participant comments, I interpreted this distinction between senior and junior employees to refer primarily to experience level rather than employee age, although the two may be correlated in some cases. This preference for senior employees was not universal - some managers felt confident hiring juniors for remote roles - but most expressed a strong preference for only hiring senior staff. For example:

*So, to be honest, you know, fortunately we don't hire entry level people for the support role, so everyone's a little more independent.*

*(Interview, Manager 15)*

*You know, we don't hire junior engineers, we hire senior engineers who have a very high personal quality bar.*

*(Interview, Manager 18)*

*So, we started trying to hire very experienced [professionals], and they have to be very experienced because we're asking them to work kind of without all the office support that [these roles] are used to. So, they have to be highly experienced.*

*(Interview, Manager 20)*

Another manager expanded on the reasons why, suggesting that senior staff will be more effective and proactive in communicating:

*One of the only things that I can think of that's a negative for remote work is that you can't hire junior or lightweight individuals. ... Again, all senior people, been around the block many, many times and been in lots of environments, worked in various methodologies. Seen good and bad communications, been able to put their hand up, been able to be forthright, able to navigate communication pretty effectively.*

*(Interview, Manager 2)*

This connects to the concerns identified above: managers show a preference for staff who will be able communicate effectively and who can recognise problems and will be willing to raise concerns if they do occur.

#### **5.4.3.1 Juniors, Under Some Circumstances**

Some organisations in this research were fully distributed, where everyone works in a different location, and others had physical offices where some staff could work co-located (though as mentioned in the Methodology section, all managers had at least one person who worked remotely). Managers whose organisation had offices, and who were willing to hire juniors in distributed teams, tended to prefer hiring junior staff if the junior could work in an office at first.

When talking about on-boarding new junior staff, one manager said:

*I would tend to have them start in the office just as an opportunity to sort of give them better mentoring. We struggle a little bit with our remote mentoring as a company. So, I would lean towards having them in the*



*office just so we help them through that initial setup and ramp up, which is so painful.*

*(Interview, Manager 29)*

Another manager reflected on hiring juniors as the organisation had grown and noted:

*But the good side is that we do have a lot of offices now in different places so if they can align with an office, even if they're in the office and they're not directly working with people in that office - there might be bunch of people in sales or other technical people from other teams - at least there's someone, some in-person thing to help, you know, proxy I guess that mentoring.*

*(Interview, Manager 9)*

It is interesting to note that in this case the manager did not feel a junior newcomer would need to be working with members of their own team, just in an office with others in the company. This suggests the manager is less concerned with teaching the junior newcomer the technical aspects of the role remotely, and more concerned about ensuring that positive behaviour or role-modelling is visible. The same manager also reflected:

*But yeah, I guess for someone that's more green than that, it would be really hard - how do they know if they're doing the right job? They don't have that feeling of going to an office, because often you can go to an office and have a day at work and go home, and you don't feel bad that you haven't done any work because you've been in an office. When you work distributed or remote, you feel like your feeling of accomplishment is about delivering stuff and*

*some days you don't deliver stuff because it's in your head.  
And for someone quite junior and inexperienced, they don't  
get that, so they get depressed.*

*(Interview, Manager 9)*

Several managers mentioned their concern about effectively mentoring juniors at a distance. Concern over mentoring has been identified in previous distributed team research. Kurland and Cooper (2002) also found that managers expressed concern about being able to effectively mentor their remote staff. As well as mentoring for the technical aspects of the job, social support is a concern (as mentioned above), and so is socialisation.

One manager talked about two employees who had joined the team but had ultimately been exited from their roles:

*But in both cases, they really needed more supervision and  
feedback than what we were able to provide. It was stressful  
for them to the point of like, "system failure" for their brain  
that, you know, if they would ask something and wouldn't  
get a response for two hours, that was an emotional  
[inaudible] for them. Um, yeah, like inability to deal with  
uncertainty, I would say.*

*(Interview, Manager 15)*

The manager felt the problem was related to both the ease of misinterpreting feedback and the difficulty in getting positive reinforcement:

*And so, when someone [is] analysing your writing and  
trying to get you up to speed and training you, it can feel  
like a lot of criticism when it's just written, right? Like, you  
don't get to have those easy kind of lunches, and know that*

*you're doing okay because your boss smiles at you when she walks past you in the hall. So usually like a lot of anxiety about how well they're doing. So, we've tried to over-communicate that.*

*(Interview, Manager 15)*

While talking about how morale may be a more prominent concern in remote work (not specifically related to hiring juniors), another manager observed that co-location provides a variety of cues that both demonstrate appropriate behaviour and create a positive environment:

*I think, you know, when you're all rubbing shoulders with each other regularly and there's lots of shared context or moments for you to see people being human and supportive or good to each other, or you see visible examples of trust and collaboration all the time, that sets a great context that you can kind of get bits of remote but you don't, I don't think it's necessarily always there.*

*(Interview, Manager 19)*

The absence of these cues may help explain some of the challenges that junior newcomers and their managers face. Managers' hesitation to hire juniors may be at least partly driven by a concern about being able to mentor and socialise new junior staff, particularly the social aspects of on-boarding.

#### **5.4.3.2 The Challenge of Socialisation**

Socialisation into a new organisation is the process whereby newcomers come to understand the information, rules and behaviours required to be successful in their new roles (Ahuja & Galvin, 2003; Ashford & Nurmohamed, 2012; Bauer et al., 2007). This adjustment can be conceptualised as acquiring three types of mastery: role clarity, where the newcomer understands what is

required in their new role; self-efficacy, where the newcomer acquires the necessary skills to accomplish their tasks; and social acceptance, where the newcomer comes to feel liked and accepted by their peers (Bauer et al., 2007, p. 708). Ahuja and Galvin (2003) note that “In general, the information that is exchanged in any group can be broadly characterized as either technical (the skills and knowledge needed in order to execute tasks competently) or social (knowledge of the expectations and norms of the group members) in nature”, and that “social information may be more difficult to articulate and is typically learned by newcomers through observation in traditional groups” (p. 164).

Juniors, new to the workforce as well as the role, may face different challenges in socialising to a new workplace than those moving from one role to another, and are likely to need more socialisation (Ahuja & Galvin, 2003; Ashford & Nurmohamed, 2012; Bauer et al., 2007). A newcomer with considerable professional experience, a ‘senior’, could be expected to bring skills and experience that make establishing role clarity and self-efficacy easier. Depending on the person, a senior’s workplace experience may also make it easier for them to establish social acceptance compared to someone new to the workforce. Bauer et al. (2007) found that social acceptance was an important indicator of job performance for newcomer juniors. Ashford and Nurmohamed (2012) suggest that for newcomer juniors, simply adjusting to being in the workforce may require so much attention that job and organisation specific adjustment is less salient, compared to more experienced new seniors who “are more likely to already understand their fit with the broader organization” (Ashford & Nurmohamed, 2012). Therefore, it may be more difficult for a junior to effectively socialise into a new role than for a senior.

There is remarkably little empirical research into socialisation in distributed work (Ahuja & Galvin, 2003; Picherit-Duthler et al., 2004). Ahuja and Galvin

(2003) is an exception, although they only look at tenure with the group (newcomer or not) and did not separate group newcomers by their level of career experience (juniors versus seniors). The authors categorised the information that newcomers were likely to seek into cognitive information (task related), regulative information (rules, process, and structure related), and normative information (norms, values, and social expectations). They predicted that because normative and regulative information was difficult for newcomers to observe in virtual groups, newcomers would be more likely to seek normative and regulative information explicitly: “unlike traditional groups, where such learning can take place in a tacit transfer of information (through observation), normative and regulative information exchange may need to be explicit in virtual groups” (Ahuja & Galvin, 2003, p. 169). However, this prediction was not supported in their findings. Newcomers did seek more *regulative* information but appeared reluctant to seek *normative* information. This may be because newcomers found it difficult to enquire about norms via email, or because they were uncomfortable about asking (Ahuja & Galvin, 2003). Alternatively, given the tacit nature of many norms, it may be that newcomers did not know they were missing important information, did not know enough to be able to formulate the question clearly, or may have felt it would be difficult for an established group member to articulate the norm to answer the question. Although normative information is important and can be difficult to obtain via observation in distributed groups, Ahuja and Galvin’s (2003) findings show that newcomers do not therefore seek normative information explicitly.

Ashford and Nurmohamed (2012, p. 10) suggest that while newcomers may obtain information by observation or by explicitly asking, they may also use more indirect methods: “For example, newcomers may use humor to disguise questions that may be too embarrassing to ask, or they may disclose personal information to see whether others respond favorably to their ideas about how

a task should be performed”. Following Miller and Jablin (1991), they describe these as “disguising conversations” and note the social cost of asking may influence how people attempt to gather information: “For example, if newcomers engage in inquiry to obtain information or feedback, they may be perceived as bothersome or uninformed; if a high-status entry to the organization does so, he or she may be considered weak or an ineffective leader” (Ashford & Nurmohamed, 2012, p. 10, citations removed). The social cost of asking for information may bias newcomers toward obtaining information by observation, and make them less willing to ask explicitly. This may be particularly true for junior newcomers, who are trying to adapt to being both new to working and new to a given workplace, making them less likely to speak out if they are uncertain.

The social aspects of socialisation may also be more difficult for the distant manager to monitor, and therefore for the manager to ensure the junior receives more support when necessary. While this research does not have enough data to verify this supposition, one of the diary entries provides some support. The manager in question had an intern working with the team during the research. The manager noted that:

*[Intern’s name] is several weeks into their internship and it’s going fine development-wise. The problem is that we have very limited insight [into] their general well-being and experience so far with their internship.*

*(Diary, Manager 34)*

Reflecting on how being remote may have influenced the situation, the manager noted that working remotely made it more difficult for the manager to check in and communicate with the parties involved:

*This has been a situation where our remote nature has failed us a little bit. It would have been less awkward to chase this up with greater frequency if I shared an office space with the people in need of nudging. Of course, if the intern was also local that would remove the barriers to communication almost completely, but then again we would never have been able to connect with this particular intern if we weren't remote.*

*(Diary, Manager 34)*

When asked how they would know if the problem has been solved, the manager reported:

*Simple: When I have more information about how [intern's name]'s internship is going outside of just the work that's produced I'll consider my intervention successful.*

*(Diary, Manager 34)*

Here, the manager states they are reasonably able to see progress the intern is making in the technical requirements of the role (“going fine, development-wise”) but feels less able to see how the non-technical aspects of the internship are going (“limited insight” into “general well-being and experience”, wanting to know how the internship is going “outside of just the work that’s produced”).

Ashford and Nurmohamed (2012) note that the uncertainty of being a newcomer may be unsettling emotionally, and that newcomers are likely to engage in impression management. Managers may be conscious that they will be less able to identify when remote juniors are confused, uncertain, or have perhaps misunderstood some social or technical requirement of the role. While hiring seniors undoubtedly brings benefits in terms of skills,

experience, and the ability to work without close supervision, managers' reluctance to hire juniors may also be driven by a concern about juniors being unable to effectively learn the tacit social information necessary to socialise into their new role, combined with concern about the manager's inability to identify the problem and therefore to help.

#### 5.4.4 Summary

Managers apply specific criteria when hiring for remote roles, with more emphasis on previous experience working remotely and on communication skills, as shown above. They also show a preference for hiring seniors as opposed to juniors. A common theme with all three requirements is that managers may be seeking confidence that the newcomer will be able to work effectively on their own, and be willing and able to communicate if issues arise, thus reducing reliance on the manager having to notice the problem before the manager can take action.

### 5.5 MONITORING

#### 5.5.1 What is Not Monitored?

To check that my coding for controls and monitoring did not overlook anything, I also took note when managers explicitly mentioned something they did not monitor. Some managers did not monitor people's work schedules:

*A lot of our staff are, kind of, you know, especially developers, who prefer to work at different times of the day or prefer to work at night. And it's just entirely up to them when and how they work. We never... you know I've never, ever worked out how many hours somebody is working. It's of no interest to me whatsoever. Everyone knows what they're supposed to do.*



*(Interview, Manager 2)*

*Other than that, it's up to you, you know? You pick your schedule, work at your own convenience. As long as you are working full time. I do expect for you to dedicate 35 to 40 hours per week for this project. So as long as you work full time and you are on with the hours you are expected to be online, then you pick your schedule.*

*(Interview, Manager 32)*

This tended to be more common in teams that were spread across multiple time zones, where people were likely to be working at different times of day to the manager. As one manager put it:

*Could you really yell at somebody if they weren't at their desk at 9:01am their local time? I mean, I guess you could but if you have people spread out over all these time zones, you'd have to spend a lot of work to figure out who's at their desk or not. So, I think, because of the nature of being distributed, you realise that that stuff doesn't matter anyway.*

*(Interview, Manager 4)*

Some managers choose not to monitor or set expectations around people's work schedules. This fits with an ethos of working flexibly and asynchronously.

#### 5.5.2 What Is Monitored?

Managers responses indicate there are two types of 'red flag' they are particularly aware of. These are indications that a problem may be occurring with someone on their team and therefore action may be required by the

manager. One indicator is a reduction in work output. The other is problematic communication behaviour. Some managers mentioned either output or communication behaviour as their key indicator. Many managers mentioned both, as the example below demonstrate:

*It was just quality of the output really. Taking very long to deliver something that should have been fairly straightforward ... And, you know, and then there would be the quality of communication, the tone. It really stands out, culturally as well, when somebody's just 'not there'. Even though we're remote, we talk all the time.*

*(Interview, Manager 2)*

*Well, we have pure data metrics on number of commits and lines committed and JIRA tickets, which is good but not adequate on its own. Hmm. I gauge a lot of it by participation, contribution. You know, people chiming in on Slack, solving customer problems as they arise, helping each other out.*

*(Interview, Manager 27)*

*The past problems that we have identified are either on the availability spectrum, meaning like they don't show up in meetings or they are not on time or you expect them to be online, that specific time frame and they are not. And you know, these can be extremely disruptive to our processes, our communication patterns. So, this is a major red flag for us. And then on the other side of things is coding. We know as we start on-boarding someone, how fast they on-board, what do they deliver, how fast can they deliver the work that*

*they do, what is the actual quality of the code that they deliver - is it where it needs to be for their level?*

*(Interview, Manager 32)*

That both output and behaviour are monitored fits with the extant organisational control literature. However, as discussed below, although managers do monitor work output, this is often measured subjectively rather than using agreed upon measures or metrics and as such may not fit the definition of output control.

Furthermore, behaviour monitoring is more complicated than the extant literature may recognise. The traditional conception of behaviour monitoring has relied heavily on direct observation. For example, Ouchi and Maguire (1975) measure the extent of behaviour control using the question “How often do you see each of the people who reports directly to you?” (p. 561). However, even in a co-located setting full observation of behaviours is unlikely, as Hölmstrom (1979, p. 74) points out: “Generally, however, full observation of actions is either impossible or prohibitively costly. In such situations interest centers around the use of imperfect estimators of action”. Monitoring behaviour through direct observation is largely impossible in remote work due to the geographic distance between managers and the staff they manage. Instead, managers primarily monitor communication behaviours, which are visible.

However, as the data below shows, communication behaviour is monitored for two separate purposes. One purpose is monitoring behaviours directly related to work actions. The other is monitoring communication behaviour as an indicator of the mental and emotional state of individuals in their teams (their attitudes). While monitoring for attitudes may not fit the traditional model of a target for monitoring and control, these findings show that it does fit for the following reasons.

First, because as shown in the data below, managers dedicate considerable effort to monitoring communication behaviour for information on their team's attitudes, and the information is used for control-related purposes. The attitude monitoring information is used to identify potential problems with performance, or with engagement, integration into the team, or understanding role requirements, all of which may lead to performance problems. As mentioned above, it seems unlikely that managers will dedicate effort to monitoring for a given type of information unless they plan to use that information. The data shows that managers do use the attitude monitoring information. They use the information to identify potential problems and, when problems may be present, they act by following up with the person in question to gather more information, and by attempting to influence the person to solve the problem. The attitude monitoring information is also used to provide context that makes other control mechanisms more effective (for example, allowing managers to interpret output monitoring). This will be discussed in more detail below.

Second, because while it is almost certain that managers do, in many cases, genuinely like and care about their employees, the data reflects monitoring motivated by a desire to ensure their employees and teams are functioning effectively in pursuit of organisational goals. As noted, control "corresponds to mechanisms that managers use to direct attention, motivate, and encourage individuals to act in ways that support the organization's objectives" (Cardinal et al., 2017, p. 559). I expect that most managers do care about their employees as individuals, but the actions managers take to ensure that employees are happy in their roles, engaged, and performing are carried out at least in part, if not wholly, as one of the manager's responsibilities to the organisation.

Below I examine the data related to the three types of monitoring and control: output, work-related behaviour, and attitude-related behaviour.

### 5.5.3 Output Monitoring

As expected, managers did employ what could be termed output control to monitor employee productivity, although the use of output measures was complicated, as discussed below.

Output control focuses employee attention on achieving organisationally desired goals rather than the processes needed to achieve those goals (Cardinal et al., 2017; Cardinal et al., 2018). In that sense, output control provides employees with more autonomy, in that managers specify the deliverable rather than the processes the employee must use to deliver it.

Examples of managers using output-type controls are as follows:

*There was also some what we call "bums on seats" measures about, you know, you've got to do so many events and get so many people turning up to them. Which gives an indication of level of activity as well. And there was also financial measures as well. They were in charge of their local budget and they had to deliver some stuff to budget.*

*(Interview, Manager 3)*

*We've defined roles and position descriptions, and with them numbers that are associated with each. So, some are very different, you know, if you're a consultant working with customers your metric is really billable hours, utilisation, how busy you are.*

*(Interview, Manager 6)*

*If the project is delivered on time and with the quality metrics we have defined for ourselves then I will consider the intervention to be successful.*

*(Diary, Manager 32)*

Given that in distributed teams managers have limited means to observe behaviours, one might conclude that managers would shift to emphasising outputs. In fact, much of the promise or ideology of remote work (and flexible work arrangements in general) relies on a shift away from micromanaging processes and behaviour and towards managing for work output instead; a desire to move beyond physical presence as a proxy for productivity. Many of the managers in this research put forward this view:

*We manage the work, not the person. That's like a little saying we have, and what's important to us is to say you're going to have the freedom to work however you want to work. If you want to work, whatever, at two in the morning until 8am, that's fine. I don't really care, if that's how you work.*

*(Interview, Manager 4)*

*So, I think, we're trying to build a culture here around outcomes rather than the method of getting stuff done. We would like people to be able to work wherever it makes sense for them, and actively encourage that as well ... And we don't really care if they work two twenty-hour days or five four-hour days, whatever shape it comes in, so long as by next Tuesday they're delivering what they said they were going to deliver, then that's it.*

*(Interview, Manager 6)*

For some employees a lack of flexibility suggested a lack of trust, as one explained. The employee described how in their previous role:

*My direct boss was actually okay with people, you know, oh, your dog is home sick from the vet or whatever. You can work from home for a half day or whatever. And he was pretty flexible about that. And then his boss's boss's boss found out we were doing that and just totally laid the hammer down. Absolutely not, under no circumstances, you know, butt in seat time. How else do I know you're doing your job? And you could tell the divide between the old school people and the new school people because the new school people said, if the only way you can tell someone's doing their job is that they've come to this building, then you can't trust them to do their job at all because you can't be watching them all the time! So, if you can't trust them when you're not watching them therefore you then, by extension, you just do not trust them to do their job ... it wasn't the fact that we couldn't work remotely. It was what that implied.*

*(Interview, Employee 6)*

Both managers and employees embraced the idea that employees should be trusted to do their job in whatever way works best for them, so long as they are still able to demonstrate productivity. However, as discussed below, that does not automatically translate into output-based control.

#### **5.5.3.1 Is it Really Output Control?**

A key feature of output control is the measurability of outputs. Ouchi (1977, p. 97) states that, “In the case of output control, the transformation process need not be known at all, but a reliable and valid measure of the desired outputs must be available”. This definition of output control, as dependent on definable measures and requiring “agreed-upon, measurable goals” (Kurland

& Cooper, 2002, p. 109), has largely persisted into modern literature (e.g. Cardinal et al., 2018; Errichiello & Pianese, 2016; Long & Sitkin, 2018). Without reliable, valid measures for agreed-upon goals, output control cannot be achieved. Therefore, if managers with distributed staff are relying on output control, we should expect to see considerable use of performance metrics. However, this turns out to not be the case. I asked participants how they tracked their team's performance and whether they used any specific metrics. Managers were often reluctant to use metrics. For example, the manager quoted above whose focus is to "manage the work, not the person", went on to say:

*I don't believe that you can boil down somebody's contribution as a software developer to a number, or even a set of numbers, that you can then manage towards. To say "well, you were at an 80 and you should be an 82 so you're fired". I don't think that's a thing. So, it's definitely a lot more intuition and a lot more feel, I think, in terms of management, than by the numbers.*

*(Interview, Manager 4)*

Another noted that the focus was less on measurement and more on affirmation that work was being done:

*It's an interesting question because we don't have a formal way of putting a value on that. It's more, do your peers recognize that you're getting work done and is your [manager] recognizing that you're getting work done?*

*(Interview, Manager 18)*

Others echoed this sentiment:



*I have been very hesitant about metrics, right? I think that especially, quite frankly, in a remote work environment they can be toxic because they're so concerned, they have such that paranoia about are people aware of the work that I'm doing? And I've tried to think really deeply about this, and I get the argument for putting metrics out there and gamifying this, if you will, or giving these people these targets to shoot for, and I've never convinced myself that it's the right thing to do.*

*(Interview, Manager 11)*

*Well, it's very hard to measure productivity on a software team. It's about delivering value more than delivering sort of any number of features or those kinds of things.*

*(Interview, Manager 12)*

Even managers who used metrics were hesitant to rely on them because, as one manager noted, the metrics were unlikely to measure what really mattered:

*I'm not happy with the metrics actually. No, I'm not. I think they have driven, and this is the case, I think, with any KPI, bonus, incentive, however you want to cut it, it drives aberrant behaviour in my view. Always has, always will. So, I wish to reframe these metrics. I've no idea how to do it. Not a clue, but more along the lines of I would like to have them talking to me more about how happy they are and how happy the client is because really, if the client is happy and my team are happy then probably we'll be fine.*

*(Interview, Manager 20)*

Or, if managers were using metrics, they did not use them as an absolute measure of performance:

*We have a whole bunch of metrics, but the ones that I really pay attention to are how many code reviews a person's doing in a given week. So, I keep running averages for all the people on my team of the number of code reviews they do, the number of commits that they made, the number of story points that they close. Those are kind of the three major ones that I track. And they're, yeah, they're not perfect measures, but they are indicative of whether or not the team's actually able to move forward on things.*

*(Interview, Manager 29)*

*Yeah, we have some specific metrics. A lot of it is very open ended. It's, you know, I responded to this post, and you know, I wrote this much and it went okay or it went terribly, but we thought it would go terribly or it could have gone better or something like that. We do a lot of pure, sort of informal peer feedback on that kind of thing.*

*(Interview, Manager 24)*

Few managers were willing to rely on metrics alone to indicate performance:

*Well, we have pure data metrics on number of commits and lines committed and JIRA tickets, which is good but not adequate on its own. Hmm. I gauge a lot of it by participation, contribution. You know, people chiming in on Slack, solving customer problems as they arise, helping each other out.*

*(Interview, Manager 27).*

Overall, the data shows that managers with remote staff have not shifted to purely output-based forms of control to compensate for their limited ability to observe employee behaviours. The reluctance to use metrics was not due to a lack of available information on work activity. If anything, managers felt that remote workflows surfaced more information about their teams' activity.

*But everything that they do is shared so it's very easy to see.  
Nobody does anything, does any work that I can't see.  
Which makes it so easy to see that, you know, so easy to see  
everything that's going on.*

*(Interview, Manager 2)*

*The way that we work, online and Slack and Trello, you can  
easily tell if somebody is working or not. Like every time  
they tick off checklists or ask a question on the threads, you  
can just tell. If somebody is not performing or not working  
online, it's just so visible. So, I can check-in even before  
that and just say, Hey, just noticed you haven't been online  
today.*

*(Interview, Manager 23)*

In summary, in remote teams, managers are monitoring their teams for performance and work throughput, but they do not tend to rely on definable, agreed-upon measures of output. Instead output is often judged subjectively and in context with other indicators of performance. The extra visibility of their team's work may mean managers feel *less* need to rely on metrics and associated output controls as they may feel they are better able to judge productivity by observing work activity.

#### 5.5.3.2 *Why So Little Output Control?*

There may be reasons managers do not rely on output control that relate to the nature of the work, rather than directly relate to the distributed nature of the teams. Remote work is often easier for roles that are primarily knowledge or information based. Unlike roles that require access to complex or shared equipment, or physical presence and interaction, knowledge work generally does not depend on a specific location. Knowledge workers carry out tasks involving “problem solving and the production of knowledge” (Mitchell & Meacheam, 2011, p. 149). They “require tacit knowledge, undertake thinking and the analysis of symbols as their core process and produce knowledge and ideas to solve complex problems” (Mitchell & Meacheam, 2011, pp. 149-150).

Eisenhardt (1989b) observes that not all tasks suit output-based controls. She notes that “some tasks require a long time to complete, involve joint or team effort, or produce soft outcomes. In these circumstances, outcomes are either difficult to measure or difficult to measure within a practical amount of time. When outcomes are measured with difficulty, outcome-based contracts are less attractive” (p. 62). Much remote work is team-based and knowledge-based, and involves solving complex problems, often requiring creativity and outcomes where it is difficult to predetermine either the outcome or the exact steps needed to reach it. Taking this into account, managers’ preference for behaviour monitoring over clearly defined metrics becomes both understandable and predictable.

#### 5.5.4 **Work-Related Behaviour Monitoring**

Monitoring behaviour plays an important role in distributed teams. However, because most behaviour cannot be observed directly, attention shifts to communication behaviours. Communication occurs via technology and many communication technologies create lengthy histories of the communication that has occurred (for example, chat room logs in an application like Slack or

updates on work-tracking tickets in applications like Trello or JIRA – tools that are popular at the time of this research). This extensive recording means that communication becomes less ephemeral and more easily observed after the fact. A great deal of monitoring occurs via updates generated by tools such as Trello or GitHub. These software tools allow users to share work and progress updates with each other, with the updates being generated and published manually or automatically. Rather than relying on direct, visual observation of behaviours, managers rely on indirect observation via these work-sharing tools.

Managers report a variety of behavioural controls they use to generate information about their employees' behaviour. For example, setting an expectation that employees will regularly deliver work in progress to shared, central work repositories (for developers, this might be called a 'checking in code' or a 'pull request' in GitHub) or updating shared work-tracking tools like Trello:

*If we see them go quiet, that's kind of where the problems start. If 3 days go by and they're not checking in code, that's where the problems start.*

*(Interview, Manager 11)*

*With so much written stuff, you know, in Slack and GitHub, you know, there's kind of a trail of what you're doing to some extent, right? So, it's not fair to measure a developer only on pull requests [PRs], if you know what those are? But you know, that's one proxy for productivity. ... So, you know, there is a lot of room for variation there and so you have to kind of be a little more contextual about the whole thing, but some people are churning through a lot of PRs*

*and other people aren't and so you can kind of get a sense of how much people are producing that way I guess.*

*(Interview, Manager 12)*

As well as setting expectations of sharing or publishing work regularly, managers also set expectations around delivering work as agreed, and monitor accountability:

*One is accountability on projects. So, people being able to say, I'm working on this and I expect to have this much done in the next week. And then they come back next week, and they say, I wasn't able to get to that, but I expect to have this much done in the next week. And when that keeps happening week to week to week, and that kind of comes out on our team calls all together or in individual meetings.*

*(Interview, Manager 24)*

*deadline for a feature that is developed by one of my teams had to be moved, because of delays in the development (from the team).*

*(Diary, Manager 32)*

*I have someone who is constantly behind schedule, even though he gets to make his own schedule.*

*(Diary, Manager 24)*

Another highlighted the importance of communicating updates:

*Then there's "How well are you communicating?" because everyone misses a deadline, the question is why and did anyone know? Because the worst thing is if you miss a*

*deadline and no-one knew. So, are you effectively communicating?*

*(Interview, Manager 8)*

And around communication responsiveness:

*And the nice thing about being remote is that it removes the temptation to look at butts in seats metrics. Yeah, butt in seat metrics, right? I don't, I mean I see when people are online or not, but we don't look at that stuff. And it's mostly are you responsive during, at least during our core hours?*

*(Interview, Manager 22)*

*It's a very soft thing. I don't have a measure that I measure, it's more of, when I look at who's answering questions and helping team members in the channel, am I seeing all of my team doing it? And for this particular individual, I wasn't seeing him doing that.*

*(Interview, Manager 29)*

*Well, since we use Slack a lot, if I can never get them on Slack or we wait hours for a response, I would be highly irritated.*

*(Interview, Manager 13)*

Overall, managers show an emphasis on behaviour controls: sharing work updates, meeting deliverables and deadlines, and communication responsiveness. Behaviour is observed indirectly via updates in communication and work-tracking software such as Slack and Trello.

### 5.5.5 Attitude-Related Behaviour Monitoring

As mentioned earlier, interview transcripts and diaries were coded for instances where managers described monitoring or control. To ensure the coding was comprehensive, and to minimise the degree to which my pre-existing knowledge of control frameworks might cause me to overlook new data, I coded for evidence of input, output, and behaviour control and monitoring. I also coded instances of monitoring that did not fit into those categories into an 'Other' category. It quickly became apparent that much of the data coded into the 'Other' category represented a unique theme of its own: managers monitoring the mental and emotional state of individuals in their teams - their attitudes.

Below are some examples. In some cases, managers mentioned that they monitored individuals' attitudes indirectly, rather than explicitly discussing it:

*I think he expressed some concerns about maybe some architecture or some approaches that we're taking and then, you know, just kind of slowly checked out, just was less and less responsive, would fail on some things and he was struggling with getting motivated and I could tell he was withdrawing and, you know, you call them on it, but it really just, it was just not a fit. And so, one day, in an email, he just resigned on me, which, you know, it wasn't unexpected.*

*(Interview, Manager 19)*

*It's something that I noticed in Slack. One of our employees had a marked change in their tone. And I noticed that, and I brought it up. I was like "Hey, I noticed in Slack that blah, blah blah. What's going on?". And they were like "Oh my*



*gosh. I didn't even notice that. I'm so stressed with what's going on in my home life, I didn't even notice". ... It's a thing where it wasn't my direct report ... they wouldn't even be in my normal sphere ... So, it's not like I'm sitting down with them and I'm watching them code or I'm reviewing their work. I just noticed this, and I was like "Woah, what's going on here?"*

*(Interview, Manager 4)*

Others were more direct in discussing monitoring for attitudes. This manager noted a relationship between their team's attitude and the team's work output. I asked how the manager identified those fluctuations:

*I pay attention to really subtle things like how communicative they are in group channels in Slack ... I can watch their team interaction and you know, like, oh, this person is usually really chatty and now they're not. Or this person usually has a certain tone when they're chatting, now they seem really short. Um, or they're not interacting at all. So that's one area that I can track.*

*(Interview, Manager 18)*

The manager went on to describe how they also tracked work output. Another highlighted the importance of attitude over the more technical aspects of the team's work:

*So yeah, I listen for tone probably more than the technical decisions they're making because they seem to do that pretty well.*

*(Interview, Manager 12)*

I commented that tone can be quite difficult to judge in written communication and asked what the manager meant by tone. They elaborated:

*Well, I guess, uh, I mean there are words that denote tone obviously [laughs/joking]. But I guess changes from the way somebody might normally communicate. So, you know, if they're normally kind of chipper and upbeat and it's gotten a little sour, like something's going on. It could be any number of things. I mean they're maybe thousands of miles away in their own house and so I don't know if the dog kicked over the garbage, you know what I mean? Like it could be a lot of things, right? So, just, you know, just kind of checking in with people.*

*(Interview, Manager 12)*

I asked another manager how they would identify that a new team member might not be working out:

*I don't worry it so much in the more social channels in Slack, but if I start not hearing from them very often or not seeing them chat a lot in the channels that I normally see them chatting, so just a drop off in engagement, then I'm like, Ooh, what's going on with that person? Not like, Ooh, I don't think they're working out but like, are they okay?*

*(Interview, Manager 16)*

Another manager, quoted above, commented on how easy it was to track work activity because all the work was visible and shared online: “*Nobody does anything, does any work that I can't see*”. I asked whether the manager used that information to track work outputs. They gave some detail on their team’s workflows then said:

*And you know, I have to put a lot of faith in them, a lot of trust, and I do. And that's rewarded. But I can see all the responses. I'm in the support team too so I see all their responses, we communicate, and they'd ask me a question, or I'd ask them a question about something. Again, all visible, very easy to track and monitor. And it genuinely isn't about "are these people performing", it's about making sure they're happy and prioritising.*

*(Interview, Manager 2)*

One manager described their system for tracking people's attitudes:

*Yeah, so I kept records basically of those conversations and had a sort of, green-orange-red flag system for myself. Where, you know, "everyone seems really happy" and that's green, through to "we've got some quite bad issues here" where they're red. And, you know, if that was sort of slipping into that orange thing, it was a case of more contact and also making an effort to see them, e.g. go and see them, and have a talk and try to get to the bottom of, you know, why are they feeling a particular way or why things aren't going well for them. And you know, if it got to the stage where it was a systemic type issue, then you moved to putting in plans into place about how you addressed it.*

*(Interview, Manager 3)*

Another gave the example of both being aware that a person's behaviour had changed, and taking actions to follow up:

*If I notice that someone is like more reserved than usual in a meeting or they seemed down cause we're always on video, right? If they seem like something's off and I just send them a quick message on Slack, like, hey, you seemed like a bit down, is everything okay?*

*(Interview, Manager 26)*

This manager commented on using communication behaviour to monitor team members' moods:

*We will have team members who will post things into our [group chat], which is where we have the banter and the water cooler conversation. Um, and actually even from that, you can detect how people are feeling by the frequency of the commenting, the tone of their commenting, their emoji use, you know, how much they're just responding to others versus initiating.*

*(Interview, Manager 17)*

Another reported an issue in a diary entry where a team member was suffering stress due to project deadlines:

*We have several projects with deadlines approaching fast. All are behind and in jeopardy of not making it. This isn't directly our fault as the deadlines were set without our input. My project lead is feeling a lot of stress about this and was beginning to get down on himself for failure to deliver.*

*(Diary, Manager 28)*

When asked how the manager would know if the actions they had taken in response had been successful, the manager reported that they would monitor behaviour for indications of the person's attitude:

*I will need to watch his behavior and communication in our video meetings and online chats to look for indications of positiveness/negativeness.*

*(Diary, Manager 28)*

This monitoring of attitudes is considered part of a manager's role:

*By the end of a sprint or two will tell us if somebody's suddenly had a dip in performance because they just won't have done their work. That's easy to pick up. The "I am unhappy" thing? Much harder! And ideally what that means is that people are just getting friendly drive-bys from someone - just "Hey, how's it going?" Do they look angry? Are they unhappy? Has another member of the team said "Hm, having a tough time, struggling a bit"? So, I do think you've got to have someone in that manager role in order to keep the team, you've got to have someone keeping an eye on the mood of the team and the mood of the individuals in the team.*

*(Interview, Manager 8)*

A different manager described this monitoring as part of their role:

*Not that I really monitor my team, but I do keep an eye on it because that's my role. I need to make sure my team is happy. We literally have a [task assignment] called 'team happiness' and I have to be on the pulse of what's*

*happening. So, if I can see someone's responded or jumped in or a conversation's getting out of hand, I'd jump in straightaway now or I might DM someone and say, hey, are you alright? Or hey, what's up with that response? Was that really necessary? So, you can monitor things a little bit online.*

*(Interview, Manager 23)*

Managers' responses indicate several things: that managers are deliberately monitoring the attitudes of their team members; that in distributed teams they are doing this by monitoring communication behaviours; and that monitoring attitudes is considered as important as monitoring work progress and decisions. It is also worth noting that managers monitor for *changes* in employee behaviour, which implies that managers have established a baseline of 'normal' behaviour for each employee, from which managers will identify deviations. This appears to be established through a combination of on-going observation of communication behaviour and using one-on-ones and personal relationships to get to know their staff (discussed in more detail below).

#### **5.5.6 Control and Monitoring Summary**

To summarise this section, the data shows that managers adjust their hiring input controls for working remotely. Specifically, they pay extra attention to communication skills, tend to prefer hiring people who have worked remotely before, and show a strong preference for hiring seniors over juniors. Hesitation to hire juniors may be driven by a concern about the mechanics of mentoring, in particular a concern about being able to effectively socialise juniors. The data also shows that managers with remote staff tend not to rely upon output controls, based on the definition of output controls requiring a pre-defined and agreed-upon measure. This is likely because much remote work is knowledge-based and team-based, which makes it difficult to

establish measurable output in advance. Where output is tracked, the measurement tends to be subjective and used in context with other monitoring information. Behaviour is monitored for two separate purposes: monitoring for work-related behaviour and monitoring for attitude-related behaviour. Work-related behaviour is controlled via expectations of regularly sharing work in progress, updating shared work tracking tools, and communication responsiveness is also monitored. Attitude-related information is gathered by monitoring communication behaviour, including changes in the tone and content of communication and the level and type of participation that employees show. Many managers consider monitoring for attitude-related information an important part of their role.

## 5.6 IMPORTANCE OF MONITORING ATTITUDES IN REMOTE TEAMS

It is important to ask whether monitoring the attitudes of team members is more important in distributed work, and if so, why? I would suggest that monitoring attitudes is equally important in co-located and distributed work, but it is more *salient* for managers in distributed teams because monitoring attitudes is more difficult to accomplish. It is more difficult to accomplish because in a co-located situation this type of monitoring is often done through unobtrusive, visual observation. Several managers reflected on this challenge.

### 5.6.1 Reduced Observation

Several managers mentioned the lack of opportunity for unobtrusive, visual observation as a challenge they face. With one manager, who had just outlined their policy on flexible work hours, I asked if that made it more difficult to track issues with absenteeism. They responded:

*You're absolutely right, the remote working folk, that's much harder. The people in the office, that's the visible stuff you're picking up on. I know, for example, [employee] here*

*in our office, is amazing - he just gets everything done. And he turns up every day at 9:30am. And that's cool, we don't care that he turns up every day at 9:30am. But if he started turning up every day at 9:40am or 10am, I'd be "hmm, maybe there's something weird". Maybe it's a different train but again, you just don't get that visibility of sickies or the disengagement. So, I don't have, I don't think we have an effective way of doing that yet, of seeing that yet. I guess there's an observation when people aren't engaged through email or their responsiveness but that's...*

*(Interview, Manager 6)*

Unfortunately, the manager in the quote above was interrupted by a phone call before they could finish their sentence. Another manager, who was quoted above talking about the importance of 'drive-bys', went on to explain why they feel it is more difficult to manage remotely:

*And ideally what that means is that people are just getting friendly drive-bys from someone - just "Hey, how's it going?" Do they look angry? Are they unhappy? Has another member of the team said "Hm, having a tough time, struggling a bit"? So, I do think you've got to have someone in that manager role in order to keep the team, you've got to have someone keeping an eye on the mood of the team and the mood of the individuals in the team. I don't think there's a way to do that remotely because, you know, you can't see my body language below here! [gestures to mid-chest height]. You don't know whether I'm sitting up or down or forward or back or... all those super subtle cues - what do they look like? What time did they come in? To the*



*minute. Are they coming in ten minutes later than normal? That probably means they're not as excited about their work as they are normally. You can't notice that stuff unless you're there.*

*(Interview, Manager 8)*

With another manager, I asked why they put so much emphasis on one-on-ones:

*So, for me it's because, uh, the potential for danger is greater in remote culture. I think it's way easier for miscommunication to happen or because again, you don't have that visual of like "oh this person walked in today and looks happy" or they look sad or you don't have just the 15 minute chat at lunch or whatever. And so, I think because the risk is greater, I am way more conscious of like, okay, you need to be constantly guarding against it. And checking in with this person, whereas I think in person you can also be like, oh that person looks happy, they're fine and kind of gloss over some deeper things that you don't see because you don't really dig in. You take those visual cues and write it off as done without actually checking with the person. Whereas here, I don't have any visual cues as to whether or not they're happy in the day. So, I have to really, yeah, like sit in and dig in.*

*(Interview, Manager 15)*

One manager described moving from managing co-located staff into their current role managing remote staff. I asked if there was anything that they felt

apprehensive about, moving into remote work. The manager's main concern was the inability to observe social cues:

*The things that I was concerned about were the ability to read body language on an ongoing basis, right? To hear the casual encounters that you get that aren't formal. So, you know, as a manager I relied a lot on, I'm sitting in a room with or near people that I work with and I can see when they sigh frustratedly about something. And, you know, I can interact with the team by those social cues that they give. I can see that when we go out for lunch together, one person is interacting with another person in a way that tells me that their relationship might be strained or there's a positive relationship there that I could leverage or, you know, encourage. So, all those things wouldn't exist. Um, so that's one thing that I was worried about.*

*(Interview, Manager 22)*

I asked, now they had been managing a remote team for a while, whether those things turned out to be a problem. The manager said:

*I mean, yeah, they are. I wouldn't call them a problem. They're definitely true. But there are other ways to accomplish the same thing. And so, I've just found other ways to do the same thing.*

*(Interview, Manager 22)*

I asked how the manager went about that and discuss their responses later.

As well as feeling that visual observation of social cues was missing, managers also reported specific instances where a lack of visual cues

influenced communication or cooperation. For example, one manager reported how being remote had influenced an issue where an important task was overlooked:

*If the person was in my office I would have been aware that they were under personal pressure and could have asked if I could help by taking some of the load.*

*(Diary, Manager 21)*

And another where an angry miscommunication had occurred:

*I think this is a good example of the difficulty of working remotely - something has been lost in translation and the remote aspect has added to the difficulty. If we had been in the same room, I would have picked up more quickly that this was a hot topic for him.*

*(Diary, Manager 20)*

Managers identified the lack of opportunity for unobtrusive, in-person observation of body language, social interactions, moods, and other behaviour as a challenge when working remotely. Managers can compensate for not being able to observe people in-person by monitoring for changes in communication behaviour - changes that may indicate a change in attitude.

## 5.7 MONITORING ATTITUDES TO MITIGATE RISKS IN DISTRIBUTED WORK

If we accept that managers monitor for changes in communication behaviour as an indicator of potential changes in attitude, a natural question is: why? Why do managers need information about their team's attitudes? Moreover, are there specific risks when working remotely than necessitate more attention to behaviour changes or attitudes than would be needed in a co-located setting? I further analysed the interview and diary data to identify the

risks that managers mentioned. These risks fell into four broad categories: *operational risks*, *communication risks*, *morale risks*, and the risk of *withheld information*. Withheld information, in particular, seems to relate to the need for managers to monitor attitudes and the absence of visual cues and observation. As this was the risk most commonly identified by managers, and the most relevant for the phenomenon of monitoring attitudes, I will discuss withheld information first.

#### 5.7.1 Withheld Information

In the initial analysis of categories, using a process similar to axial coding (Charmaz, 2014), a theme emerged that I have termed ‘withheld information’. This is a group of risks that managers mentioned that relate to the idea there are things that, as a manager, people cannot tell you and things that people will not tell you. For example, a person cannot tell you if they have misunderstood a conversation, or that they are unaware of important aspects of a plan. And there are things that people may not be willing to tell you: if someone is unhappy, uncertain about their own performance, or feeling at risk, communicating that to their manager may not be their first instinct. They may instead seek to preserve the appearance of success and thus keep problems under cover. Managers are aware that their staff may not be willing or able to be completely forthcoming about their situation. This risk of ‘withheld information’ was by far the most common risk that managers mentioned during data collection. Managers felt that there is a quantity of information they may be missing and that they have no way to judge if that information is in fact missing. They also have no way to judge what risks that missing information may alert them to, if they had access to it. The data suggests three key dimensions to withheld information: withheld information regarding one’s own state or performance, withheld concerns or issues, and a relationship between visual cues and withheld information.

#### 5.7.1.1 Withholding Information Regarding One's Own State

Staff who feel unhappy in their role or concerned about their performance, for example, may not feel comfortable sharing these issues with their manager. As one manager put it, when you only see your staff in video calls:

*The thing is, it's easy to stick the plastic smile on for 10 minutes, isn't it?*

*(Interview, Manager 8)*

Another manager expanded on the same idea:

*I think that managing remote staff is also partly an art form because it's tricky enough to get a holistic picture of someone in the same office as you and checking everything's okay. It's five times as hard to do that when they're remote and you're getting little snapshots of stuff. Particularly if somebody's deliberately sort of trying to paint a rosy picture when they're struggling and all the rest of it. It's difficult to sometimes read those signals without seeing them.*

*(Interview, Manager 3)*

The idea that people may withhold information came up repeatedly:

*Nobody wants to come up to [a daily meeting] with other people and say "yeah, I did this wrong" or "I'm stuck", and I get that there's this argument that's why we need to create teams with trust and yadda, yadda, yadda, but just be honest about human nature a little bit, right? Sure, we can have trust but people are going to be inclined a lot of the time to hide that. It's just their natural position.*

*(Interview, Manager 11)*

Another says:

*It's still, if morale fades and someone's good at kind of putting up faces, which some people can be, then I don't get the real scoop.*

*(Interview, Manager 19)*

One manager gave a more detailed example where an employee had left their role and, while tidying up the ex-employee's client-facing email account, it became clear that the employee had in fact been stressed and unhappy in the role, but was not willing or able to discuss that with their manager:

*We just recently had one of our salespeople leave and another salesperson went in to just get emails and tidy everything out and we found a [conversation] between two people that was really shocking. Not, not bad, they weren't doing anything wrong and it wasn't, you know, they didn't hate working for [the company] but they were having a conversation about their stress levels that really shocked me. Yeah.*

*(Interview, Manager 20)*

The manager went on to note that even when asked directly, people may not be forthcoming:

*Literally the woman who was involved had just had her annual performance review and we always ask the questions, you know, how are you doing, do you feel like you've got enough resources, what do you need? "Oh Great. Loving it, loving it", and you know, "Completely*

*resourced. No, I don't need any help". And that was not, it just wasn't, it was not the case.*

*(Interview, Manager 20)*

The manager was conscious that people may not want to raise their own performance issues with their manager, and this can be particularly problematic if the manager and staff are not co-located:

*I think people are often quite happy to talk about, you know, their children to me and if things are going well. I think perhaps people are less comfortable talking to somebody that they may have only met one time with something that's not going well professionally. Right? That's an awkward topic, isn't it? And people don't want to say I'm struggling. And if you were walking past the desk, you would have that, they won't say it, but you might see it. And I think that is a disadvantage.*

*(Interview, Manager 20)*

Managers are aware that people, naturally, may not feel comfortable sharing information with their manager if that information could reflect badly on them, even though that information may be highly important to the manager. Managers often feel they would be more able to identify these issues in person, where they could observe behaviour and body language. Furthermore, the data suggests that staff may be hesitant to raise concerns, even if they do not directly relate to the individual's own performance, as discussed next.

#### **5.7.1.2 Withholding Concerns or Issues**

Even in a co-located team, information may not always flow easily to the manager. One manager observed that often 'the manager is the last person to know':

*One of the things I think is interesting about many companies when it comes to performance management is, it's almost always that the manager is the last person to know. What I mean by that is that the team always knows. Because the team, you know, the team is working with this person and knows that their output is great or not. And eventually it kind of filters up to the manager.*

*(Interview, Manager 4)*

Although the participant above was not talking about remote work specifically, the manager being the last to find out may be exacerbated in remote work. For example, this manager commented on the need to recalibrate how they react to people raising concerns with them remotely, indicating that it may take longer for managers to find out if there is an issue within the team:

*I also think that, it's funny because with remote, there's an extra layer of like, if someone needs to complain about someone or bring you information, there's another barrier that they can't just, it doesn't come out in a side conversation. So, they have to proactively come to you and be like, hey, this person is really falling short in these areas. So then it's actually a recalibration when someone comes to you with that kind of sentiment because you're like, okay, they probably sat with this longer than normal and now they're coming to me, so I need to pay attention to it because they've probably already stewed on it a little bit because they've had to work up enough courage and whatever to like ping me and be like, let's have a video chat.*

*(Interview, Manager 16).*



Managers acknowledge that information may not flow to the manager as freely as it would in-person. It may remain withheld for longer. Managers also mentioned that if they were working in the same physical space as their staff, they would be more able to identify issues without needing to be told explicitly. This highlights the importance of casual observation for managers in understanding the state of their team.

### 5.7.2 Link between Visual Cues and Withheld Information

Some participant managers had experience managing both co-located and remote teams at different times in their career. When discussing the contrast between managing remote staff and co-located staff, those managers mentioned that a key difference was that for co-located staff, observation helped them identify issues early. This highlights the link between observation and withheld information.

Discussing performance with a manager who has both co-located and remote staff, I asked if the manager found it easier to get a sense of people's performance when co-located with staff. The manager responded:

*Yeah, unquestionably. Because [in person] you can see, you know, you can see the people do that [mimes slumping over, possibly in despair or exhaustion]. And you can see the people being playful, hear the grunts or the moans or the sighs or whatever when they're under pressure. And likewise, you can see when they're visibly, you know, feeling successful and, you just never get a sense of that.*

*(Interview, Manager 6)*

This highlights the role of observation in understanding the team's state. Another manager emphasised the importance of observation for early identification of problems:

*And then you have the HR/management side of it, which is how do you know when people are happy, when people are unhappy, and that's so much more difficult, so a.) you don't see those things, you don't get to nip the in the bud. They're likely to be more developed by the time you find out.*

*(Interview, Manager 8)*

One manager commented on the importance of being able to read people's expressions:

*But when I do find out something about them as a person that, you know, that rings a little alarm bell or you know, nothing serious but something that I do need to pay attention to, that I pay far more attention to it than I would with someone in the office because in the office, I can just see their face, you know? I can see if someone's depressed. You know, it's a lot simpler.*

*(Interview, Manager 25)*

One manager commented that being remote meant they were more likely to have to take their staff's responses 'at face value':

*Is there anything that's bugging you, you know, is there anything that we need to talk about, and I don't know them as well as I would know them in the office. So, them saying no, I just have to take that at face value. Whereas maybe in an office I might see their tells or whatever, you know.*

*(Interview, Manager 21)*

This suggests that the manager would not necessarily take those answers at face value if they were co-located with their staff - they would instead check

body language or other visual cues. The data here indicates that other managers feel similarly; that they are aware they lack the visual cues that may indicate withheld information.

#### **5.7.2.1 Diary Evidence**

The diaries also provide some insight into how managers identify and follow-up on withheld information. One manager identified a problem with a staff member who was not coming up to speed as quickly as hoped. Initially the manager reported:

*We also did a drivers (what things motivate you/ drive your decisions) discussion. I noticed in it that he was nervous, maybe even hesitant to select some things. Made me realize that I may not have fully earned his trust, and that he doesn't yet feel really incorporated into the team.*

*(Diary, Manager 29)*

Three weeks later, the manager reported on a follow-up conversation with the person in question:

*The chat went well and we were able to talk about some of the things that were holding him back, in particular feeling uncomfortable reaching out for help. A lot of that was rooted in his fear of showing a lack of knowledge, which we spent a bunch of time talking about. We identified some changes, and talked about expected culture etc.*

*(Diary, Manager 29)*

Specifically, the manager felt that:

*In thinking about it, it would have been good to have a higher tempo of 1:1s with [Name] as he is relatively new.*

*That could have helped a bit with on-boarding and cultural indoctrination.*

*(Diary, Manager 29)*

Here the diaries provide an insight into the specific *processes* that managers use: developing trust, utilising one-on-ones meetings, and ultimately being able to solicit some withheld information that was affecting the employee's performance. This will be explored in more depth below.

Overall, we see that managers are aware that staff may not be willing or able to share information that may have a direct bearing on their job performance. Employees may be motivated to withhold relevant information, particularly if they are concerned the information will reflect poorly on them, but in-person observation can help managers identify this. This withheld information is valued by managers, in the sense that they notice their inability to gather this information remotely, and in the sense that they are willing to put considerable effort into compensating for it, as discussed below. Managers are aware that the things people tell them cannot simply be taken at face value and that if co-located, direct, casual observation of body language and other visual cues provides an important way to double-check the information that people are able and willing to provide.

### 5.7.3 Other Risks

The data indicated three other broad categories of risk: morale risks, operational risks, and communication risks. These risks have also been mentioned in previous research.

#### 5.7.3.1 Morale Risks

Morale risks took two general forms. One was a concern that employees felt their self, or their work, was not visible to others, or that others' work was not visible to them. The other was a concern that a lack of feedback can leave people

feeling uncertain about their performance. Other research has hinted at this effect: Kurland and Cooper (2002) found that telecommuters may experience more concern about isolation and professional advancement if managers focus on output-based management (Kurland & Cooper, 2002, p. 118). Felstead et al. (2003) also found that teleworkers could experience concerns over their work not being visible enough to managers, and may respond by over-working (Felstead et al., 2003, p. 245).

One manager relayed an incident where a member of the team raised a concern over their lack of visibility. The manager explained:

*One of the juniors was just discussing and she said, so I never know what's going on, you guys. I know you guys know what's going on, but I never know what's going on in this company. Nobody tells me anything and I'm just down here in the dark. I felt awful. So, I said, okay, how about I do a weekly update?*

*(Interview, Manager 20)*

Another manager provided an example where a team member felt insecure in their role with the following quote, where the employee was performing well but was still concerned about their role with the company. The manager suggests that 'imposter syndrome' may be more problematic in remote work:

*I have a team member that appears to be suffering from a crisis of confidence that is bothering him (and me). He seems to be concerned about his place in the team, his value to the organisation and worries that as our team grows someone else will have the skills that he has and we won't need him anymore ... Our CEO got in touch with me to say that he'd had a distressed email from the person explaining*

*that they are aware that they are not doing a great job and that they have personal issues which they know are getting in the way of work. Neither is the case, this is an incredibly valued employee who is doing a great job ... I have suffered a similar crisis of confidence in a past role. I \*think\* that this is something to do with working remotely but I'm not certain. I have never suffered from imposter syndrome in jobs where I haven't worked remotely. I'm extroverted and tend to find security in my interactions with others. That is more difficult when you're remote. Word[s] take on different (and probably unintended) meanings.*

*(Diary, Manager 21)*

An interesting thread that runs through the data on morale risks is that, for the staff in question, often nothing is actually going wrong. The anxious staff are not underperforming or necessarily missing out on important information that is circulating (any more than normally happens in a company). However, there is a sense that the team members are lacking some reassurance or some information that would occur serendipitously in a co-located setting, and that managers need to compensate for that. Indeed, Barsness et al. (2005, p. 414) argue that “remote workers may believe it imperative to inform their supervisors about their effort and performance, fearing that otherwise their performance will not be seen or acknowledged” and that this may lead to increased efforts to make a positive impression on their manager. Given that individuals who feel they are underperforming might be inclined to withhold that information, an exaggerated risk to individuals’ morale is particularly problematic for managers with remote staff.

### 5.7.3.2 Operational Risks

Operational risks fell into three categories: challenges with training, risks of staff overworking, and problems caused by slow turnaround time in communications.

#### 5.7.3.2.1 Training

The challenge of on-boarding new staff has been talked about briefly above, in the Input Control section. Managers also reported feeling that training any new staff remotely could be a challenge, junior or senior. For example, one described a team member who was struggling to come up to speed:

*My lead developer said, if I'm being honest, I think that if we weren't remote then I probably would have been able to spend more time coaching and counselling and pair programming and done this, and so I think he would have been able to learn this faster if we haven't been remote.*

*(Interview, Manager 17)*

Another described an in-depth on-boarding process for new staff. I commented that it seemed very comprehensive and asked if the manager felt it was more comprehensive than it would be in a co-located team. Their response echoes the importance of observation in socialisation, as suggested above:

*Oh my God. Yeah. I think that the key thing, the difference is, you have to be intentional. I find you have to be so intentional, you know, because... it's not like you notice people getting up from their chairs and going to meetings, or you don't learn through osmosis just listening to somebody, which happens, you know? I've definitely done lots of co-located teams before this and yeah, you can just*

*dump somebody in a co-located group and they're going to figure it out, talk to people, ask lots of questions and it's going to get done.*

*(Interview, Manager 19)*

This supports a finding in Kurland and Cooper (2002), where the authors found that managers were concerned about the difficulty in mentoring telecommuters.

#### 5.7.3.2.2 Overwork

Managers also worry that their staff will overwork. This is partly because remote workers are often working in their own homes and so it can be difficult to separate work life from home life:

*It is a problem for some people, particularly with when they're doing it for the first time and there is a real danger, and it's not the danger that most people think, oh, people are just going to skip off and not do anything. It's the opposite. It's burnout. It's the fact that they never leave the screen. They never get away. They never take a break.*

*(Interview, Manager 14)*

*[Name] does too much work. (What a delightful problem to have.) He handles the lion's share of the Support tickets, and is going to burn himself out shortly because of it.*

*(Diary, Manager 24)*

As noted above, this finding has been exhibited in other research. For example, Felstead et al. (2003) found evidence of overworking in response to concerns that teleworking would make it difficult for staff to demonstrate their value to managers.



#### 5.7.3.2.3 Productivity-Impacting Delays

The last operational risk is the risk to productivity and smooth operation caused by delays in communication. This is often a result of people working in multiple time zones with limited overlap, which forces communication to happen asynchronously. One manager described the frustration of coordinating across multiple time zones:

*Also aligning, especially if there's more than two people involved, you know, if it's not just me and another person, but it affects like someone from another team or someone from our own team, that takes more time and energy. The stalling out can be frustrating where there's something really big going on, it's really high priority. I need three people in order to have the conversation about what needs to happen because no one can really move forward until we all connect and coordinate. But one person's at lunch, one person's at the gym and the other person is here wanting to get work done. So that can create, especially for people who really want to just deliver things, that can create frustration.*

*(Interview, Manager 18)*

Another gave the example:

*But if you spread people out you know, over a lot of time zones, it becomes really important to have like, well, where is the documentation for the decisions that we made? Because, you know, [Name] is in bed now and I'm at work and need to know, so I can't just ask him.*

*(Interview, Manager 28)*

Overall, asynchronous communication introduces operational risks for managers: risks that staff will fail to manage their own work hours sustainably, risks that on-boarding new staff will be slower or less successful, and risks that slower communication and decision-making will affect productivity.

#### **5.7.3.3 Communication Risks**

Communication risks are risks that arise from the challenges of communicating via technology and asynchronously. They fall into two main categories: risks from misinterpretation, including risks to relationships; and risks of misalignment, including risk of misaligned priorities.

Risks from misinterpretation occur in co-located and distributed workplaces. However, managers in distributed teams tended to worry about how effectively those misinterpretations can be identified and corrected and, consequently, about larger risks to relationships.

One manager commented on the importance of being aware that you might be misinterpreted:

*But I think that remotely, that understanding, that saying things like that can cause offence or can be misinterpreted or taken the wrong way when I'm not standing in front of you with a big grin on my face ... And so if you're working with remote teams, you need to be very aware of how you are perceived, and constantly check yourself because at the end of the day, someone's receiving something from you, and the way that you are giving it makes such a big difference.*

*(Interview, Manager 31)*

These misinterpretation risks tend to be related to a concern that the emotional tenor of comments will be missed in remote communication, and that can have detrimental effects that can be difficult to identify and solve quickly:

*It's harder to repair damage. Because, I mean, you can't just accidentally bump into somebody and be like, oh, hey, sorry about the other day. Yeah. You have to, if you have to make amends, you have to kind of go hat-in-hand and reach out to them and you know, it's... [I ask: it's more of a big deal?]. Yeah. You feel it a little bit more. You, when you've got to do it that way, you feel a little bit more contrite about things.*

*(Interview, Manager 27)*

A related, but different type of communication risk is that of misalignment. This is also generally caused by a misinterpretation, but the misinterpretation is task-related rather than misinterpreting the social or emotional intent of a message. These misalignment risks can mean that people are prioritising work incorrectly and, due to less observation and potentially longer time between check-ins with staff, these misalignments may mean people are spending their time inefficiently.

I asked one manager if they worried more about miscommunication with remote staff. They said they were much more intentional about communication with remote staff and put more effort into checking for misunderstanding. The manager went on to explain why it was particularly important if crossing time zones:

*So, people in the office ... I'll quickly find out about it because I'll, you know, I'll talk to them about it as I'm walking past for coffee or whatever. Whereas the time*

*difference between [remote compared to in the office] is easily enough time for things to progress drastically in the wrong direction, you know, make great progress on nothing that's useful or was talked about.*

*(Interview, Manager 25)*

Interestingly, in the diary entries, misalignment of priorities was one of the most common problems that was reported. For example:

*A team member was approached and agreed to do some work outside of the currently accepted priority project.*

*(Diary, Manager 25)*

*The behavior I have been trying to curb was the tendency to jump on issues that 'seem important' but may not have a[n] impact in the grand scheme of things.*

*(Diary, Manager 33)*

*One member of my team has been (productively) procrastinating on a task for several months now. We were paying him to do the task before he began working for us and then employed him part way through. He now prioritises other work over this task.*

*(Diary, Manager 21)*

Overall, we see that managers are aware of, and working to mitigate, risks of misalignment and incorrect priorities, and risks of misinterpretation and potential damage to relationships that occur when communicating across distance. These risks highlight that communication tends to be incomplete and uncertain. What is written or said in a conference call is subject to

interpretation by the receiver and that interpretation may differ from what was intended. This different interpretation can be difficult to detect until something has gone wrong, and in a remote setting considerable time or effort may elapse before the miscommunication is identified and rectified. Furthermore, interpretation requires context (for example, being able to see someone grinning while they make a joke) to reduce ambiguity and increase the chances of arriving at the right interpretation. The manager that gave the example of jokes being misinterpreted if the receiver cannot see you grinning noted the effort they put into ensuring that they know their team as individuals, and that their team knows the manager, so that the manager can engage in jokes and casual conversations with their team. As communication is uncertain and incomplete, managers cannot rely on communication at face value.

#### **5.7.4 Summary**

To summarise, managers are aware they have fewer opportunities for direct, unobtrusive monitoring of body language, social interactions, moods and other behaviours, and that these observations serve as a valuable source of information when co-located. They are also aware that written and spoken communication is incomplete and uncertain and therefore cannot be taken at face value. To compensate for this, managers monitor communication behaviour for information that observation might otherwise provide: uncovering withheld information, insight into employees' attitudes, and early identification of possible problems.

### **5.8 MANAGERS USE RELATIONSHIPS TO IMPROVE THEIR ABILITY TO MONITOR ATTITUDES**

As we have seen in the data so far, managers dedicate effort to monitoring the attitudes of their staff. In a co-located setting, this would likely be achieved through deliberate conversations, such as one-on-one meetings, as well as

observing people during day-to-day interactions, and through direct observation of people's body language and behaviour. Managers notice the lack of opportunity to observe their staff's unguarded body language and behaviours, as discussed in the Reduced Observation section, above.

Managers compensate for their inability to use direct observation to gather information on their employee's attitudes and instead focus on communication behaviour as a potential indicator of attitude. To do this, to make sufficient information available, they encourage personal information into the workplace and intentionally and effortfully develop closer relationships with their staff. One-on-one meetings form an important basis for developing these relationships. The relationships provide context that allows the manager to interpret more traditional control-related information gathered through output and work-related behaviour monitoring, and provide a baseline from which managers can identify changes in employee behaviour that may indicate problems or withheld information. These relationships sometimes require vulnerability on the part of the employee, and also on the part of the manager.

#### 5.8.1 Personal Information in the Workplace

Managers encourage their staff to share personal information in the workplace. One manager described team meetings as starting with personal information:

*We start off with just like a virtual water cooler and we ask everybody how their weekend was, what did you do? You know - it's a work meeting but we're talking about not-work stuff, because it's part of getting to know this other person.*

*(Interview, Manager 4)*

Another shared a similar technique:

*And then my staff meetings ... we'll take 30 minutes every now and then to have somebody share their story. And so that's just an opportunity for everybody, we'll try and do it when everybody's there, but just really like personally or professionally, whatever they want to talk about, but their story of how they got to come all the way up until today.*

*(Interview, Manager 22)*

One manager touched on the potential legal complications from having so much personal information shared:

*You get a lot more of just sort of casual, oh, my wife is doing this thing over here or, um, uh, it gets a little dicey actually sometimes because we end up knowing for example, medical things that we shouldn't know about one another, especially not as a manager. We've had to actually make an effort to reign that stuff back.*

*(Interview, Manager 24)*

While the manager here is talking about having too much personal information in the workplace, it's notable that there was so much personal information being shared that they needed to take action to reduce it.

Another manager highlighted that sharing personal information was sufficiently important that they had directed their staff to share more:

*We have given feedback to one of our team members that we would love to see more of you and your personality in [the group chat] because we feel like we don't know you as much as we would like to and it's really smart and sensible*

*for you to ensure that your teammates do know you, more about you and who you are.*

*(Interview, Manager 17)*

Managers set aside time in meetings to ensure that people share personal, non-work-related information and encourage people to share that with their manager and their teammates. I commented to one manager that I found it hard to imagine a traditional co-located workplace where the first five to ten minutes of every meeting was deliberately set aside for chatting about non-work-related topics and they agreed that in a co-located setting, that sort of behaviour would probably be discouraged instead of encouraged. Where personal information may naturally enter the workplace in co-located settings, managers actively encourage and set aside time for it in distributed teams. This personal information allows managers and their team members to get to know each other.

#### 5.8.2 One-on-ones

All the managers interviewed invested time in one-on-ones with their direct reports and in many cases also had regularly scheduled one-on-ones with their skip-level reports. Most managers met with all their direct reports every week or every second week, depending on the size of the team. The one-on-ones typically lasted between 30 and 60 minutes, though would occasionally go longer. Obviously, this represents a substantial time investment from the manager, which suggests that the one-on-ones are considered important. For example:

*We encourage, I guess you could say require, one-on-ones.*

*(Interview, Manager 4)*



*So, the structure is very rigorous about one-on-one meetings. So, typically with my direct reports, I have them weekly and we keep to them.*

*(Interview, Manager 14)*

*I have a set one-on-one and neither of us ever really like cancels or moves it.*

*(Interview, Manager 15)*

*So, we ask that every manager have a consistent one-on-one with their direct reports. And that's either every week or every two weeks and that's the place they don't talk about to-do lists. They just talked about how are things, how things are going, challenges that have arisen and um, you know, any hard feedback that they have to talk about or not even hard feedback, but any kind of feedback that comes up.*

*(Interview, Manager 16)*

Another manager, with a larger team, changed the frequency depending on how new the person was:

*So, I have a one-on-one. It's usually every other week with everybody on my direct team. If they're new though, it's weekly until they and I both say, yeah, you know, I don't really have as much to talk about anymore. You're onboarded, you're fully integrated. And then we go to every other week.*

*(Interview, Manager 19)*

I asked one manager if they thought they spent more time in one-on-ones than they might if their team was office-based. They responded:

*Yep. But I think it's worth the investment.*

*(Interview, Manager 23)*

As well as high frequency and adherence to schedules for one-on-ones, managers reported that one-on-ones were rarely used to monitor work progress. While checking on work might occur, the emphasis was on getting to know the individual and relationship building.

*I would say [the one-on-ones are] very focused on the relationship, I focus it more on the relationship. It's obviously work focused but we will typically, you know, I have notes that I take about each of them after, just to remind myself of what we talked about and it always includes like personal things like, what's going on in their life. Um, you know, just like random tidbits you pick up. So yeah, definitely trying to talk to them as a person. And then also getting into work but it would never just be like, hey, here's what I need you to do, or checking on that. There's always some social elements.*

*(Interview, Manager 15)*

Another described two goals for their one-on-ones:

*I have two goals and neither of them is primary or secondary, I think. So one of the goals is go over anything they bring, that they want answers, feedback on, or bring anything to them that I have feedback to give them that we hadn't discussed earlier in the week or, you know, a new*

*project or something I need an update on or whatever, sort of the business. But an equally important goal of those calls for me is just connection and socializing and hey, how's your family and water cooler stuff. And, you know, I have a couple of people who will go quite far down sort of a philosophical rabbit hole about how our product works and how the communities should operate and things like that because it's interesting and it's fun to explore and also just builds the rapport and the connection, which you lose, I think. Um, you lose opportunities for that being remote. And so that's, uh, that's one of the more important things that we do on those calls.*

*(Interview, Manager 24)*

Another manager reflected on a new hire who was experienced but did not seem to be coming up to speed as quickly as expected:

*In thinking about it, it would have been good to have a higher tempo of 1:1s with [person's name] as he is relatively new. That could have helped a bit with onboarding and cultural indoctrination. Had he been in the office more (he is local but mostly works from home) I probably would have been more able to grab him and chat frequently. So... that's something that I need to work on in the future.*

*(Diary, Manager 29)*

One-on-ones are an important way for managers to create opportunities to talk with their staff, especially remote staff:

*This is actually something I've been thinking about a lot lately is whether or not my cadence for one-on-ones should be higher for my mostly-remote guys. Even though most of my one-on-ones end up being remote in one fashion or another, probably 70% of my one-on-ones are through video. Yeah, I've been wondering whether or not I should change the cadence for my mostly-remote guys to see if it would be useful to them to have more one-on-one communication than they're currently getting.*

*(Interview, Manager 29)*

I asked whether the primary purpose of increasing the cadence of the manager's one-on-ones would be relationship building. They responded:

*Yeah. Yeah, absolutely. With one exception, the only reason that I would want to change the cadence is really to get to know them better and then help build an even more trusting relationship with them.*

*(Interview, Manager 29)*

The one exception they mention is an employee who was showing performance problems.

These participant reflections show that managers with remote staff value one-on-one meetings to help build relationships with their employees and open channels of communication. This finding is supported by previous research. For example, researching telecommuters, Kurland and Egan (1999) found that telecommuters spent more time communicating with supervisors about personal topics.

Overall, working remotely seems to encourage an emphasis on time spent discussing personal, non-work-related topics, and one-on-ones provide a forum to achieve this.

#### **5.8.2.1 Vulnerable, Emotionally Intimate Relationships**

Some managers go beyond one-on-ones and put considerable effort into developing close relationships with their staff. This was often seen as necessary; to help the manager understand changes in behaviour or performance, and to get to know staff sufficiently to be able to help them succeed in their roles. These deep relationships also increase rapport, trust, and increase the likelihood that people will share information they might not otherwise. This often involved sharing quite personal information.

One manager commented that building rapport was one of the most important things they did:

*It was quite humbling to me some of the information my staff would share because I'd done that. And it helped an awful lot actually in my management of the staff to know that they were really struggling this month because their mother had Alzheimer's and they were shifting her into an aged care facility, or something like that. That, you know, in terms of being able to work with them and the company outcomes. You need that richness of rapport to do justice to these people. Yeah, build your rapport. I'd probably put that up as one of my top one or two things to do with a remote team.*

*(Interview, Manager 3)*

Some managers go to considerable length to develop these deep relationships with their staff. Ideas of intimacy and vulnerability came up surprisingly

often. One manager discussed modelling the kind of behaviour the manager wanted their team to exhibit:

*Basically, being able to be vulnerable to others and be open. Sometimes we all do mistakes so if I go there and say "Ok, I fucked up, sorry" it's much better for the team than trying to hide it and pretend like nothing happened. Or if I'm in a bad mood, I can say "Hey guys, sorry today I'm in a bad mood". It requires you to be more vulnerable to others and be more with your guards off. And then there is a lot of trust built in this way.*

*(Interview, Manager 10)*

Another manager said:

*So, you know, one thing is, from the beginning I try to establish very intimate, open, vulnerable relationships with my team members. Some of them are harder than others, you know? I worked with a handful of eastern Europeans who just, like, don't want to go there [joking/laughing]. But I feel like after two years I'm actually breaking some of them down. And so, I try to establish, like, this very deep trust with employees so that when I do ask ... when I ask them "how are you doing, what's going on?" they're more apt to give me an honest answer. But because I can't see that, of course, it just takes more time so I have to reach out to far more people and you know, each one of those communications takes extra time and a lot of times I won't even touch base with everybody in one week. So, I do have one-on-ones with everybody, but they're every other week.*

*(Interview, Manager 18)*

This manager went on to describe how they build these emotionally intimate relationships:

*I mean I try to be as vulnerable as possible, like I show lots of my own failures and faults. I talk about my challenges that I have personally, how I'm trying to improve as a manager. I admit mistakes as soon as they happen. Um, so I try to model the, you know, the sort of vulnerability I'd like to have. In our one-on-ones, I'll try to, when I can remember, I'll try to throw in awkward questions, you know, things that might make us both uncomfortable to talk about. And I don't do that right away. Like, I do that after we've been working together for a few months. But I find that that is helpful to artificially create these vulnerable moments.*

*(Interview, Manager 18)*

Another manager described how they would start to establish a relationship with new staff:

*When someone's new, I have kind of this collection of one-on-one questions just to understand them more deeply and form a relationship. So, you know, like the first one is, you know, a lot of these came from blog posts I read so they're all out there but one of the first ones it starts with is like, okay, how would I know that you're grumpy? When do you get grumpy? What can I do when you are grumpy? And we just talk about signals and symptoms that I should look out for and the kinds of things they want in terms of TLC if they*

*feel that way. And then I go into a thing like, you know, since ever since kindergarten, tell me about your life. Basically, a full hour where they break down their life ever since kindergarten. And I don't let them skip over their childhood or jump right into university or anything like that. And we just go through it. And then of course I share my story too because, you know, besides a one week on-boarding session with folks that we bring them out here, I have to form a great relationship with these folks.*

*(Interview, Manager 19)*

Obviously, asking someone for details of their life since childhood exceeds what would normally be considered work-related information and for some people may constitute difficult stories to share. Another notable feature in these approaches is that it requires a great deal of reciprocation on the part of the manager. Not only is the manager expecting the *employee* to open up, but the *manager* must also display this behaviour. A different manager joked about his approach:

*I think probably the best thing has been to some degree oversharing with those people about me. To really let them know what's going on in my life, or you know, to try and break the fourth wall of boss to employee. I'm veering into dangerous territory where I might start to sound like David Brent from The Office<sup>2</sup> BUT... You know, I think that building that relationship with people over the phone, you*

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<sup>2</sup> A popular British and American television show where the boss, character David Brent, is a caricature of someone lacking awareness of how others perceive him.



*do just need to talk crap with them for a fair bit because you don't get the opportunity to do that while you're making a coffee or while you're waiting for food in the microwave or, god forbid, coming out of the bathroom [laughs]. So, ah, you get that in-person, you've got to force that a bit when you're remote.*

*(Interview, Manager 6)*

Another manager referenced the fine line that managers must tread when developing such close relationships with their staff:

*I know that there's probably, like, a fine line between manager and therapist and I would definitely want to stay on the manager's side of things. But sometimes people just need to vent at me if they're frustrated or if they're upset about something. And I think that it's super important for them to be able to do that.*

*(Interview, Manager 26)*

One manager reflected that working remotely seemed to have changed their awareness of their own emotional responses:

*I would say this, working remotely has been the number one thing in my life to help me with my personal relationships because even, my partner and I were talking about this the other day actually because he was like, you know, since you've worked there your ability, it's like you have your emotion and you're immediately able to articulate the logical side of why it's happening. Like immediately. He was like, I feel like you're superhuman now.*

*(Interview, Manager 15)*

The manager felt that the reason for this was, “*Because you really are forced to reflect on yourself and also have that interaction with people*” (Interview, Manager 15).

In summary, we see evidence that some (though not all) managers are willing to go to considerable lengths to develop close relationships with their employees. For some managers, this is a significant time investment, with many hours each week dedicated to one-on-one catch ups with their staff where a key purpose of the one-on-one, and a key use of that time, is to share personal information and develop rapport. In some cases, managers also invest what must be a considerable amount of emotional energy and deliberately demonstrate a high degree of personal sharing and vulnerability. This effort highlights the importance of these relationships to managers.

### **5.8.3 Reasons for Deep Relationships**

Managers emphasised the importance of developing deeper relationships with their staff, and that developing those relationships requires more intentionality from the manager if their staff are remote. Relationships and rapport that may happen naturally in a co-located environment require effort from the manager in a distributed team. However, developing these relationships creates instrumental outcomes for managers: employees may be more willing to share information that they might otherwise keep to themselves, the relationships enable managers to more easily interpret changes in behaviour or output, to tailor their communication to suit the employee and thereby enable more effective communication, and by knowing the employee better, they allow the manager to modify roles to suit the employee’s needs if necessary. These instrumental reasons for developing deeper relationships with staff are discussed in more depth below.

#### 5.8.3.1 Encouraging More Discretionary Information Sharing

Having regular one-on-ones creates a forum where employees can express concerns in private. One-on-ones, by virtue of being a private conversation, enable sharing information that might not be shared in a group setting. This is not unique to distributed work, of course. Managers also recognise that sharing information beyond strictly work-related updates is in fact at the discretion of each employee. If managers put in the time, effort, and where necessary, personal disclosure needed to create a trusting relationship with each employee, that employee may be more willing to share information that they might otherwise keep to themselves.

For example, one manager commented:

*I really want to spend time with them, quality time with them and understand who they are. We get to talk a lot also about our personal lives sometimes and those one-on-ones, you know, I get to ask them about their lives and how they're doing. So, if the bond is there and you connect with them regularly, I don't see why they would hold back.*

*(Interview, Manager 32)*

Another commented that even when one-on-ones are quite short, the manager still finds them valuable:

*I still quite like them because it's sort of um, it makes me feel connected. Hopefully it makes them feel connected and if there's any problems I hear about it.*

*(Interview, Manager 20)*

One manager highlighted the importance of personal relationships so that people feel they can talk to the manager in question:

*I'm a naturally kind of a sort of gregarious, approachable person anyway. So, I think my team knows me well enough to know that they can talk to me ... I think that, again, it's that if you talk to someone, you get a familiarity and then you feel like you can talk to them more.*

*(Interview, Manager 31)*

The manager went on to point out how relationships give managers access to information that is important for them to be able to do their jobs well:

*I think that recognising that if you don't make the effort, your own staff think of you as a stranger. And you know, it's just makes life that much harder. And it's harder for you to get a sense of who's doing a good job and what feedback loops you've got. And it's harder for them because, you know, you're not seen as approachable if you're a stranger, or if you're only seen as a boss that tells people what to do and then you disappear again. And that's just a reality.*

*(Interview, Manager 31)*

This manager had a lovely insight, which has really stuck with me. They suggested that in distributed work, as a manager you cannot be what they described as “a table-thumper”. The manager said:

*So, you know, you can't be a table-thumper and manage remote staff.*

*(Interview, Manager 31)*

I asked them to explain. They said:

*You can't, that doesn't work. Because people can switch you off. People can mute you and start reading the paper while you're having a rant and not listen. I've seen people do it! ... ... You have to be realistic. That old style, I'm going to shout at you and that's your motivation, that doesn't work remotely ... Whereas when they're in front of you yelling, you don't have a choice.*

*(Interview, Manager 31)*

The manager summed up by saying:

*It's really hard to intimidate someone over [video conferencing].*

*(Interview, Manager 31)*

This highlights a shift in power dynamics in remote work, where some behaviours that are in fact quite discretionary, such as sharing personal information, being vulnerable, or just listening to someone who is trying to intimidate you, become much more difficult to enforce. Managers instead must rely on the goodwill of their staff and so having good relationships becomes more important. I will explore this idea more in the Discussion chapter.

#### **5.8.3.2 More Context for Control**

As demonstrated in the section on Output Monitoring, managers tended not to use metrics or pre-established measures for control, relying instead on observations of behaviour, especially communication behaviour. A notable feature of output controls with pre-established measures is that they tend to be viewed as more objective; everyone can see whether the output has met the agreed upon standard. When managers are not relying on objective standards, effective control depends instead on managers' ability to interpret

the control-related information they have gathered. Under these circumstances, the manager may need more context to decide if a change in behaviour or output constitutes a problem.

Some managers mentioned this explicitly:

*So, the standard information, what are you working on and how is it going or what are you struggling with? I mean, frankly, for the most part, I get that through them proactively and asynchronously publishing that, but what I need is the extra context, you know, the story behind the story. And that's why that's what I focus on.*

*(Interview, Manager 19)*

The manager quoted above mentioned this while discussing the importance of establishing personal connections with his team. I asked what they thought would happen if they did not have those personal connections. The manager responded:

*You know, for various folks' behaviours or the way they are, there is a reason and there's a story there and you know, I think without understanding the context, you create your own narrative, you create your own story to fill in the gaps and that doesn't do anybody any good. I mean that narrative is often extremely wrong. Maybe you've kind of pegged somebody for this kind of a person when actually, no, they are different. It just provides a lot of context to really understand who they are.*

*(Interview, Manager 19)*

Another manager talked about the importance of getting to know individuals:

*The content of what we're talking about is what are you doing and how is it going? But also I spent a lot of time trying to learn each person and kind of be able to read them to get a sense of is there some challenge here or there are some concerns here that maybe we should pull out some and unpack a bit while we're talking individually.*

*(Interview, Manager 30)*

One topic that does not come up often in the organisational control literature is the degree to which managers can be fallible in enacting organisational control. One can see evidence, here, that managers are aware they may not have all the necessary information to make evaluations, and so attempt to cultivate relationships that increase the amount of information they do have and to contextualise that information.

#### **5.8.3.3 Better Communication**

Managers often tailor their communication to each employee, which requires knowledge of that individual. This relates to the discussion, above, about the importance of clear communication and the risks related to miscommunication.

As mentioned earlier, there are fewer visual cues for managers to use to understand their remote employee's attitudes, which may alter how the manager chooses to communicate with their employee. For example:

*I can't tell if someone's sad or if they're a bit tired coming into the office. There's those physical cues that allow you to communicate differently. You know, you can see if someone's tired you're a bit softer with your communications, whereas when you can't physically see*

*that online, you rely on people telling you like, Oh, I'm tired today.*

*(Interview, Manager 23)*

As this manager notes, they prefer to modify their communication to suit the employee's state but without the visual cues that you might pick up in an office, the manager has to rely on the employee volunteering information to understand their attitudes.

Another points out that managers are often required to give feedback to alter an employee's behaviour. How that feedback is received is likely to be influenced by the employee's perception of their relationship with the manager:

*For me, rapport matters because I'm very careful to tailor my relationship with someone, or the way I communicate with someone, to what seems to be more effective for them. So if I have critical feedback to give, or positive feedback to give, or whatever, it's important to me to know how best they like to receive that kind of thing, which rapport helps with, to have it feel like it's coming from someone they know, to have it feel like it's coming from someone who's not just paying attention to their output, but coming from someone who has been paying attention to their thought process the whole time, or you know, knows they have a deep philosophical opposition to this project that they're working on, but they're trying to do it anyway.*

*(Interview, Manager 24)*



The same manager's diary provided insight into a situation where learning to communicate with an employee was a 'work in progress', and how that affected her ability to manage him effectively:

*I've got someone who's off in left field all the time. He's extremely long-tenured and intelligent, and has been left to his own devices for many years - long before I became his manager. My meetings with him are exercises in patience as I try to figure out how his mind works and how I can possibly steer him in a direction - any direction! His work is good but unsteerable and therefore difficult to predict or rely on.*

*(Diary, Manager 24)*

When writing about actions in response to this issue, the manager noted:

*It's an ongoing challenge. I haven't yet figured out how to effectively direct this person's efforts, or even move a conversation in a direction I need it to go.*

*(Diary, Manager 24)*

Reflecting on whether being remote had influenced the problem, she observed that understanding the individual and communicating effectively can be crucial for control:

*It might be easier to know what he's doing at any given moment if we were co-located, but I don't know if that would help me get more \*control\* over it.*

*(Diary, Manager 24)*

Getting to know staff as individuals allows managers to communicate with them more effectively and to direct their attention more effectively, especially for delicate conversations such as giving feedback to alter someone's behaviour.

#### **5.8.3.4 Better Helping**

Managers are uniquely placed to alter an employee's work conditions; to help mitigate personal or professional problems they may be facing or to help them succeed in new ways. To be able to do this effectively requires knowing each individual. As one manager says:

*It is really important for me to get to know everyone individually and to get a sense of their comfort levels and their strengths and what they enjoy. And so, I can kind of tailor the work for them.*

*(Interview, Manager 30)*

Another echoed this sentiment:

*One of the things I did, probably a good chunk of my time was, the team was small enough that I could know everyone and I knew some people liked to have a big backlog and, you know, they'd pick the thing that suited them and others were overwhelmed by that so I would keep theirs small and, you know, keep in my mind or my notes what I think they're best at and what I think they should be fed next without being overwhelmed.*

*(Interview, Manager 9)*

Part of the art of enacting organisational control - directing employee's efforts and attention to achieving organisational goals - is understanding and taking

advantage of individuals' strengths, which requires knowledge of the individuals. This knowledge can be acquired via the manager's relationships with their staff.

#### 5.8.3.5 *Intentionality*

The concept of intentionality occurred often in interviews with both managers and employees. This was in reference to quality and quantity of communication, and also in reference to contact with staff. One manager noted, for example:

*I feel like working remotely, everything just needs to be much more deliberate. Like I mentioned before, the stuff that comes for free in a co-located situation, doesn't [when] working remote. So, the rapport that you build just by seeing them in the office every day, you need to consciously do that.*

*(Interview, Manager 26).*

Managers often reported actions they took that were specifically needed because of the geographic separation from their direct reports. Many of these intentional actions centred on establishing enough contact and maintaining relationships.

#### 5.8.4 *Summary*

Managers intentionally develop deeper relationships with their staff because they feel that relationships will not develop at the same pace or to the same depth that they might if managers were co-located with their staff. These relationships are based on encouraging sharing of personal information in the workplace, one-on-one meetings emphasising relationship building, and in some cases developing close relationships by demonstrating and encouraging vulnerability and personal disclosure. These relationships create a conduit for

managers to get to know individuals better, allowing managers to make more accurate assessments of staff performance and attitudes, improve communication by allowing it to be tailored to the individual, improve performance by allowing the manager to tailor the role to suit the individual, and develop trust that encourages discretionary sharing by staff of information that might otherwise be ‘withheld’.

## 5.9 PERSONAL OUTCOMES FOR SOME MANAGERS

Evidence shows that managers with remote staff monitor their employees’ communication behaviour so that they can attempt to understand their employee’s mental and emotional state (attitude), in particular looking out for changes that may indicate problems occurring. These problems often relate to what would otherwise be *withheld information* – information that employees may be unable or unwilling to share with their manager. Managers’ responses indicate they are aware this information may otherwise be withheld and believe that they can anticipate problems by monitoring for employee’s attitudes.

Furthermore, it was found that managers often go to considerable lengths to access this withheld information by encouraging personal information into the workplace, devoting considerable time and energy to one-on-ones with staff, and sometimes by developing deep and vulnerable relationships with their staff. Given the effort that managers incur, this would suggest that the information managers are seeking has considerable value and importance for them. However, developing these connections requires more effort and can alter the nature of the relationship, as discussed below.

### 5.9.1 More Effort

Early in the interviews, I noticed managers mentioned that managing distributed teams took more work than managing a co-located team. To check this suspicion, during analysis I coded for all instances where managers

mentioned workload or effort. These instances were categorised as managing distributed teams was less effort, the same effort, or more effort than managing co-located teams. The idea that managing distributed teams was more effort was mentioned significantly more often, more than ten times as often as the other two categories combined. The extra effort is connected to the idea of intentionality; that many things that seem to occur naturally or easily in co-located teams require intentional effort in distributed teams.

Not all the extra effort was a consequence of using deeper relationships to elicit information but as a finding, the extra effort required to manage remote staff may have practical implications for managers, so I have included the data here.

Some of the extra effort was logistical, for example:

*Remote working does require more intricate processes and systems in order to make sure things are done. There is also a much higher degree of trust required between team members.*

*(Diary, Manager 21)*

*You don't have to plan to walk by somebody's desk - that's the big difference [in co-located work]. If you want to have the equivalent of walking by somebody's desk, I have to plan for it. And people don't like to have to do that because it's extra work for the manager. And it's a lot of extra work.*

*(Interview, Manager 1)*

*Don't underestimate the effort. It's not the same as having them all in your office. You have to work twice as hard or more, and you'll have more problems and you'll find them*

*harder to fix ... All of the above plus, you know, every time you're in an office and you just wandered over to someone's desk, you've got to try to get their attention remotely and they might be going and making a sandwich or something, and you know, there's that kind of like that little death by a thousand paper cuts thing, which is that nothing is quite as fast or convenient.*

*(Interview, Manager 8)*

Sometimes the extra effort comes from the hours required to stay in touch when your team is spread across multiple time zones:

*Well, the days could be a bit long where I'd be contactable, so I'd have the chat programs on my phone so people would reach me, you know, I might be at the gym early in the morning or at dinner or something and I could provide a quick answer.*

*(Interview, Manager 9)*

*I would respond to pings as soon as I woke up in the morning and, you know, before I went to sleep at night. So that was obviously very exhausting.*

*(Interview, Manager 15)*

*For me right now, it's that my team is spread so far apart, time-zone wise, it makes me feel like I have to always be available. Which means that, you know, my day stretches like 13, 14 hours. Even though I'm not actively working that whole time, I'm available. I feel stress. I go for a bike ride,*

*I still have anxiety about like, oh, what if someone needs something?*

*(Interview, Manager 18)*

Sometimes the effort is needed to stay up to date with communications, particularly if the team crosses multiple time zones:

*In some ways, I find the work more, more tiring. I'm up early and I want to have gotten through email and Slack before I have my first meeting and so, because I don't want to get into a meeting, have some big surprise. Right? And if my team's really active or even like the other people, sort of my cohort, is active. I mean there's a lot to work through and sometimes you know, they're having a whole conversation about something I just don't have the context for. So, like trying to read through it is, you know, is pretty difficult too. Yeah, all the reading is can be kind of tiring.*

*(Interview, Manager 12)*

This is particularly important given the reliance on monitoring communication behaviours.

Other managers felt they could not manage as large a team effectively if the team was remote:

*I'm right now I'm managing 15 people, which is far too many people to manage in an in-office situation and remote, it feels overwhelming and sometimes impossible, but we're changing that, and we are hiring someone.*

*(Interview, Manager 18)*

Other managers echoed this idea. One manager mentioned the workload several times during our interview and that they felt that in their previous role, the organisation had underestimated the work required to manage remote staff and so had left the manager under-resourced for the role. At the end of the interview I asked if they would be willing to work remotely again. The manager said:

*I would jump back into it but having been around the traps there are a few things that I would want to make sure were set up in the environment to do it successfully. And some of it is making sure that the company you're working for has resourced the position appropriately. So, for instance, I wouldn't take on 10 staff plus projects plus other things to do. I think, if you've got staff remote, you actually need to be able to dedicate to them the time they require to get their stuff done. ... So yeah. I absolutely loved it, but it was a hell of a challenge actually.*

*(Interview, Manager 3)*

Another suggested that:

*If you're a manager, know that you're going to have to spend more of your time actually managing people, so make sure that the job you're taking is that you're a manager and not like a [manager and contributor] where you're doing a lot of other things. Like, there's going to be some strategy involved, but make sure that you carve out more time than you think you should have for the people aspect of it. You have to be more proactive and you have to be more on top of it.*



*(Interview, Manager 16)*

Some managers noted the extra mental and emotional effort of being remote. I asked the manager above, who mentioned that it was difficult to manage so many people remotely, if they felt that managing remotely took more time. The manager responded:

*Not only more time, but more energy because I definitely say being on a video call takes more emotional energy and mental energy than talking to someone face-to-face in-person. I don't know why that is. Probably because you have to navigate lags, not interrupting, dropped bits of data in the conversation. There's more pieces to deal with. If I have a day with, you know, four or five meetings in it, like I'm exhausted at the end of the day, far more than I would be if I just talked to four or five people in-person.*

*(Interview, Manager 18)*

This manager was someone that particularly emphasised developing open and vulnerable relationships with their team. Another manager who also emphasised getting to know their team by, for example, asking questions about their life history, echoed a similar sentiment. At the end of the interview, the manager volunteered one last observation:

*There's just one other point I want to make. Actually that was an insight I had more recently that just, which I'm sure some other people have talked about, but I feel like as a leader, I need more emotional support. I don't think I've ever leaned on my HR [human resources] department for emotional support like I do here, or I have to here because, just like, you know, one, hey, what's the emotional tenor of*

*these two people that are asking really hard questions for me, or how do I navigate this in a remote-friendly way? Those kinds of things. I feel like I'm constantly with my [HR] person, figuring out and plotting and strategizing how we get through some challenge of working remote and I had never, I mean basically an HR person to me in the past was just like a tool to bring in resumes or something. So, that's been interesting. So yeah, I think HR is kind of critical, I guess for a company that's doing remote is what I'm saying.*

*(Interview, Manager 19)*

It was an interesting observation because this manager themselves, and another participant I spoke to in the same company, both commented that this manager in particular was a quite non-emotional, task-focused person.

Aside from the time zone and logistical challenges, it seems reasonable to assume that if managers feel they need to develop deeper relationships with their staff, and that developing these deep relationships requires reciprocal sharing of personal information, feelings, and demonstrating vulnerability, this is likely to be emotionally and mentally taxing for managers. It becomes a form of emotional labour (Hochschild, 1983). This, with the factors mentioned above, may combine to make managing remote staff considerably more effortful for managers.

### 5.9.2 Different Relationships

As noted, managers seek access to information from individuals by cultivating deeper relationships with their staff. These deeper relationships encourage staff to share information more freely – information that they might not feel comfortable sharing with a manager they do not know as well. They also provide context that allows managers to make more accurate

interpretations of changes in behaviour or output, and allow managers to tailor communication and adapt roles to suit individuals. Unsurprisingly, there is a social consequence to these cultivated deeper relationships: some managers feel closer with their remote teams than they might if their teams were co-located. In this case, paradoxically, distance creates closer relationships.

One manager commented that:

*So, I would say it takes, it took me longer to form connections at [company name] but they are also, I think deeper than other work connections I've had.*

*(Interview, Manager 15)*

I asked this manager why they thought that might be the case. The manager commented that when you can hire from any location, it is easier to hire people who tend to share the same values. Building on that, they reflected:

*I really feel like all of my teammates share similar values, um, and I don't know. Yeah. So, it has just more of a sense of feeling safe and like I can speak up and you know, things are transparent and I trust people. So, I think the friendships are just built on who we are as individuals as opposed to like griping about our jobs or like talking about the company only, right? Like we just talked to each other as people.*

*(Interview, Manager 15)*

Another manager told me a story about a staff member that suggested the manager was aware of quite personal details of that person's life. I asked if the manager felt they knew more about their team's personal lives than they might if they worked in an office. The manager replied:

*I do, actually. So, we have this group [chat room] and it's just, I actually feel more connected.*

*(Interview, Manager 17)*

One manager described some of their team meetings:

*We have something like a peer review where we all sit at a table, like four people sit in a [video conference] session, for example, and we give each other kind of appreciation, like basically you say what you appreciate in the other and then you tell them what your team might ask for improvement in certain areas. But for that to work you have to have very good relationship with them, at least to be very open and transparent. So, and we also do meetings in the real life, like we gather every few months in some place. That also helps a lot. So, all these things push towards more close connections.*

*(Interview, Manager 10)*

One manager compared the relationships developed with remote staff to those working in an office. This manager did not particularly solicit deeper relationships with remote staff but did still feel connected:

*I think we're a very strong team, a much stronger team than I experienced working in real-life offices. With the exception of those very close relationships, you know, the people that you actually would go out for a beer with or whatever - those relationships develop a little bit more than you have online. Um, yeah, I think I've become quite close to people. I noticed the closeness.*

*(Interview, Manager 21)*

As this manager noted, the closeness can also be a consequence of the type of work, where the team may be sharing, for example, access to each other's work email accounts to provide continuity of service to customers. This generates a kind of intimacy too.

Overall, we see that cultivating deeper relationships with staff, for the instrumental benefits outlined above, requires more effort for managers, both in terms of the time required and also because of the emotional energy required. This can lead to managers, paradoxically, feeling emotionally closer to their distant, distributed staff.

## 5.10 THE EMPLOYEE PERSPECTIVE

Eight employees volunteered to participate in interviews for this research. Of the eight employees interviewed, seven worked for the same company. As only one of the interviewed employees reported to a manager who was also participating, there is no way to draw conclusions using a dyadic approach. Also, the relevance of the data around monitoring for attitudes to identify what might otherwise remain withheld information began to emerge midway through the interview process. Unfortunately, most of the employee interviews occurred earlier than this which limited my opportunities to explore employees' perspective on this subject. However, employee participants did touch on some of the topics discussed above and, while it is difficult to draw strong conclusions based on this employee data alone, it provides some insight into the employee perspective on their relationship with their managers.

#### 5.10.1 No Concern over Sharing Personal Information

Perhaps the most interesting finding is that none of the employees raised any concern or hesitation about sharing personal information with their manager or gave any indication that they felt pressured to do so.

Several employee participants recognised the value of sharing personal information to facilitate relationships and to contextualise communications. I asked one employee if there was anything they had found difficult about working remotely. They noted that:

*I guess I've always, I've been decent at reading body language and body cues and things like that and, you know, it's not difficult because of the way the team operates but if the team didn't operate the way that it did and share personally how we were doing, like "Oh, I'm really tired" or "I'm really stressed out" or something like that, it would be very difficult to realise why text is coming across the way that it does. ... I guess I'm not directly having that problem but, yeah, if somebody had something going on that they weren't sharing and I couldn't read the vibes of the body language, it would be a lot more difficult to know.*

*(Interview, Employee 2)*

Another noted that:

*So, but even in our Slack, I think we've got to know each other personally, you know, we've not met each other's families, but we've gotten to know each other's families in terms of, you know, when somebody bought a house or you know, when people had snow days and all of those things. We have found those connections.*

*(Interview, Employee 8)*

At a different point in the interview, this employee also described how personality tests were used as part of the induction process to help people get to know each other:

*And so when we were in [headquarters city], they pulled out information [from a personality test] ... but it kind of gave an inkling of the three of us who are new and they pulled up our bosses' and they pulled up at least a couple of other colleagues. So it was, it was right there in the open and we were having this really honest discussion about our personalities right there.*

*(Interview, Employee 8)*

This highlights that sharing personal information in the workplace is not just helpful for managers in understanding their employees but also helpful in establishing effective peer to peer relationships and communication. This may even be the primary reason that managers encourage personal information into the workplace. However, that does not mean managers do not also use it for control-related purposes.

Rather than being concerned about the need for close relationships with their managers, the employees interviewed generally seemed to value those relationships:

*I mean, I think he does a good job of communicating with me pretty openly and I do a pretty good job of communicating with him openly, I think so... And I think in a lot of ways we have a very good culture around just sort of improvement and things like that.*

*(Interview, Employee 4)*

Another talked about the importance of contact with their manager:

*That's probably my main point of contact, like one of my main social times with my team is just with my manager. Like we actually have a fairly, we have like an hour long one-on-one, which I think is significantly longer than most of the other ones he has. Um, and we, we tend to spend about five to 10 minutes talking about like work one-on-one type stuff and about 50 minutes just talking about whatever. That's nice.*

*(Interview, Employee 4)*

Another mentioned that their team had encouraged the team lead's manager to join a weekly meeting, specifically to make it easier to share non-task related information:

*He doesn't get that opportunity to tell how we're doing, which is a big reason why we wanted to bring him back into the weekly Monday meeting where we just, you know, not only do we go over everything we need to do that week, it's our opportunity to go, like, "Oh man, the kid, up all night, haven't had any sleep" or something like that.*

*(Interview, Employee 2)*

In contrast, the one employee participant who worked for a different company had a very different relationship with their distant manager. They felt the manager had quite limited insight into the employee's activities and there was no evidence of regular contact or close relationships. It seemed to be a much



more ‘hands off’ style of management. Referring to their manager, the employee said:

*They would have very little direct visibility of how I spend my time every day. He's aware of all the projects that I'm working on. He knows what sort of progress is going on in those projects, but yeah. I do think it's a little bit of a rubber stamp exercise rather than an oversight and review process that could happen if he was actually in the same room as me.*

*(Interview, Employee 1)*

I asked if they felt it was difficult to get enough feedback from their remote manager, when their manager had so little insight into their work. The employee said:

*In some respects, yes. I see it the other way, really, because this guy who's trying to manage stuff in [another city], I get the feeling that he feels left out because a large number of the people that he's overseeing are in [the local city]. And, it is a question of having to make a special point of including him. Because he's got to do his job, and if he's not seeing what's going on then he's taking a lot of stuff on trust. And he's sometimes hearing about things second-hand and thinking "I should know about this" and then coming and asking questions.*

*(Interview, Employee 1)*

I asked if that required any changes on the part of the local employees and the employee participant responded that they try to be mindful to communicate more with their remote manager.

### 5.10.2 Interpretations

There are several possibilities why none of the employee participants raised any concern or hesitation about sharing personal information with their manager. The first and most obvious is that the seven employee participants from the same company were sanctioned by their employer to participate which could have affected who was able to participate. The people who chose to participate may have tended towards the happier employees who have adjusted well to the organisation's expectations. They were also self-selecting participants and so were likely to be people who felt comfortable enough with their work arrangements to speak to an outsider about them. It is notable that all seven employees felt quite happy with their decision to work remotely. It may be interesting in future research to identify people who are unhappy working remotely and explore whether the reasons for their dissatisfaction relate to information disclosure or relational concerns.

It may also be that the employee participants did not feel pressured in any way and so only shared information with their manager that they felt comfortable sharing. It may be that setting a team-wide or company-wide expectation of disclosing personal information meant that employees self-selected into (or out of) that culture, or that hiring practices tended to select for people who were naturally open and inclined to share (there is some evidence to support this in the data presented above). It may also reflect a belief that sharing personal information is necessary to make relationships over distance effective and that trade-off may be acceptable to the people who are choosing to disclose personal information.

Alternatively, it may be that working remotely creates a sense of isolation which increases the perceived value of nurturing social relationships within the workplace, thereby decreasing the perceived cost of sharing personal information. Employees and managers are aware that working remotely can create a sense of isolation. One employee noted:

*So, yeah, so there are times that you can feel a little isolated. I think to some degree that's sort of a problem that you have to overcome yourself. And, I mean I'm, in general, fairly reserved in terms of my personal life and things, but to some degree if you want that social aspect, you're kind of the one who has to be initiating like, hey, I did this thing this weekend. Because, you know, a lot of times that conversation in the office is going to be happening outside of the remote tool, I should say. I guess ultimately when you think about it, like the communication and isolation sort of go together. I mean it's a bit like if communication is bad, there's probably a chance you're also feeling isolated.*

*(Interview, Employee 4)*

Sewell and Taskin (2015) find some support with teleworkers for the idea that working remotely entails different trade-offs for employees to be able to feel connected to their team and their manager. They found that teleworkers were willing to accept more stringent controls while working from home as they felt it made them more visible: “Despite this increased scrutiny at the domestic scale (much more intensive, in fact, than when in the office), the teleworkers themselves expressed their satisfaction with this situation because it actually made them feel more integrated with the social practices of the workplace scale” (Sewell & Taskin, 2015, p. 1518).

Hafermalz (2020) provides a potential explanation for this willingness to share and engage in what might otherwise be seen as managerial surveillance. The author notes that, rather than being primarily concerned by a desire to avoid managerial scrutiny, remote workers may be motivated by a fear of *exile* – of being excluded or ignored. Hafermalz (2020, p. 24) suggests that “a fear of exile can lead to self-disclosure by distributed workers who are

struggling to be known and to belong”. Willing self-disclosure may be a result of workers effortfully pursuing visibility, for workplace self-promotion and to ensure social recognition that reinforces their sense of belonging and importance within the organisation.

In the end, there is not enough data from the employee perspective to draw conclusions about the employees’ experience of managerial attention to developing relationships, and monitoring for attitude-related behaviours and potential withheld information. However, the small amount of data collected here does highlight interesting areas for future research, including understanding the perspective of unhappy (or ex-) remote workers and deliberately exploring the employee experience of their relationship with, and information disclosure to, their distant managers.

### 5.11 SUMMARY OF FINDINGS

Managers monitor for information that fits into the control target categories identified in extant organisational control literature - input, behaviour, and output. However, the data in this research shows that, in distributed teams at least, to treat behaviour control as a single category may fail to differentiate between two different functions: monitoring for work-related behaviours and monitoring for attitude-related behaviours. Managers discuss the effort they commit to and the importance of being able to monitor for indications that their staff’s attitudes may have changed. Managers consider this work an important part of their role and they use the information to ensure that their staff remain happy, engaged, and productive members of their team.

Monitoring for attitude-related behaviour appears to be associated with a concern about *withheld information*; the idea there could be important things that staff may not be able or willing to tell the manager. This rarely seems to be a concern that staff are withholding information through malfeasance. Instead withheld information may have a variety of causes: staff may not be

aware there is a problem (e.g. they have misunderstood), may not know the information they hold is useful or needs to be shared, perhaps fear giving the wrong impression (for example, if they have concerns over their own performance or acceptance by the team), or fear being misunderstood. These circumstances put staff in a position where it can be difficult for them to share what may be pertinent information for the manager.

Managers in distributed teams notice their inability to monitor staff for visual cues that may indicate a change in attitude, for example, body language, social interactions, or changes in day-to-day behaviours such as arrival time. Managers report that these visual cues would often be used in a co-located setting to unobtrusively monitor for withheld information; to identify when employees may be feeling confused, uncertain, disengaged, stressed, or overwhelmed and who, as a consequence, may be unwilling or unable to let their manager know this is the case, even though the manager may need to take action or may be able to help.

To increase their ability to effectively monitor attitudes, managers leverage relationships with their staff. They develop relationships by encouraging personal information into the workplace, through one-on-one meetings, and in some cases by encouraging deeper, more vulnerable and emotionally intimate relationships. These relationships provide managers with a variety of advantages: they can encourage more discretionary information sharing by employees, they provide more context to allow managers to better interpret other control-related information such as changes in work output, they allow managers to tailor their communication to suit the employees' needs, and to shape the employees' roles for each employee. This requires intentionality on the part of the manager and is an effortful and time-consuming process. The amount of time and personal effort managers dedicate to this process indicates the importance that managers place on the information gathered via these deeper personal relationships.

Developing these personal relationships has some implications for managers beyond just having access to better attitude-related information. As mentioned above, managers can find managing distributed teams takes more effort and time than managing in a co-located setting. In some cases, as a consequence of encouraging deeper and more emotionally intimate relationships with their staff, managers also feel more personally connected to their teams than they would if they worked in the same location, despite rarely seeing their team members in person and being separated in many cases by time zones and geographic distance.

In the following chapter, I consider explanations for and theoretical implications from these findings. I will first discuss why monitoring attitudes may take on particular importance in the context of distributed work. I will examine how lack of physical proximity may contribute to managers' emphasis on monitoring attitudes, and introduce *pastoral control* as a lens to understand this relationship-based dynamic. Finally, implications for organisational control and distributed work literature will be considered.

## 6 DISCUSSION

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Definitions of behaviour control have typically been limited to controls that alter how work is accomplished. However, this overlooks an important aspect of behaviour monitoring. If behaviour control regulates how work is accomplished, that suggests behaviour monitoring assesses only behaviour that accomplishes work. This research shows that behaviour is monitored for reasons that do not directly relate to the accomplishment of any specific task or responsibility. Instead, in addition to monitoring behaviour to assess the quality and progress of tasks, managers monitor behaviour to assess employees' attitudes. Thus, rather than two fundamental types of control monitoring - behaviour and output - there are at least three: work-related behaviour, attitude-related behaviour, and output. Furthermore, the need to monitor attitudes is explained when the difficulty in specifying behaviours or outputs for knowledge work, and discretionary effort, are taken into account.

### 6.1 WHY MONITOR ATTITUDES?

Distributed teams tend to involve knowledge work because knowledge work is more easily adapted to distributed and digitised workflows. Knowledge work is less likely to rely on shared equipment, physical locations, or in-person presence; it largely deals with “the manipulation of symbols rather than things, concepts rather than materials” (Sewell, 2005, p. 686). This is relevant when considering organisational control because much of the theorising on control relies on the ability to specify in advance what behaviours or outputs are required. However, the nature of knowledge work means that is difficult to do, as discussed next.

Knowledge workers carry out tasks involving “problem solving and the production of knowledge” (Mitchell & Meacheam, 2011, p. 149). They “require tacit knowledge, undertake thinking and the analysis of symbols as

their core process and produce knowledge and ideas to solve complex problems” (Mitchell & Meacheam, 2011, pp. 149-150). Mitchell and Meacheam (2011) argue that professionals are “recognised as a prominent category of knowledge workers” (p. 151). Sharma (1997) argues that “the key distinguishing characteristic of professions is that they are based in abstract bodies of knowledge”. For both knowledge workers and professionals, possession and application of specific knowledge defines their work.

Because knowledge work involves problem-solving and knowledge production, it is difficult to define the “means-end relationship” (Ouchi, 1977, p. 97) necessary for specifying behaviour controls. Langfred and Rockmann (2016) suggest that “[an] aspect of knowledge work is potential equifinality. In work such as software development, services, research, academia, design, and architecture (to name but a few examples), there are potentially many different paths to the ultimate outcome” (Langfred & Rockmann, 2016, p. 639). Mitchell and Meacheam (2011) argue that in knowledge work it is difficult to determine the causal link between knowledge workers’ actions and final performance because there is a “lack of a linear relationship between knowledge worker effort and outcome” due to the variety of factors that could intervene, “which makes it difficult to determine the contribution of knowledge worker actions” (Mitchell & Meacheam, 2011, p. 152). Some behaviour controls will be specifiable and useful – for example, hours of work, expectations for sharing work updates or reports, processes for collaborating, etc, but there will be key parts of the job, necessary for achieving the desired outcomes, which cannot be effectively specified in advance due to the nature of knowledge work. Thus, knowledge work resists understanding the means-end relationship and therefore the ability to specify behaviours necessary to implement behaviour control.

Due to the creative and problem-solving nature of knowledge work, output controls are also difficult to specify. The exact nature of the solution is



unlikely to be known in advance and, as Sharma (1997) argues, the specialist expertise of the knowledge worker may make it difficult for a manager to determine the standards and quantity of the work required: “the asymmetry of know-how complicates the issue further by making it difficult for the principals to know ex ante how much service actually is needed” (Sharma, 1997, p. 769). Ouchi gives this example:

*Finally, suppose that we are running a research laboratory at a multibillion dollar corporation. We have no ability to define the rules of behavior which, if followed, will lead to the desired scientific breakthroughs which will, in turn, lead to marketable new products for the company. We can measure the ultimate success of a scientific discovery, but it may take ten, twenty, or even fifty years for an apparently arcane discovery to be fully appreciated. Certainly, we would be wary of using a strong form of output control to encourage certain scientists in our lab while discouraging others. Effectively, we are unable to use either behavior or output measurement, thus leaving us with no "rational" form of control. (Ouchi, 1979, p. 44)*

Thus, knowledge work, particularly if it is team-based where evaluating the contribution of any individual is difficult (Eisenhardt, 1989a; Ouchi, 1979), does not lend itself purely to either behaviour or output control because it lacks the informational prerequisites for these types of control: specifiable behaviours and agreed-upon outputs.

Langfred and Rockmann (2016) make the case that this aspect of knowledge work has required organisations to provide employees with more autonomy and that, “As organizations cede more control to employees, there is often a reciprocal expectation that employees will be more proactive” (Langfred &

Rockmann, 2016, p. 630). Furthermore, it is important to realise that all jobs contain an element of unspecifiable work, not just knowledge work. Discretionary effort can be considered a type of organisational citizenship behaviour. For example, Brown and Korczynski (2010) cite Organ's (1998) definition of organisational citizenship behaviour as:

*individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. By discretionary, we mean that the behavior is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person's employment contract with the organization; the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishable. (Organ (1998) p. 4, cited in Brown & Korczynski, 2010, p. 409)*

Kmec and Gorman (2010), on the other hand, argue that discretionary effort is related to, but conceptually distinct from, organisational citizenship behaviours. What tends to be clear though is that discretionary effort is work that is outside the formally specifiable role requirements. Citing Kidwell Jr and Bennett (1993), Kmec and Gorman suggest that: "Discretionary effort is effort in excess of requirements, 'above and beyond the call of duty;' it involves contributions to the organization that cannot be enforced on the basis of formal role obligations" (p. 4). Kidwell Jr and Bennett (1993) discuss employees' propensity to withhold effort, which is the opposite of providing extra discretionary effort, but closely related. The authors note that social, cultural, and normative expectations within an organisation are likely to affect whether employees will withhold work effort. Kmec and Gorman (2010) also suggest that "Employers' strategies for eliciting discretionary effort include...

social control processes in work teams” and the intentional use of organisational culture (Kmec & Gorman, 2010, p. 4, citations removed). Thus, a link is suggested between discretionary work and informal, socially based controls.

The employment contract does not specify everything that might be asked of an employee, and instead typically directs that the employee follow reasonable directions from their supervisor as required in the role. This provides considerable flexibility to the employer to adapt their production processes to changing circumstances and requirements, which is particularly important for modern organisations working in fast-changing competitive environments. Furthermore, it means that some portion of the work that employees do will be difficult to fully specify, to link to compensation, and is therefore somewhat discretionary. To be clear: the fact that work is not specified in the contract does not automatically make it difficult to specify. However, if it is difficult to specify it is less likely to be in the contract, even if the employer intends to make it part of the role, and therefore will be less directly linked to compensation and other global controls. All jobs involve elements that are difficult to specify. Because they are difficult to specify, some elements of work will always be outside control of the formal behaviour-output framework, which relies on specifiability as an antecedent of control.

So, we can see that there are discretionary efforts on the part of the employee that the employer will want to solicit but that cannot be easily or fully specified in advance. However, the fact that these efforts cannot be pre-specified does not preclude attempts to solicit them, monitoring to check if the solicitation was successful, as well as responses if it was not. While some portion of the work that is expected of the employee will not be specified in advance, this work will still be monitored. If we were to restrict our idea of what can be monitored to only things that can be specified, such as behaviours

and outputs, this would omit a portion of work from consideration. Arguably, work that cannot be specified using behaviours or outputs is in fact the most important work to monitor *because* it is the hardest to specify and link to rewards. If it is not specified, it is difficult to link to compensation and therefore less likely that people will be motivated by compensation to ensure the work is done. Furthermore, because this work may be unspecified in the contract and may involve discretionary effort on the part of the employee, monitoring *attitudes* takes on particular importance as they are likely to indicate willingness to do the work well.

Work that can be specified will likely be controlled via behaviour or output control and therefore with more global or systemic controls. A useful distinction to consider is the difference between *specifiable* and *observable*. Here, observable is taken in the broadest sense to mean any activity where information can be gathered about the activity (during or after), not just visual observation. For example, the number of widgets required can be specified (“ten widgets, please”) and observed (counting the number of widgets upon delivery). Some work cannot be easily specified but can be observed. For example, when hiring a designer to create a new logo for my company, I will want the logo to “look professional”, a criterion where it is difficult to specify in advance but “I’ll know it when I see it”. These difficult to specify but observable actions tend, by nature, to require subjective assessment. Traditional control literature has often theorised based on sources of control that can be pre-specified *and* observed. However, important elements of work – that exist in the indeterminate parts of the employment contract and discretionary effort on the part of the employee – these elements are often work that cannot be well-specified but *can* be observed. As some part of the work is discretionary and difficult to specify, some part of control must be local, situational, and contextual for monitoring to be feasible.

While this has always been the case, it becomes even more crucial as organisations come to rely more heavily on knowledge work. As well as requiring contract indeterminacy and discretionary effort, in knowledge work it is uniquely difficult to prespecify either behaviours or output (Mitchell & Meacheam, 2011; Sharma, 1997). Traditional control theorising was developed in traditional organisational contexts, where there was less knowledge work and relatively low environmental turbulence (Cardinal et al., 2017). Organisations tended to operate in the same environment, facing predictable forces, and changed their processes relatively slowly. This has not been the case for many decades and the need to update theorising on organisational control to account for this has been recognised (Cardinal et al., 2017).

Based on Ouchi's work, it is generally assumed that an inability to specify behaviours or outputs has meant a shift to what Ouchi called "clan control" (Ouchi, 1980) or what has been described in critical management literature as normative control. As noted in the Literature Review chapter, clan control and informal controls are closely related. Some researchers categorise clan control as a type of informal control (e.g. Kirsch, 1997; Kirsch & Choudhury, 2010; Kirsch et al., 2010; Turner & Makhija, 2006) and others have simply noted considerable overlap. For example, Kreutzer et al. (2016) find that the traditional view of control distinguishes between formal behaviour control, formal output control, and "informal clan control". Given that clan control refers to a control *system*, rather than control *mechanisms*, the close relationship between clan control and informal control would suggest that an informal clan control *system* relies largely on *informal control mechanisms*<sup>3</sup>.

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<sup>3</sup> Almost all control researchers acknowledge that organisations will tend to use a combination of controls, rather than relying purely on one control type or another and

Indeed, Kreutzer et al. (2016) note that “In addition to informal control as clan control, more recent work has further differentiated the same control targets as the literature on formal control, i.e., informal behavior control and informal outcome control” (Kreutzer et al., 2016, p. 236).

To summarise the argument so far, both knowledge work and the discretionary component of work mean that some portion of work cannot be easily specified. This precludes the use of formal behaviour and output controls and means that organisations and managers must also rely on informal control. Furthermore, informal controls by nature are likely to be enacted locally and situationally.

However, in this theorising there has been little discussion of what the shift to clan and informal control means for the role of information as an antecedent to control or what it means for monitoring. Part of Ouchi’s reasoning on control was that because behaviours and outputs are the only things that can be monitored, observed, and counted, they are the things that control would be based upon i.e. control is based on monitoring. Knowledge work and a reliance on discretionary effort means that neither behaviours nor outputs can be specified or measured, therefore managers shift to using informal controls. How, though, do managers know their informal controls are working? Some monitoring is required, at least to establish how people are responding to the informal controls, whether the controls are having the anticipated effects, and to identify whether any adjustments are required. To some degree, the fact that informal controls, particularly as used in clan control, intend to influence people’s beliefs, values, and norms means that the need to monitor people’s attitudes is a natural consequence. Moreover, informal controls are likely to

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Kreutzer et al. (2016) show that formal and informal controls can be complementary rather than substitutive.

be enacted at a local, situational scale, which requires knowing how individuals are likely to react to those controls and what is most likely to influence them, highlighting the personal and relational nature of control.

Distributed work tends to be more knowledge-based, and based on the data presented in the Findings chapter, we see two broad types of behaviour control used: one designed to surface information about work-related behaviours, where employees are required to regularly share work updates in tickets, shared work repositories (e.g. code check-ins), and in work-tracking and communication tools; and a second type of behaviour control designed to surface attitude-related behaviours, where employees are encouraged to share personal information in the workplace, attend one-on-ones meetings, develop relationships with their managers, and where managers monitor communication for indications that a person's attitude may have changed.

While monitoring attitudes is likely to occur in most roles, due to the existence of difficult to prespecify discretionary effort and the increasing use of knowledge work, attitude monitoring becomes even more salient in distributed teams because managers in distributed teams face unique problems in achieving this type of monitoring due to a lack of physical proximity, as discussed below.

#### **6.1.1 Summary**

An emphasis on monitoring attitudes fits with extant explanations which predict that in the absence of specifiable behaviours and outputs, organisations will emphasise clan or normative type control, particularly as organisations increasingly rely on knowledge work and discretionary effort on the part of their employees. These socially based controls still require some monitoring, and given that these types of control emphasise influencing people's perceptions and feelings, they are likely to require monitoring people's attitudes. Attitudes are internal to individuals, not directly accessible

to an observer. Nonetheless, we tend to believe that we can infer a person's attitude, especially when we have more opportunity to spend time with them and get to know them better. And, as discussed below, we often believe that through visual observation we can identify when there is a discrepancy between what they say and what they really feel.

## 6.2 ACCESS TO ATTITUDES

Attitudes are individual, internal states and not directly accessible to others (Ajzen, 2005). Because they are not directly accessible, to have access to a person's attitude, an observer has two options: try to infer the other's attitudes from their behaviour or hope the person in question will share how they feel. Managers in distributed teams use both methods for assessing their team members' attitudes. They observe people's behaviour to infer their team members' attitudes, largely communication behaviour as that is what is most available, and they use one-on-ones and personal relationships to encourage discretionary information sharing, as shown in the Findings chapter and discussed below.

Foucault (1982) makes a distinction about power that I believe also applies to control. He contends that rather than reifying power, that is, treating it as a presupposed 'thing' that can be approached, it should be recognised as manifesting within relationships and actions:

*For let us not deceive ourselves; if we speak of structures or the mechanisms of power, it is only insofar as we suppose that certain persons exercise power over others. The term "power" designates relationships between partners... (Foucault, 1982, p. 786)*

"Power", he argues, "exists only when it is put into action" (Foucault, 1982, p. 788). Much like power, control is also relational. Control is born of an



interdependency of interests and consequences: if your actions have no consequences for me at all, I am unlikely to be concerned with monitoring or controlling them. Thus, a relationship of (at least) interdependency and overlapping interests precedes any attempt at control. When one focuses on control as global and systemic, rather than local and situational, it is easy to overlook the relational nature of control, enacted day-to-day. Furthermore, while global controls *may* be objective and rather less relational, situational controls depend on the given context, including the relationships between the people involved, and so will be somewhat subjective. And while controls may be established at a global level, they are enacted at a situational one, so focus on local, situational control matters.

Given that control is enacted situationally, and is fundamentally relational, it should not be surprising to see managers utilising their relationships to enact control. Managers have many reasons for wanting to leverage relationships to enact control. As discussed in the Findings chapter, the data suggests that managers believe establishing deeper relationships will encourage more discretionary sharing of information. Another benefit for managers from developing deeper one-on-one relationships with their staff is more detailed knowledge of each individual. Control includes the application of rewards and sanctions (e.g. Goold & Quinn, 1990; Jensen & Meckling, 1976; Long & Sitkin, 2018), either explicit, specified, and contractual or more tacit and social, such as approval or disapproval. Day-to-day, it seems unlikely that a manager will invoke rewards and sanctions that exist at the level of global organisational controls. These are likely to be formal processes - formal warnings, firing, pay increases, promotions, etc. Instead, day-to-day rewards and sanctions are likely to be enacted on a much smaller, more individual scale. The more subtle the reward or sanction, the more necessary it is to understand the individual recipient, so that the reward or sanction will have

the desired effect. Establishing a good knowledge of the individual will help the manager make these small ‘course corrections’ more effectively.

In a co-located team, a manager can increase their knowledge of individuals through observation. In a distributed team, the manager must rely more heavily on relationships and one-on-ones. Managers in both distributed and co-located teams can use one-on-ones and relationships to improve their knowledge of individuals and to attempt to increase team members’ willingness to share discretionary information, including attitudes. However, managers in distributed teams face an additional challenge because physical distance limits their ability to use observation to infer attitudes.

### 6.3 MONITORING ATTITUDES IN DISTRIBUTED WORK

When looking at the data through the lens of organisational control, it becomes apparent that managers feel comfortable with their ability to monitor work-related behaviours (and to a lesser degree, work output, although this seems to be more due to the type of work – knowledge work – than physical proximity): *“But everything that they do is shared so it's very easy to see. Nobody does anything, does any work that I can't see”* (Interview, Manager 2) or *“If somebody is not performing or not working online [it's] just so visible”* (Interview, Manager 23). What managers felt less able to do, or more accurately, felt it was necessary to apply more effort and attention to, was the ability to understand an individual’s current attitudes, how those attitudes might impact the individual’s ability to fulfil their role, and what steps managers might need to take if the smooth functioning and productivity of the team is threatened: *“The remote working folk, that's much harder ... you just don't get that visibility of sickies or the disengagement”* (Interview, Manager 8). However, a critical question is why monitoring attitudes would become a higher priority in distributed work.

The data suggests that managers are alert to the risk that there are things people may not be comfortable sharing with their manager: *“but just be honest about human nature a little bit, right? Sure, we can have trust but people are going to be inclined a lot of the time to hide [performance concerns]. It's just their natural position”* (Interview, Manager 11). For example, a person who has become disengaged or dissatisfied with their role may consider leaving. They may not wish to share that with their manager until they have come to a final decision, however, for fear that it will prejudice the manager's support or intentions toward them. The manager, on the other hand, is likely to want to know *before* the employee makes a final decision because the manager may be able to change the role to address whatever is causing the employee dissatisfaction or be more prepared for the departure to minimise its impact.

Alternatively, the employee may, rightly or not, be concerned that their performance is not meeting expectations. They may wish to continue to present themselves as a competent, hard-working and valued member of the team while they work to improve their performance. Naturally, if we are concerned that we will not be able to make the right impression, we may prefer to avoid or withdraw from interactions instead. This is what many managers report: one of the first indications of a problem with a team member is often a withdrawal from regular communication; people “go quiet”. In these cases, the employees seek to conceal information (their true attitudes) that may be important for the manager.

As Goffman (1971) notes, if we are aware we are seen, for example when we are in conversation with another person, we are likely to moderate our behaviour. Goffman (1971) terms this – that is, everything from managing how we present ourselves in day-to-day interactions through to how we conceal true and problematic feelings – impression management.

## 6.4 IMPRESSION MANAGEMENT

Impression management is a topic of study in organisational research (for recent reviews, see Bolino et al., 2016; Bolino et al., 2008) but it should be noted that the perspective this research takes on impression management differs in focus from much of the extant research. Researchers to date have focused on impression management behaviours, largely at an individual level (though some researchers have studied how organisations manage the impression they make) (Bolino et al., 2016; Bolino et al., 2008). Research has focused on categorising and understanding impression management tactics, motivations for engaging in impression management, and consequences of using different impression management behaviours (Bolino et al., 2016). Impression management research has typically been focused on “seeking to understand the ways in which the behaviors of ‘actors’ (e.g., employees) affect the evaluations made by ‘targets’ (e.g., supervisors)” (Bolino et al., 2008, p. 1083).

This research takes a slightly different approach in that the important factor is not which impression management tactics actors might choose, how or when they’re used, or even whether those tactics are effective. What is central instead is the manager’s awareness that impression management *may* be taking place. It is the existence of impression management, rather than the content or actions of impression management that counts. In this sense it is a less functional view of impression management and a more structural view, and as such, may hew more closely to Goffman’s original work which was interested in how patterns of ritual, and social orders and structures alter our lives (Jacobsen & Kristiansen, 2014) rather than later impression management research which has striven to uncover the mechanisms of these structures. As such, I rely on Goffman’s explanations of impression management, as discussed below.

In the case of things employees may withhold, that they may not want to tell their manager, the risk the manager has identified is a risk stemming from *impression management*. Impression management is an everyday activity, part of normal social interaction. Goffman (1971) notes that, consciously or unconsciously, we present ourselves so as to convey a certain impression. He notes that in social interactions, we often operate by extrapolating from partial information about others:

*When an individual enters the presence of others, they commonly seek to acquire information about him [sic] or to bring into play information about him already possessed. They will be interested in his general socio-economic status, his conception of self, his attitude towards them, his competence, his trustworthiness, etc. Although some of this information seems to be sought almost as an end in itself, there are usually quite practical reasons for acquiring it. Information about the individual helps to define the situation, enabling others to know in advance what he will expect of them and what they may expect of him. (Goffman, 1971, p. 13)*

As this is the case, an individual can attempt to influence the interaction in a way that is favourable to themselves by projecting an impression that suits their own ends. This need not entail deliberate or malicious deception. Very often, in normal interactions, the ends the individual hopes to achieve are simply protection of ego and self-image:

*Let us turn from the others to the point of view of the individual who presents himself before them. He may wish them to think highly of him, or to think that he thinks highly of them, or to perceive how in fact he feels towards them,*

*or to obtain no clear-cut impression; he may wish to ensure sufficient harmony so that the interaction can be sustained, or to defraud, get rid of, confuse, mislead, antagonize, or insult them. Regardless of the particular objective which the individual has in mind and of his motive for having this objective, it will be in his interests to control the conduct of others, especially their responsive treatment of him. This control is achieved largely by influencing the definition of the situation which the others come to formulate, and he can influence this definition by expressing himself in such a way as to give them the kind of impression that will lead them to act voluntarily in accordance with his own plans. Thus, when an individual appears in the presence of others, there will usually be some reason for him to mobilize his activity so that it will convey an impression to others which it is in his interests to convey. (Goffman, 1971, pp. 15-16)*

But, as this is a normal part of social interaction, at least in Western cultures, each is aware the other is making this effort to influence how they are perceived. As such, the impressions that people present are rarely taken at face value. Goffman notes that:

*...during the period in which the individual is in the immediate presence of the others, few events may occur which directly provide the others with the conclusive information they will need if they are to direct wisely their own activity. Many crucial facts lie beyond the time and place of interaction or lie concealed within it. For example, the 'true' or 'real' attitudes, beliefs, and emotions of the individual can be ascertained only indirectly, through his*

*avowals or through what appears to be involuntary expressive behaviour. (Goffman, 1971, p. 14)*

Goffman expands on this idea of access to the ‘real’ beliefs and attitudes of the individual through their involuntary behaviours:

*There is one aspect of the others' response which bears special comment here. Knowing that the individual is likely to present himself in a light that is favorable to him, the others may divide what they witness into two parts: a part that is relatively easy for the individual to manipulate at will, being chiefly his verbal assertions, and a part in regard to which he seems to have little concern or control, being chiefly derived from the expressions he gives off. The others may then use what are considered to be the ungovernable aspects of his expressive behavior as a check upon the validity of what is conveyed by the governable aspects. (Goffman, 1971, p. 18)*

As we can generally choose what we say and how we act, these are likely to be the tools we use to manage others’ impressions of ourselves. Therefore the involuntary behaviours, which we may not be aware of and are more difficult to control, provide a useful verification: do they agree with or support our voluntary assertions, in which case the impression we present can be trusted, or should the impression we present be treated with caution?

With Goffman’s observations in mind, we come to a fundamental difference between co-located work and distributed work: “the ability to use ungovernable aspects of expressive behaviour as a check upon the validity of what is conveyed by the governable aspects” (Goffman, 1971, p. 18).

## 6.5 IMPRESSION MANAGEMENT AT A DISTANCE

A defining feature of distributed work is that colleagues work at a physical distance to one another. As such, communication occurs via technology rather than in person. A great deal of communication happens in writing, with some communication being audio-only (e.g. phone calls) and some providing visual and audio information (e.g. video calls). Video calling provides a richer communication medium (Daft et al., 1987), with more cues and interactive feedback; audio somewhat less rich; and written text provides the leanest medium.

Written text, being a lean communication medium, provides most opportunity for the communicator to manage the impression they give, with few involuntary or ungoverned behaviours being available to the receiver. Video calling comes nearest to the level of richness that face-to-face communication, the richest of all (Daft et al., 1987), can provide, though it is still limited as not all body language is available to the observer (as several research participants noted) and the communicator is likely to be highly aware they are on camera and being observed, hence more conscious of managing the impression they give. Video calls are also time-bound and have a sudden, rather than gradual, entry and exit, reducing the window of time where the communicator may be less guarded in their behaviours. Goffman (1971, p. 19) notes that when people believe they are unseen, they can sometimes be observed to “drop whatever expression he was manifesting and replace it with a sociable one” as they approach a social interaction. Furthermore, outside of video calls and audio or written communication, remote team members cannot be directly observed. Thus, the receiver has greatly reduced opportunities to observe unguarded behaviours and therefore far less opportunity to check for discrepancies between what is being said and the speaker’s ‘true’ feelings. This puts the receiver at a disadvantage compared to face-to-face communication.



This concern is manifested in the managers' comments. Concern that *"it's easy to stick the plastic smile on for 10 minutes"* (Interview, Manager 8) or that it's difficult to *"get a holistic picture of someone... Particularly if somebody's deliberately sort of trying to paint a rosy picture when they're struggling"* (Interview, Manager 3), or concern that *"if morale fades and someone's good at kind of putting up faces, which some people can be, then I don't get the real scoop"* (Interview, Manager 19).

These concerns are specifically linked to the inability to observe the person: *"It's difficult to sometimes read those signals without seeing them"* (Interview, Manager 3); and the inability to observe a change in behaviour such as arriving at work later, or looking stressed or overwhelmed:

*I don't think there's a way to do that remotely because, you know, you can't see my body language below here! [gestures to mid-chest height]. You don't know whether I'm sitting up or down or forward or back or... all those super subtle cues - what do they look like? What time did they come in? To the minute. Are they coming in ten minutes later than normal? That probably means they're not as excited about their work as they are normally. You can't notice that stuff unless you're there. (Interview, Manager 8)*

*... the ability to read body language on an ongoing basis, right? To hear the casual encounters that you get that aren't formal. So, you know, as a manager I relied a lot on, I'm sitting in a room with or near people that I work with and I can see when they sigh frustratedly about something. And, you know, I can interact with the team by those social cues that they give. I can see that when we go out for lunch together, one person is interacting with another person in*

*a way that tells me that their relationship might be strained  
or there's a positive relationship there that I could leverage  
or you know, encourage. (Interview, Manager 22)*

What managers describe is their inability to observe and use unguarded behaviour to verify what they are being told (when someone chooses to “put on a plastic smile”, or “paint a rosy picture”), and to identify what they are not being told (being able to see when someone sighs in frustration). They can no longer use in-person observation to counter-check impression management and reduce the risk of that important information is being withheld.

## **6.6 NEW STRATEGIES TO REDUCE THE RISK OF WITHHELD INFORMATION: PASTORAL CONTROL**

Managers’ concerns over missing vital information due to impression management may be well founded. Barsness et al. (2005) found that “As the proportion of time spent working remotely from their supervisors increased, subordinates increased their levels of impression management. This finding suggests an intense desire to create a positive workplace image” (p. 414). As Barsness et al. (2005) note, it seems likely that employees will willingly share positive information and demonstrate positive attitudes. However, by the same token employees may be more inclined to withhold negative attitudes, even though these will be important for managers trying to identify potential problems.

In response to a reduced ability to use observation to check for important information being withheld, managers appear to put more emphasis on monitoring behaviour, particularly communication behaviour as it is the most observable behaviour. As communication is the most observable behaviour in distributed work, it is also the place where ungoverned or uncured

behaviour is most likely to be seen when in-person observation is unavailable (though, as noted above it is still limited). As the data indicates, communication behaviour is explicitly monitored for changes that may indicate a corresponding change in individuals' attitudes: "*I will need to watch his behavior and communication in our video meetings and online chats to look for indications of positiveness/negativeness*" (Diary, Manager 28). In tandem, managers also seek more access to individuals' personal and interior lives; closer access to their 'true' feelings.

The need to monitor work-related behaviour is in part based on the assumption that if the work is not monitored, the work will not be done as well as possible: if the work was sure to be completed at the desired pace and to the desired standard whether or not the work was monitored, the only value in monitoring it would be for coordinating with others in the organisation, not for organisational control. Instead monitoring is necessary to ensure that staff have understood what is required of them and are applying their effort on the right things, that unexpected complications have not necessitated a change in plan, and of course, that staff are working as agreed and are not prioritising self-interest over organisational goals (e.g. shirking). In all these cases, organisational control seeks to uncover unknowns through monitoring.

The second type of behaviour monitoring described in the Findings chapter, attitude-related behaviour monitoring, serves the same purpose: it seeks to uncover unknowns that may disrupt the efficient production of work. These unknowns are not related directly to the task, however. Instead, they relate to the complexity of human emotional, mental, and relational attitudes and the ways these can impact on effective individual and team work. I call this type of behaviour monitoring for attitudes *pastoral monitoring*, and its associated form of organisational control *pastoral control*.

### 6.6.1 Pastoral Monitoring

It is notable that managers in this research tended to believe monitoring work progress was relatively straightforward. This is likely because remote work encourages highly asynchronous workflows, which necessitate producing large quantities of explicit information – either in writing or via work sharing and tracking tools. Explicit, written information can be shared between people who are working at different times, unlike information shared via tacit or ephemeral means (such as talk which requires that both people are present). Emphasising the creation of explicit, recorded information makes the activities of everyone in a team highly visible to anyone with access to that information, such as the manager. This makes it easier to monitor work-related behaviour.

With that as the case, managers reported their attention and effort went to a different type of monitoring: monitoring attitudes. Rather than monitoring how work is being accomplished, managers monitor to identify whether individual attitudes might impact accomplishment of work; a diagnostic, forward-looking type of monitoring. The managers reported that this requires looking for changes in behaviour, changes from some baseline of ‘normal’. It is likely this baseline is established as the manager gets to know the individual, and is informed by the manager’s judgement of what is expected and acceptable in that organisation and in society in general.

### 6.6.2 Pastoral Relationships

Establishing a baseline, from which to identify changes, requires getting to know the individual. Managers spend considerable time in one-on-ones talking about personal matters, both those of the employee and reciprocation by the manager. This allows managers to get to know the individual, establishing a baseline, and the individual to know the manager, potentially developing trust and encouraging discretionary information sharing. Managers ask probing personal questions, model vulnerable behaviour,

deliberately ‘break down barriers’, and intentionally develop personal relationships with their staff. Managers monitor on-going behaviour (largely communication behaviour) and encourage sharing personal information in the workplace. Communication behaviour is monitored for signs of potential trouble: a change in tone or frequency of communication, withdrawal, indications of friction between team members, and so forth. While a baseline is required to identify a change, establishing a baseline and on-going monitoring to identify changes from that baseline are not two separate processes, they both rely on the same sources of information and the same monitoring.

### 6.6.3 Foucault’s Pastoral Power

To understand and have access to another’s true, unvarnished attitudes or their mental, emotional, and relational state is of course an intimate request. It goes beyond what might be expected of a person in a workplace, particularly if we think of work as a place of rational, instrumental exchange of labour for reward (noting that it is impossible to truly separate the economic from the relational - as Granovetter (1985) points out, all economic activity is embedded in and shaped by social relations). While I have no doubt that many (perhaps all) of the managers I spoke with cared about their team as individuals, there was little indication that this intimate access, this pastoral monitoring, was driven purely by altruistic or interpersonal reasons. Instead, managers recognised it as a necessity of their role and a professional responsibility: some part of their role is ensuring the team is engaged, motivated, happy in their roles, and working well together. If any of these things change, it is likely to be disruptive for the individual, the manager, and the whole team. An optimally productive team is a happy and engaged team, and part of a manager’s role is to ensure optimal productivity. A team where one member is withdrawn, disengaged, disruptive, leaves, or needs to be removed is unlikely to function as well.

To achieve this type of attitude monitoring, managers in remote teams go to great lengths to get to know the people on their team and to gain access to their true thoughts and feelings. Foucault (1982) provides a useful framing for this process of care and control in his description of *pastoral power*.

Foucault describes pastoral power as follows:

*It has often been said that Christianity brought into being a code of ethics fundamentally different from that of the ancient world. Less emphasis is usually placed on the fact that it proposed and spread new power relations throughout the ancient world.*

*Christianity is the only religion which has organized itself as a church. And as such, it postulates in principle that certain individuals can, by their religious quality, serve others not as princes, magistrates, prophets, fortune-tellers, benefactors, educationalists, and so on but as pastors. However, this word designates a very special form of power.*

*1. It is a form of power whose ultimate aim is to assure individual salvation in the next world.*

*2. Pastoral power is not merely a form of power which commands; it must also be prepared to sacrifice itself for the life and salvation of the flock. Therefore, it is different from royal power, which demands a sacrifice from its subjects to save the throne.*

*3. It is a form of power which does not look after just the whole community but each individual in particular, during his entire life.*

4. Finally, this form of power cannot be exercised without knowing the inside of people's minds, without exploring their souls, without making them reveal their innermost secrets. It implies a knowledge of the conscience and an ability to direct it. (Foucault, 1982, p. 783)

The emphasis on the individual, points 3 and 4, in particular is important when we consider pastoral control as demonstrated within organisations, as in this research.

Foucault argues that the state is a new form or a new organisation of this 'individualising power'. As opposed to the church, in the state "*pastoral power focused the development of knowledge of man around two roles: one, globalizing and quantitative, concerning the population; the other, analytical, concerning the individual*" (Foucault, 1982, p. 784). He describes how the state has combined political power that addresses classes or groups of citizens as a totality, with an individualising power; a "*form of power [which] applies itself to immediate everyday life which categorizes the individual, marks him by his own individuality, attaches him to his own identity, imposes a law of truth on him which he must recognize and which others have to recognize*" (Foucault, 1982, p. 782). He argues that in this individualising power, "*the modern Western state has integrated in a new political shape an old power technique which originated in Christian institutions. We can call this power technique the pastoral power*" (Foucault, 1982, p. 782). The modern state, Foucault argues, combines political power over groups with pastoral power that individualises.

He notes that the state offers different outcomes than the church in exchange for exercising its pastoral power. Rather than heavenly salvation, the state offers safety and well-being in *this* world:

*We may observe a change in its objective. It was no longer a question of leading people to their salvation in the next world but rather ensuring it in this world. And in this context, the word "salvation" takes on different meanings: health, well-being (that is, sufficient wealth, standard of living), security, protection against accidents. A series of "worldly" aims took the place of the religious aims of the traditional pastorate (Foucault, 1982)*

Thus, Foucault argues that the technologies of pastoral power moved from the church to the state, and I argue that they have moved from the state to the organisation.

#### **6.6.4 The Workplace as a New Distribution of Pastoral Power**

Foucault notes a shift from the church as a site of pastoral power to the state. He argues that:

*...we should distinguish between two aspects of pastoral power - between the ecclesiastical institutionalization, which has ceased or at least lost its vitality since the eighteenth century, and its function, which has spread and multiplied outside the ecclesiastical institution.*

*An important phenomenon took place around the eighteenth century - it was a new distribution, a new organization of this kind of individualizing power.*

*I don't think that we should consider the "modern state" as an entity which was developed above individuals, ignoring what they are and even their very existence, but, on the contrary, as a very sophisticated structure, in which individuals can be integrated, under one condition: that*



*this individuality would be shaped in a new form and submitted to a set of very specific patterns.*

*In a way, we can see the state as a modern matrix of individualization or a new form of pastoral power.*  
(Foucault, 1982, p. 783)

It can be argued that the shift of pastoral power from church to state, which Foucault observes took place in the 18<sup>th</sup> Century, has occurred again in the 20<sup>th</sup> Century (and is on-going in the 21<sup>st</sup> Century), with a shift of pastoral power from the state to private organisations as employers.

To suggest that employers can be considered to exercise as much power as the state is not a new idea. For example, Anderson (2017) suggests that employers exercise more power over individuals than some states. She argues that as the employment relationship has inherited much of its structure from the household master-servant relations, employers enjoy such sweeping power over their employees that, were a government to exercise the same degree of power, we would consider it unreasonable. Employers can dictate what their staff wear, what they say both at work and in public (e.g. the content of posts on social media), how they present themselves (hair colour, tattoos, or other body modifications). They dictate who their staff associate with (for example, if the employer bans union meetings), and set rosters, break times, and overtime that determine the rhythms of their employee's lives. Atleson's (1983) analysis of assumptions and values embedded in American labour law agrees – employers can even control employees' nonwork time:

*Similarly, refusals to work overtime, even when used as a pressure device, suggest that employees believe they have or should have control over their nonwork time. Such actions not only interfere with unfettered employer*

*planning (unilateral planning, that is), but raise questions of relative power. The legal rules effectively fill in the employment contract—the employer may expand the scope of working time, or negate free time, in the interests of unilateral production planning (Atleson, 1983, p. 60).*

As Atleson notes, labour law tends to support the rights of the employer to maintain production, even if this sometimes at the expense of the autonomy of the employee (Lee, 2018). Atleson makes the point that,

*...the merger of master-servant law and contract meant that the law never treated the employment contract as the result of free bargaining and mutual assent, despite dogma that this was indeed the case. Instead, the contract was deemed to include ‘implied’ terms which reserved to the employer the full authority and direction of employees (p. 14).*

Anderson, using similar evidence, argues that employers exercise such power over employees they should be considered ‘private governments’, although they are a form of governance where the governed can exercise little to no democratic power. She notes that employees have little recourse: they cannot fire their bosses, they cannot dictate the nature of their own role, and leaving a job is often more costly for the employee than the employer (Anderson, 2017, p. 56). So, it is not unthinkable that a technology of power exercised by the church and by the state might also be exercised by a private organisation.

## 6.7 PASTORAL TECHNIQUES

Seeck and Kantola (2009) note that Foucault’s pastoral power “*has its premises in the Christian method of confession*” (p. 246) and it is difficult not to see parallels between this and the regular, often deeply personal one-on-

ones that managers describe here. Between requesting access to personal information and feelings, and monitoring individuals' for indications of their mental, emotional and relational state, their attitudes, managers do appear to be effecting a "*form of power [that] cannot be exercised without knowing the inside of people's minds, without exploring their souls, without making them reveal their innermost secrets*" (Foucault, 1982, p. 783). And via that access, managers can be seen to provide a form of care - shepherding the employee's day-to-day work - which "*does not look after just the whole community*" (the team, or the organisation) "*but each individual in particular, during his entire life*" (with the organisation) (p. 783).

#### 6.7.1 Pastoral Control

Impression management is a normal part of interaction, in Western cultures at least. Rather than being an effortful, conscious, or deceptive attempt to mislead others about who we are, Goffman describes it as the process of selecting the appropriate behaviours and presentation of self to fit the circumstances and to encourage the outcome from social interaction that one desires. It involves bringing forth some facts about oneself and moving other facts to the background. To a large degree, what we bring forth and what we background is dictated by what is considered polite and relevant. Say I recently underwent a gruesome medical procedure. It would almost certainly be inappropriate to bring that up at a formal dinner party with strangers, whereas it would be both appropriate and advisable to mention it to my regular doctor. It would be *true* in both circumstances, but I am unlikely to make a good impression by regaling fellow diners with the gory details. We choose to present some facts about ourselves and conceal others, as appropriate for the circumstances and the type of interaction we wish to have; thus, managing the impression we make.

As with all other social realms, impression management occurs in the workplace. For an employee, it can be particularly important to maintain a

good impression with their manager. The rewards or sanctions that occur within organisations have a subjective element; how a manager feels about an employee is likely to colour decisions about that employee's immediate and long-term future with the organisation. With more at stake, employees are likely to be more deliberate in their impression management. If they have doubts about whether information is appropriate or beneficial to share, they may be more inclined to withhold it or to withdraw from interactions.

However, some of the information that employees withhold will be relevant for the manager as they enact organisational control. For example, if an employee disagrees with a decision and decides to withhold effort related to that decision, or if an employee is underperforming, overworked, stressed or lacking clarity on how they fit into the team's effort - these are all circumstances where an employee may be concerned about the impression they will create if they share this with their manager. For the manager, though, these circumstances present problems, in many cases solvable problems, that can impact how effectively the individual and the team are able to pursue organisational goals. Because this information may be withheld, it presents a risk to managers that they may not be able to identify and solve these problems; a risk to their ability to effect organisational control.

In a co-located setting, to counter this risk managers can use normal social processes: monitoring unguarded or unintentional behaviours for indications that projected impressions may not match reality, that true attitudes are being withheld. They can watch for body language, changes in routine, changes in social interactions, signs of frustration, stress or withdrawal that might be at odds with what the employee in question is reporting if asked about their mental, emotional, or relational state. In a distributed team, these opportunities for observation are reduced or altered. For example, social interactions can be observed on video calls and in text-based chat applications but in a manner that is more limited than in-person, and with fewer times

where employees are likely to forget that they are being observed. This reduces the manager's ability to check that the impression given matches the true attitude of the employee, and to identify problems before they escalate.

To mitigate this risk, managers need better access to information about their employees' true attitudes. The findings here indicate that they achieve this in two ways: by using behaviour monitoring to assess employees' attitudes, and by developing closer relationships. Closer relationships serve several instrumental purposes: they increase trust and, as a consequence, the likelihood of discretionary information sharing; they provide more information about the individual which allows the manager to identify changes; they provide context for better assessment and enactment of organisation control actions; and allow the manager to tailor communication and assistance to best suit the individual. Managers develop deeper relationships through intentional effort, through one-on-ones with their team, and by encouraging sharing personal information in the workplace.

In this way, managers exercise pastoral control. Managers attend to each individual employee, observing and requesting access to their inner thoughts in exchange for the manager's assistance in their organisational lives. In this sense, pastoral control as exercised by managers in organisations is closer to the original model created by the church - a pastor who tends to their 'flock' (team), knowing the inner lives and darkest secrets of each 'congregant', and providing individual guidance on how to achieve 'salvation' (organisational success). Where the state individualises and categorises its subjects, it does so at a distance. In both the church and a manager-employee relationship, the relationship is more immediate (although, as Townley (1993) notes, with many human resource practices, organisations also utilise techniques of individualisation akin to those of the state).

Foucault (1982) suggests that in the case of the church, “*Pastoral power is not merely a form of power which commands; it must also be prepared to sacrifice itself for the life and salvation of the flock. Therefore, it is different from royal power, which demands a sacrifice from its subjects to save the throne*” (Foucault, 1982, p. 783). Whether one would argue that a manager is expected to “sacrifice” themselves for the salvation of their team would likely depend on who you asked. The world is littered with examples of managers who do not appear, at least, to feel any such obligation. On the other hand, the managers of distributed teams in this research did indicate they found managing a remote team to be more effortful, time-consuming and, in some cases, exhausting than managing a co-located team. They also noted the reciprocal nature of relationship building, which requires them to sacrifice a degree of their own privacy to fulfil the requirements of their role.

#### 6.7.2 Consequences of Pastoral Control

We can turn again to Goffman (1971) to predict some of the subtler consequences that pastoral control may create. Leveraging Shakespeare’s observation that “all the world’s a stage”, Goffman frames impression management as a performance and the selves we present as roles we perform. Furthermore, extending the metaphor of a stage, he suggests that while performing there can be considered a ‘front region’ where the performance occurs and a ‘back region’ where behaviour inconsistent with the performance can be allowed, out of sight of the audience, and therefore not threatening the illusion that the performance maintains. For example, staff in a restaurant may act and speak very differently to one another in the kitchen – informally, rudely, perhaps even making fun of customers or the food – compared to the dining area, where they are maintaining a professional and friendly presentation for their customers (Goffman, 1971), and we may present ourselves differently at home compared to at work.

In the back region of any performance, 'off stage', different rules apply to individuals and in interactions with others. Goffman (1971) notes that to maintain a performance often requires actions that are at odds with the impression the performance is attempting to make, and that these are likely to occur 'backstage', concealed from the audience:

*In general, of course, the back region will be the place where the performer can reliably expect that no member of the audience will intrude.*

*Since the vital secrets of a show are visible backstage and since performers behave out of character while there, it is natural to expect that the passage from the front region to the back region will be kept closed to members of the audience or that the entire back region will be kept hidden from them. (Goffman, 1971, p. 116)*

As such, those who are allowed backstage have special access and share special secrets. To be allowed backstage is to become part of the team that is putting on the performance. Goffman notes that as such, with other members of the performance team, each member will "want to sustain the impression that he can be trusted with the secrets of the team" (Goffman, 1971, p. 130).

In requesting closer relationships with their staff and knowledge of their true attitudes, managers are, in effect, asking for backstage access. They are asking to go beyond the front that is presented by the individual to get access to the 'real' story, to see the actor out of costume and out of character. But if there is only a front region and a back region, and the manager is asking for access to the back region, where does this leave the employee? What space does the employee have left to drop their guard, to put on their stage make-up and to prepare their performance? Here we come to an inherent and permanent tension in organisational control: complete control requires

complete information. Any information the employee withholds, for any reason, encroaches on the manager's ability to effect perfect control. As the manager's job is to enact organisational control, if there is a way to increase the information available to the manager, and to increase their ability to enact control more effectively, they are likely to utilise it, unless specific costs discourage them from doing so.

I do not mean to portray managers as voracious information-and-control seeking machines, gobbling up the landscape as they go. I wish simply to acknowledge the position that employees, and the managers themselves, are put in when managers are asked to enact organisational control. There will always be a natural tension between the manager's implicit need to know more and the employee's natural need to keep some space sacrosanct.

### 6.7.3 Resistance to Pastoral Control

Foucault argues that resistance does not exist outside of power; that creating forms of power also creates means of resistance (Burrell, 1988). Furthermore, to understand power, rather than beginning from an objectification of power Foucault suggests, "taking the forms of resistance against different forms of power as a starting point" (Foucault, 1982, p. 780). If pastoral control is an exercise of power, what does the resistance look like? Pastoral care, as exercised by the church, leaves little room for resistance. At best one might choose to keep secrets from one's pastor but doing so presumably puts one's immortal soul at risk. Pastoral power, as exercised by the state, requires that we share (increasingly) large amounts of information with the state: tax records, passport details, health care records. In exchange, the state uses these to provide necessary social services to keep citizens safe and healthy. To withdraw from this exchange requires a withdrawal from society and levels of secrecy reserved for mad hermits. Perhaps then, to individualise and exercise pastoral power over an individual depends on information about that individual, and resistance is withholding or misreporting that information.



While this research only canvassed a small sample of employees, it is notable that none of them evidenced any concern over their managers' interest in their personal lives. If anything, it appeared to be welcomed. As mentioned in the Findings chapter, it is likely that the small and restricted sample contributed to this. However, it is also feasible that employees do in fact welcome managers' interest in them as individuals and in their personal lives. Social isolation can be an unwelcome outcome of working remotely and it may be that connecting with their managers at such a personal level offers a welcome antidote and sense of connection, hence little apparent resistance. However, there is also a relationship between impression management and pastoral control: so, is impression management resistance to pastoral control? I think not, because impression management is so much a part of normal social interaction. Or is pastoral control instead resistance to the individual power that impression management seeks to have over interactions? Perhaps.

## 6.8 RELATING PASTORAL MONITORING TO CONTROL MECHANISMS

Monitoring, in and of itself, has only limited control effects. While being aware that one is monitored is likely to have some disciplinary effects, per Foucault (1979), that may not be sufficient for organisational control purposes. If there is monitoring of attitudes, is there also an attempt to control attitudes? I would argue that the primary purpose of pastoral monitoring of attitudes is as an early indicator for problems. However, the organisational control literature also provides considerable evidence that organisations do attempt to influence attitudes. This is sometimes termed *cultural, social, or normative control*.

### 6.8.1 Pastoral Control and Other 'Internal' Forms of Control

Critical management scholars have identified forms of power that utilise similar access to employee's inner worlds, and some of them share similarities with pastoral control as described here. The following section

outlines why pastoral control should be considered separate and distinct from these other forms of normative control.

Many forms of social or normative control direct their attention to employees' inner worlds. Normative control, for example, attempts to "elicit and direct the required efforts of members by controlling the underlying experiences, thoughts, and feelings that guide their actions" (Kunda, 2006, p. 11) or to "operate internally by moulding common attitudes, beliefs and values among employees" (Fleming & Sturdy, 2009, p. 569) so that employee attitudes and beliefs align with organisational goals. Both pastoral control and normative control therefore share an interest in employees' private experiences, where "what one does, thinks, or feels—indeed, who one is—is not just a matter of private concern but the legitimate domain of bureaucratic control structures" (Kunda, 2006, pp. 13-14). Where they differ is the execution. Normative control, as described by Fleming and Sturdy (2009) or Kunda (2006) emphasises the creation of a strong organisational culture, designed to elicit commitment and shape employees' values and beliefs via organisationally defined member roles. Pastoral control, on the other hand, emphasises one-on-one relationships between the manager and the employee, and access to (and assessment of) employees' mental, emotional, and relational state, rather than an attempt to define or create the appropriate attitudes.

Neo-normative control, Fleming and Sturdy (2009) argue, differs from normative control. Where normative control seeks to have employees adopt specific member roles and become a "company man(woman)", neo-normative control seeks to appropriate employees' 'true' or authentic selves in service of the organisation's instrumental goals (Fleming & Sturdy, 2009, p. 571). As with normative control, this is enacted via organisational culture. And where neo-normative control focuses on expressing individuality as a means of control, pastoral control focuses on access to individual experiences as a basis for understanding and predicting work performance.

Other forms of social control seek to co-opt existing, valued relationship structures for organisational ends, as does pastoral control. In these types of control, family structures, friendship networks, and paternal relations are leveraged (e.g. Casey, 1999; Costas, 2012; Fleming, 2005). Here there is a desire for employees to feel that they are ‘part of the family’ or that work is done with and for ‘friends’. Much like pastoral control, in family or paternal control, the organisation may offer a sense of security in exchange for participation. However, unlike pastoral control, much of this social, relational control is enacted through peers and group pressure. In pastoral control, the emphasis is on a one-on-one relationship, and control is more directly connected to the manager. Being ‘part of the family’ also suggests a sense of unity that is not necessarily a feature of pastoral control.

*Table 6: Pastoral Control Compared with Other Normative Modes of Control*

<b>Mode of Control</b>	<b>Pastoral Control</b>
Normative Control (e.g. Kunda, 2006)	Shares focus in the inner worlds, thoughts and feelings of employees. However, differs as emphasis is on individual relationships and access to inner worlds, rather than emphasis on organisation-wide culture that instils shared values.
Neo-normative Control (e.g. Fleming & Sturdy, 2009)	Shares focus on interest in ‘true self’ and the co-opting of the true self for organisational purposes. However, neo-normative control focuses on expressing individuality as a means of control, where pastoral control focuses on the role of individual attitudes as a basis for understanding and predicting work performance.
Familial, Paternal, or Friendship-based Control	Shares an emphasis on relationships as a lever of control. For paternal control, shares concept of

(e.g. Casey, 1999; Costas, 2012; Fleming, 2005)	submitting to a superior (father or pastor) and emphasis on superior's ability to provide security. However, in pastoral control, no focus on the unity of the family, emphasis is on one-on-one relationships rather than group or network relationships, and control sits with manager not enacted by peers or group.
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In all these forms of social control, the organisation uses culture to achieve control over the subjective experiences of employees. Pastoral control differs, therefore, in two key ways. First, control occurs between managers and their direct reports, at a one-on-one level rather than at the macro, organisation-wide cultural level. Second, pastoral control does not seek to directly alter employees' perceptions or experiences, beyond what must be the disciplining effect of the managers' gaze, knowing that the manager will be seeking access to the employees' true attitudes. Instead, pastoral control is control over access to information needed to enact organisational controls.

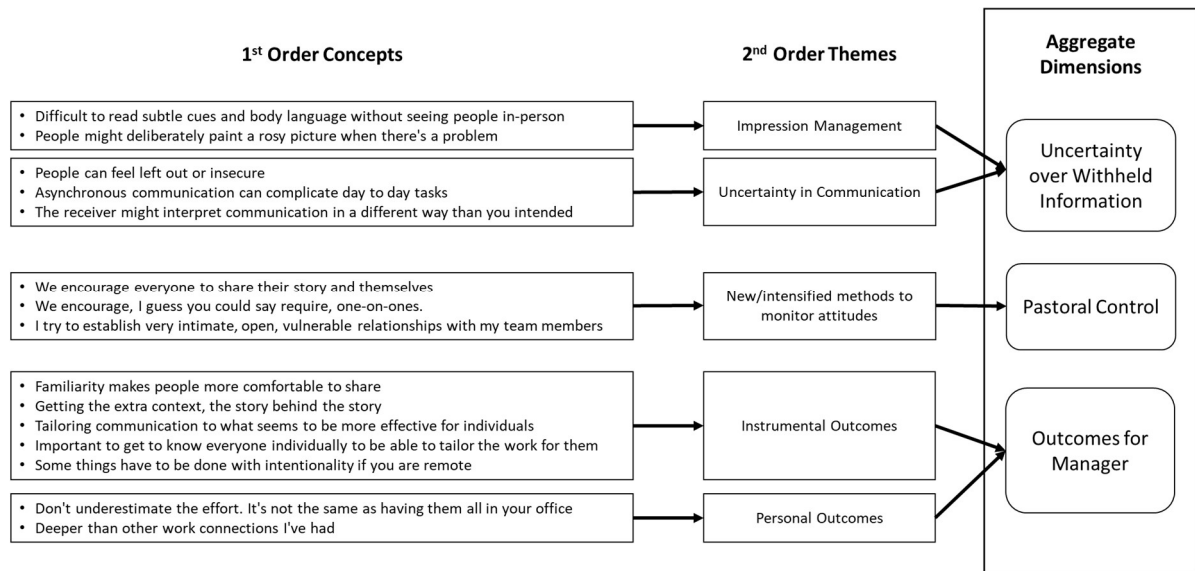
## 6.9 THEORETICAL MODEL

As discussed in the Methodology chapter, following Gioia et al. (2012) allows the researcher to move from data, through analysis of categories in the data as first order concepts and second order themes, and to ultimately derive aggregate dimensions and a theory model that describes their relationships. This allows the researcher to move from the details of the data to 'higher level' theoretical concepts that connect with extant literature and identify new concepts, relationships, and theory.

The data structure derived from this analysis process is presented in Figure 5. It identifies the central concepts and themes that arose through analysis of the data and how they relate to each other. The data supporting these concepts

and important related concepts are discussed in the Findings chapter, above.

The second order themes and aggregate dimensions are discussed here in the



Discussion chapter.

Figure 5: Data Structure

The resulting theoretical model derived from data structure, the analysis and data presented in the Findings chapter, and discussed here, is presented in Figure 6.

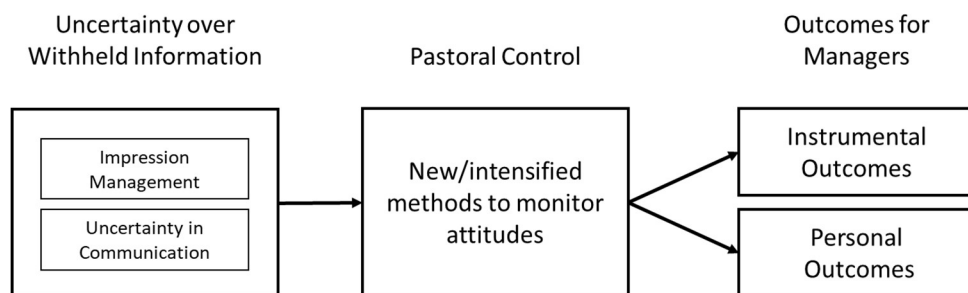


Figure 6: Theoretical Model of How Impression Management and Uncertainty Lead to Pastoral Control and Creates Personal and Instrumental Outcome for Managers

## 6.10 SUMMARY OF DISCUSSION

In summary, we can see that an increasing organisational reliance on knowledge work and discretionary effort from employees predicts a shift to socially-based informal controls. However, these informal controls still require monitoring and managers can begin to meet that need by monitoring employees' attitudes.

Where employees are concerned about the impression they might make - for example, where they feel they are underperforming, or are perhaps feeling overwhelmed or disengaged from their role, where sharing that information with their manager may have negative consequences for them, they may choose to engage in impression management to withhold this information from their manager. Impression management, in this framing, is a natural and common social process, and as such managers will be aware that employees may be engaging in it. To check if this is the case, and to attempt to discern 'true' attitudes, managers in a co-located setting could use unobtrusive observation of their team members' ungoverned, unconscious behaviours. This is more difficult to achieve in distributed teams due to spending less time in physical proximity, and fewer communication opportunities where people are likely to forget they may be observed.

This monitoring of attitudes, relying on observation and visual cues, seems likely to occur in co-located as well as remote environments. However, it may have remained latent to researchers given its both subtle and ubiquitous nature. Heidegger makes the argument that we may not truly notice the function of a tool until it is broken and no longer performs as expected (Harman, 2009; Heidegger, 2008). We may be able to extend that logic to subtle social mechanisms: they may not be entirely apparent to us until, because of a change in how we work, shifting from physical proximity to working remotely for example, these mechanisms cease to function the same way and thereby become apparent.

When managers of distributed teams encounter challenges in identifying withheld information and monitoring attitudes, they compensate by developing deeper relationships with their team members, encouraging personal information into the workplace, dedicating time and energy to one-on-ones, and monitoring communication for indications of attitude change. This can be understood as a kind of *pastoral control*, where managers attempt to ensure access to information useful for organisational control. This extra effort has instrumental outcomes for managers as it gives them more access to information about the individual's attitudes and also allows the manager to get to know individuals better – both of which allow the manager to more effectively implement informal controls that compensate for the lack of easily specifiable behaviours and outputs. Importantly, it also provides context that can assist managers to more accurately understand the meaning of other behaviour or output control-related information. It may also have personal outcomes for the manager, requiring more effort, more emotional engagement, more disclosure and in some cases, resulting in closer personal relationships with their staff.

## 6.11 CONTRIBUTIONS TO CONTROL RESEARCH

### 6.11.1 An Improved Typology of Organisational Control Monitoring

Organisational control monitoring has previously been categorised as monitoring behaviour and monitoring output. However, if behaviour control regulates how work is accomplished, that would suggest that behaviour monitoring assesses only behaviour that accomplishes work. The data presented here shows that behaviour monitoring is not limited to monitoring work-related behaviours. Behaviour is also monitored in the workplace to infer individuals' attitudes. This three-part, rather than two-part, categorisation of monitoring provides a more complete view of what it is that managers monitor in the workplace, both co-located and distributed.

### 6.11.2 Extended Framework to Understand Control Monitoring

In identifying a new type of monitoring, this research extends Ouchi's Behaviour-Output model of monitoring and provides a framework within which future research can explore the complexities of monitoring attitudes and informal control enactment.

Ouchi hints at the need to monitor attitudes but generally (though not entirely consistently) frames it as an absence of behaviour or output monitoring rather than the positive presence of attitude monitoring. Early in his discussion of clan control in Ouchi (1979), the author begins his argument by restating his position in earlier work:

*let us agree, for the moment, that if we wanted to control an organization, we would have to monitor or measure something and that, essentially, the things which we can measure are limited to the behavior of employees or the results, the outputs of those behaviors (Ouchi, 1979, p. 843)*

This bridges to and reinforces his earlier Behaviour-Output framework. He then touches on also monitoring attitudes within clan control:

*Because ceremonial forms of control explicitly are unable to exercise monitoring and evaluation of anything but attitudes, values, and beliefs... (Ouchi, 1979, p. 844)*

However, he also frames the monitoring of attitudes as an absence of monitoring:

*Although clans may employ a system of legitimate authority (often the traditional rather than the rational-legal form), they differ fundamentally from bureaucracies in that they do not require explicit auditing and evaluation. Performance evaluation takes place instead through the*



*kind of subtle reading of signals that is possible among intimate coworkers but which cannot be translated into explicit, verifiable measures. (Ouchi, 1980, p. 137, emphasis added)*

*But if it is not possible to measure either behavior or outputs and it is therefore not possible to "rationally" evaluate the work of the organization, what alternative is there but to carefully select workers so that you can be assured of having an able and committed set of people and then engaging in rituals and ceremonies which serve the purpose of rewarding those who display the underlying attitudes and values which are likely to lead to organizational success (Ouchi, 1979, p. 844, emphasis added)*

At other times he appears to contradict his own position that monitoring attitudes does occur:

*If all members of the organization have been exposed to an apprenticeship or other socialization period, then they will share personal goals that are compatible with the goals of the organization. In this condition, auditing of performance is unnecessary except for educational purposes, since no member will attempt to depart from organizational goals. (Ouchi, 1980, p. 138)*

As mentioned in the Literature Review, in my opinion a situation where there is a complete absence of evaluation or auditing for performance or deviation from organisational goals seems overly optimistic, so it seems likely that here Ouchi is invoking an exaggerated or platonic ideal of clan control for the purpose of illustrating a point. In the case of the Ouchi (1979, p. 844) quote,

where he mentions that it is not possible to “rationally” evaluate work, he is making the point that in utilising clan control, organisations do in fact act in ways that do not fit older models of "organizational rationality" (Ouchi, 1979, p. 843).

Thus, without invalidating his earlier Behaviour-Output model, Ouchi builds up a model of clan control as existing in the absence of monitoring behaviour or outputs. The idea that behaviour and output are the two fundamental bases of control has been, and is still, hugely influential within the organisational control literature but I would argue that in recognising the role of clan control, Ouchi’s formulation had the potential to instead become an Attitude-Behaviour-Output model.

To argue that Ouchi’s Behaviour-Output model should instead become an Attitude-Behaviour-Output model requires unpicking two aspects of Ouchi’s work. The first aspect is the suggestion that only behaviours or outputs can be monitored:

*...if we wanted to control an organization, we would have to monitor or measure something and that, essentially, the things which we can measure are limited to the behavior of employees or the results, the outputs of those behaviors (Ouchi, 1979, p. 843)*

In originally formulating this proposition, Ouchi notes that while you can only monitor or measure behaviours and the outputs of those behaviours, you can in fact only control behaviours:

*Thus, control systems can be regarded as being based essentially on the monitoring and evaluation of one or the other, and these will be referred to as being behavior control and output control - remembering that even in the*

*case of output control, real control comes about only through changing the worker's behaviour (Ouchi, 1977, p. 97, emphasis added)*

It is true that while you can *monitor* behaviours and their outputs, you can only *control* behaviour – in that everything an individual does in an organisation qualifies as ‘behaviour’. So, this argument can be boiled down to one of two interpretations. The first is: the only thing you can control in organisational control is individuals. This is essentially the definition of organisational control (exercising control over individuals in an organisational context).

However, the second interpretation, the idea that control is based on monitoring, and *monitoring* is based on behaviour or output is more powerful. So, the question instead becomes, can you monitor anything other than behaviours or output? Ouchi himself hints that you can when he talks about clan control relying on monitoring attitudes.

The second aspect that needs to be examined is that researchers have at times attempted to unify Ouchi’s ideas by describing control as consisting of behaviour, output, or clan (e.g. Das & Teng, 1998; Kurland & Cooper, 2002; Turner & Makhija, 2006), which is similar to the Attitude-Behaviour-Output framework that I propose. However, describing control as consisting of behaviour, output or clan merges two levels of analysis. Using the definition of control components that Cardinal et al. (2010) provide, behaviour and output controls are categorisations of control *mechanisms*, whereas Ouchi describes clan control as a control *system*. Long and Sitkin (2018) agree:

*Research is also compromised by false consensus problems because scholars may use the same label to describe very different concepts. For example, particular informal control labels (e.g., “social control”) have been used to*

*describe very different control concepts across levels of analyses, from individual control mechanisms to comprehensive control systems (Long & Sitkin, 2018, p. 729)*

Ouchi (1979, 1980) identifies control *systems* as either market, bureaucracy, or clan systems, and control *mechanisms* as based on monitoring either behaviours or outputs. I would argue that to support a clan control system, and based on the data and analysis presented here, control mechanisms should instead be understood to be based on monitoring attitudes, behaviours, or outputs.

#### **6.11.2.1 Integrating Input Control**

Cardinal (2001) suggests that Ouchi's behaviour-output framework should be extended to include mechanisms that influence the beginning of the production process; input control targets that control how resources enter the production process. Kirsch et al. (2010) argue that input control mechanisms are a factor of clan control, in that clan control relies on selection and socialisation. Cardinal's (2001) formulation of control mechanisms as based on input, behaviour, and output is based on where in the production process the control is applied, or perhaps what is intended to be changed. The formulation I have suggested here of attitude, behaviour, or output, is based on what is monitored rather than what is changed (because as Ouchi notes, in the end the only thing that can actually be changed is behaviour) and on the informational requirements of control.

Thus, input-based control mechanisms and attitude-based monitoring are both necessary components of a clan control system and in fact of informal controls.

#### *6.11.2.2 Is Monitoring Attitudes Just Monitoring Behaviours?*

As discussed above, attitudes cannot be accessed, and therefore monitored, directly by anyone other than their possessor. That said, I suspect that if organisations could directly access their employees' attitudes, they would.

While it is true the only thing that can be directly observed is behaviour and the consequences of that behaviour (outputs), definitions of behaviour control have relied heavily on the idea that behavioural controls specify and regulate how work is accomplished. Attitude monitoring, on the other hand, does not relate to the accomplishment of any specific task.

Furthermore, a great deal of specified behaviour is not observed directly either – that the behaviour has occurred is inferred from other indicators, other “imperfect estimators”. The same is true for attitudes.

And while behaviour controls can specify required behaviours, and output controls specify required outputs, attitudes would seem harder to specify. However, considerable literature on clan or social controls, particularly the work within critical management studies on normative control, would suggest that organisations do in fact intend to influence their employees' attitudes (and their values and beliefs) deliberately and for organisational purposes. While the required attitude might not be explicitly formalised, the intention to influence the attitude (and therefore the need to monitor it) is there.

#### *6.11.2.3 Summary*

Ouchi (1979, 1980) suggests that in the absence of monitoring behaviour or output, organisations will rely on more socially-based clan control. He hints at the fact that clan control requires monitoring attitudes, values, and beliefs but does not extend his original formulation of control, as based on monitoring either behaviours or outputs, with a positive indication of what is monitored in the case of clan control, instead leaving monitoring in these circumstances defined as an absence of behaviour or output monitoring.

I would suggest that extending Ouchi's formulation to include control based on monitoring attitudes, as well as behaviour and output, usefully improves the comprehensiveness of our understanding of informal or social control. While this formulation of control mechanisms as based on monitoring attitudes does not address directly how monitoring attitudes can thereby create control, and cause changes in behaviour, a considerable body of research already exists on the effects of clan and normative control. The addition of control based on monitoring attitudes simply provides empirical support for how monitoring, an essential component of control, is accomplished in control systems that do not rely entirely on behaviour or output control. This formulation of control based on attitudes, behaviours, or outputs provides an improved typology of control monitoring, highlighting an important type of monitoring that managers undertake in the workplace, and helping to explain how informal controls are enacted, as discussed next.

#### 6.11.3 Understanding Informal Control

While the body of research on informal control is considerably smaller than research on formal control, researchers increasingly acknowledge that informal control is an important part of organisational control (e.g. Sitkin et al., 2020). Informal controls are less well-understood, however research has identified that informal control works with and can complement formal control (e.g. Cardinal et al., 2004; Kreutzer et al., 2016). Thus, understanding informal control is vital to understanding control as a whole.

By identifying an additional type of monitoring, where managers monitor behaviours for attitude-related information as well as work-related information, this research identifies one of the necessary mechanisms to enact informal control. Based on Ouchi's work, it has generally been assumed that an inability to specify behaviours or outputs has meant a shift to what Ouchi called "clan control" (Ouchi, 1980) or a shift to what has been described as normative or social control. But in that theorising, there has been little

discussion of what the shift to informal controls means for the role of information as an antecedent of control or what it means for monitoring. If we accept that the inability to specify formal behaviour and output controls will lead to increased reliance on informal controls, and if we accept that all controls, including informal controls, rely on information and therefore require monitoring, as described above, then identifying a means of monitoring – such as monitoring attitudes – becomes a crucial explanator in understanding how informal controls operate.

By identifying a monitoring mechanism that supports informal control, and by demonstrating with empirical data how this mechanism operates, and by developing a theoretical rationale to explain why this type of monitoring occurs, a significant piece of the puzzle is revealed as we seek to understand control in its entirety. This provides more explanatory power for researchers, and I believe for managers as well.

#### **6.11.4 Understanding Control in Modern and Distributed Organisations**

Researchers have long argued that organisations now operate in more turbulent and complex environments and have adapted to meet these new demands (e.g. Cardinal et al., 2017; Kirsch & Choudhury, 2010; Long & Sitkin, 2018). These adaptations require scholarly research to keep pace if research is to reflect real-world activity. This is particularly true for the study of organisational control, where a shift to more knowledge work, greater reliance on technology, and more team-based work, combined with complex, fast-changing environments, changes what organisations require of their staff. These new forms of working, with difficult to specify behaviours and outcomes, team- and knowledge-based work, and relying on discretionary effort, challenge the applicability of formal output and behaviour controls (Eisenhardt, 1989a; Ouchi, 1979), raising the importance of other forms of control for modern organisations.

Cardinal et al. (2017) make the case that “control research has not kept pace with the dramatic changes of recent decades, particularly in the 21st century” (p. 560) and that to remain relevant, control research must move beyond a singular view of control with its focus on formal and coercive control. They argue that decades ago, when organisations operated in more predictable environments, “control mechanisms could be simpler, more coercive, and more formal. Such mechanisms matched the relative stability and transparency of task and institutional environments, the relative transparency of goals and goal differences inside firms, and the lower levels of complex knowledge work” but in modern organisations “control mechanisms have needed to be more holistic, enabling, and informal” (Cardinal et al., 2017, p. 562).

To understand modern organisations, and for organisational control research to remain relevant for these organisations, the mechanics and practicalities of informal control must be addressed. This research contributes to meeting that need. It surfaces key concepts in the use of informal control, such as monitoring attitudes, the role of context, and impression management, which is vital for understanding control in modern organisations. It does so through an examination of distributed teams, where work is dispersed and collaboration occurs across multiple locations. Cardinal et al. (2017) suggest that it will be important for control research to address currently-unanswered questions in these new organisational forms:

*What are the effects of control on cross-boundary, dispersed, and temporary forms of work (e.g., virtual teams, peer-based groups, alliances, consortia, communities of practice, and relational networks)? What types of controls are effective in these new forms? How might these new forms change our theories of control?*  
(Cardinal et al., 2017, p. 583)



Thus, by explicating a vital function in informal control (monitoring attitudes), this research contributes not only to our overall understanding of control, but to our understanding of control in a way that is relevant for the modern organisational context.

#### **6.11.5 Incorporating Diagnostic Monitoring and Indicators into Control**

A key attribute of monitoring attitudes is that it highlights the role of diagnostics in control. While Simons' (1991, 1994) work incorporates this idea, the role of diagnostics is often overlooked in other control research, and Simons' work has had limited impact in the organisational control literature compared to other frameworks (Cardinal et al., 2017).

Control mechanisms have in the past been categorised by control targets – input, behaviour, and output - based on which part of the production process the mechanism aims to influence (Cardinal et al., 2017; Cardinal et al., 2004). This view suggests that “controls should be viewed from the standpoint of their inherent temporal location in a process” (Cardinal et al., 2017, p. 566): input occurs at the beginning of the production process, behaviour during, and output after production.

Considering the role of diagnostics in control offers us a different view. To effect control requires understanding the current state of production, and from that state information, having the ability to identify both problems and appropriate responses to correct those problems. As such, monitoring mechanisms that offer early warning are likely to be more valued than monitoring mechanisms that provide warning after a problem has already occurred. Furthermore, it seems likely that as organisations operate in more complex and turbulent environments, where speed and agility in responding to environmental change is likely to be favoured, earlier diagnostics will gain further value.

Rather than categorising control mechanisms by where in the production process they seek to make change, we can categorise control mechanisms by where in the production process they generate information; more specifically, we can categorise them by the timeliness of the warning they provide. Output control (and its associated monitoring) is a trailing indicator, notifying managers of problems after they have occurred. Behaviour control is a concurrent indicator, notifying managers as (or slightly after) a problem is occurring. Because attitudes are likely to motivate and therefore precede individuals' actions, attitude monitoring is a form of leading indicator, potentially providing managers with warning of problems *before* they occur. Input controls could also be considered a leading indicator, in that inputs are selected based on a presumed cause-effect relationship between the input and the desired outcome, so if the input is not available, the outcome may not occur. However, this is only likely to be a useful indicator if the desired input is unavailable. Given the complexity of factors between the input and the desired output, in most cases having the input you seek is unlikely, on its own, to guarantee the outcome, thus limiting its usefulness as a diagnostic indicator of potential problems.

Highlighting the diagnostic function of information for control (specifically via attitudes) provides a new lens to conceptualise controls, where we can categorise controls by the timeliness of the diagnostic information they provide.

#### 6.11.6 Situational and Relational Control

Monitoring attitudes requires attention to individuals. It relies on personal knowledge, observation, discretionary information sharing, and context. As noted in the Literature Review chapter, much theorising on organisational control has focused on systemic, global organisational controls – based on assumptions of universal human nature, set at the top of the organisation, and able to apply equally to all within it. While it is important to identify these

macro, organisation-scale controls, that should not cause us to overlook that control is enacted locally and situationally, and relies on context and relationships. In focusing on informal controls, and on monitoring attitudes, our attention is drawn to this more individual-scale aspect of control. This provides a more multi-faceted view of control, representing not just what happens systemically in organisations but what happens personally (Orlikowski, 1991). This, I believe, points to new ways of considering control for future research.

#### 6.11.7 Pastoral Monitoring and Control

This research also adds control over access to information as an important type of control within the broader scope of organisational control. This is a type of control that does not directly affect the subject of control's actions but is an antecedent for any type of control that does. As has been acknowledged in prior control research, particularly in critical management studies, control over access to information is often ground that is contested between the controller and controllee.

In describing how managers improve access to monitoring information about attitudes, I introduce the concept of *pastoral monitoring* and *pastoral control* as a framework for understanding and integrating monitoring, relationships, and the role that impression management plays in reducing managers' access to attitude-related information. This is particularly relevant in distributed teams where the lack of physical proximity allows impression management to interrupt and impede managers' ability to verify espoused attitudes. Pastoral control is a new way to consider how managers use relationships and access to discretionary information to enact control, and is particularly powerful for understanding distributed teams, where lack of physical proximity and impression management activities may make it more difficult to monitor attitudes.

#### 6.11.8 Other Implications for Organisational Control

Monitoring attitudes requires close observation, contextual and individual knowledge, access to people's beliefs and feelings, and subjective judgement on the managers' part. Thus, with monitoring of attitudes, the relationship between control and context becomes apparent.

##### *6.11.8.1 Control is Contextual*

As discussed in the Literature Review chapter, control depends on information. This is evidenced by previous research and by the close relationship between monitoring and control. What is perhaps less discussed in extant research is the nature of information, and how information is interpreted. In the Literature Review, I explored how information, including control-related information, derives its meaning in part from context.

Context is a relational concept, indicating that to understand the meaning of any given fact, it is necessary to also look at the context surround that fact. In the Literature Review chapter I posed the following thought experiment to demonstrate the necessity of context to control information: one of your staff produced 100 widgets this week. Should you give her a raise? Or fire her?

I argued that the answer depends on a variety of other pieces of data: how many widgets she was expected to and agreed to produce, how many is usual for a person in her role to produce, whether other factors may have contributed to higher or lower output than usual. As such, even relatively objective facts like the number of widgets a worker produced does not, on its own, produce useful information or actionable knowledge. Thus, control information, like all types of information, depends on context.

##### *6.11.8.2 Integrating Context into Control*

Hall (1976) introduces the idea of high-context and low-context cultures in sociology. Hall argues that some cultures rely more heavily on the shared, cultural context of an utterance to derive its meaning than others. Put

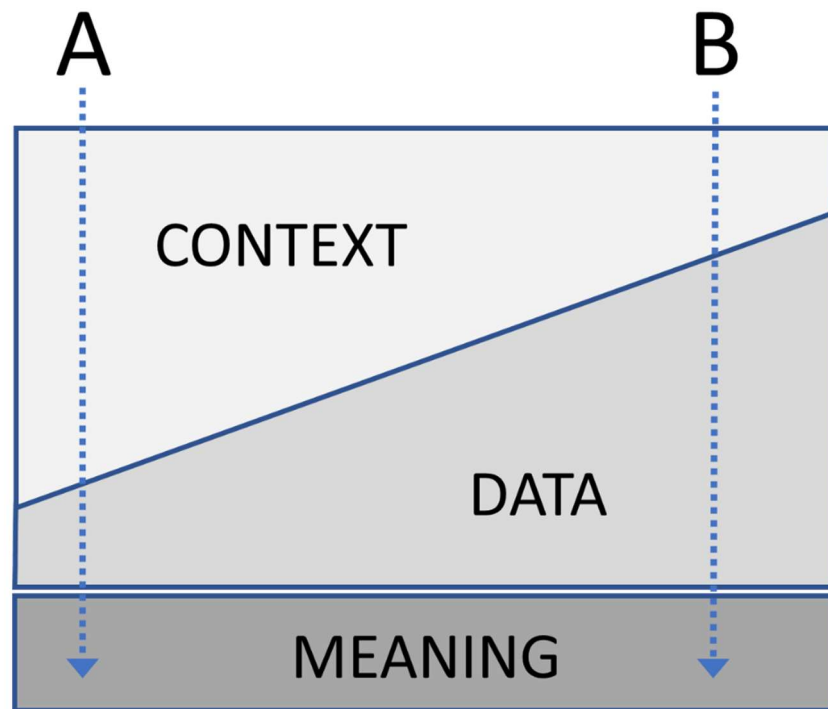
differently, he suggests that in some cultures a great deal of the meaning of any communication is left unspoken. Rather than being explicitly stated, in high-context cultures a great deal of the meaning is derived from shared cultural knowledge. He suggests that in American culture, for example, the communication style tends to include more explicitly stated information whereas in Japanese culture, for example, communication tends to leave a lot unsaid and the listener is expected understand the unstated assumptions and subtleties.

Kittler et al. (2011) note that Hall's work has been influential in sociology. However, Kittler et al. (2011) also note its lack of definitional clarity and that the work is subject to the same criticisms which have applied to other attempts to classify national cultures, including critiques of bipolarisation and overgeneralisation. Reviewing work based on Hall's concepts, Kittler et al. (2011) find little empirical support for Hall's suggestion that high-context and low-context cultures exist, no doubt in part because of the difficulty in identifying any individual 'national culture'. However, the framework Hall introduces for considering the relationship between context and information when interpreting a message provides a simple way to conceptualise the role of context in control if, rather than looking at cultures, we consider the role of context in specific control environments.

#### ***6.11.8.3 The Relationship between Context and Information***

Hall (1976) proposes that for any given message, there is a relationship between the given information, the context needed to interpret it, and the meaning that can be derived from the combination of explicit information and context. He suggests that some messages provide less explicit information and rely more on context. Others provide more explicit information and rely less on context. This can be visualised in the following diagram, Figure 7, adapted from Hall (1976, p. 102). While Hall (1976) uses the word 'information', in line with the DIKW framework introduced in the Literature

Review, given that information includes the derived meaning, what he terms ‘information’ could be better thought of as ‘data’.



*Figure 7: Meaning of Messages A or B is derived from different ratios of explicit data and the context of the given data.*

If we take the meaning of any information to be a combination of the explicit data given and the context that surrounds the data (and that is used to interpret the data), we can understand that the meaning of message A, in Figure 7, is in large part derived from the context of the data. The meaning of message B, on the other hand, is largely derived from the data, with less reliance on the context.

An example drawn from organisational control may make this distinction clearer. As mentioned above, if you have an employee making 100 widgets a day, the only context you may need to know is that 100 widgets per day is the

expected output rate for that role. This is an example of Message B: the output data is relatively clear and little context is needed to interpret it; in this case, just the expected output rate. On the other hand, if you have a scientist who has not met expected project deadlines, you may need significantly more context to understand if this data indicates a problem (Message A). Was the scientist delayed by an unforeseeable aspect of the discovery process? By requiring time off for illness? By stumbling upon an unexpected but potentially lucrative new finding that diverted their attention? As the scientist's manager, your response will depend heavily the reason (context) that the deadline was missed (data).

#### ***6.11.8.4 Context Providing Environments***

As noted in the Literature Review chapter, an important feature that differentiates co-located and distributed teams is that distributed teams have reduced access to context information about remote colleagues and their actions. The converse is also true: physical co-location and time spent together provides significant amounts of context information.

#### **6.11.9 Context-Dependent Controls**

Context is necessary to accurately interpret the meaning of information. As enacting organisational control is a key managerial function (Sitkin et al., 2020), accurately interpreting control-related information will be important for managers. Monitoring outputs, behaviours, and attitudes generates control-related information but on its own, this information will not be sufficient – it needs context to be interpreted correctly. This may be particularly relevant for attitude and behaviour-related monitoring, where understanding the meaning of an action is likely to benefit from knowledge of the individual and the circumstances that surround the action.

Working in physical proximity provides considerable context by virtue of being in the same space and so traditional, co-located work can be thought of

as a ‘high-context’ environment. Working remotely, on the other hand, where context information is reduced (Cramton, 2016; Gross, 2013), can be thought of as a ‘low-context’ environment. When organisational control shifts from traditional high-context physical proximity to low-context distributed work, the importance of context in interpreting information is made more apparent by its absence, and the steps managers must take to compensate.

To increase the amount of context available, managers increase their focus on relationships as a conduit for context information. This context supplements information from monitoring and allows the manager to more effectively identify problems, diagnose causes, and choose corrective actions, thus improving the manager’s ability to enact day-to-day organisational control.

The role of context in accurately interpreting organizational control information can also explain why, as discussed in the Literature Review chapter, as organisations grow and become more horizontally or vertically differentiated, they come to rely on more objective, quantitative financial controls (Hoskisson et al., 1993), and why a relationship exists between knowledge of task processes and the use of output controls (Ouchi & Maguire, 1975). These more objective and quantitative controls require less context to interpret correctly.

Organizational control research categorises controls in multiple ways: as, for example, formal or informal, direct or indirect, coercive or enabling (Adler & Borys, 1996; Cardinal et al., 2017; Errichiello & Pianese, 2016). This research shows that to identify how and where controls should be used, it is also necessary to understand controls as highly context-dependent or more context-independent. Using highly context-dependent controls in low-context environments may not function as expected.



## **6.12 CONTRIBUTIONS TO DISTRIBUTED TEAMS RESEARCH**

This research addresses several issues in distributed team research. To date only sparse research exists on how organisational control functions when teams and their managers are separated by geographic distance, and this research contributes to filling that gap in knowledge.

### **6.12.1 Clarifying the Problem with Output Control**

In exploring the theoretical relationships between knowledge work, discretionary effort, and control, this work highlights that because distributed teams tend to incorporate considerable knowledge work, previous suggestions that distributed teams should shift to output-based controls lack theoretical depth. Furthermore, the data shows that distributed teams do not in fact rely on output controls. The role of knowledge work and discretionary effort explains why, even though the suggestion to emphasise output-based controls has persisted, managers may ultimately find it difficult to implement or unsatisfying.

### **6.12.2 Highlighting the Effectiveness of Work-related Behaviour Monitoring**

Complementary to finding that primary reliance on output controls has limited applicability in distributed teams, the data here highlights that distributed workflows tend to create large amounts of explicit, shared data to support asynchronous work. Managers in this research found that the creation of large quantities of explicit, shared information makes monitoring work-related behaviour relatively effective. This has useful practical implications for managers attempting to enact organisational control in distributed teams.

### **6.12.3 Identifying Attitude Monitoring in Distributed Teams**

However, even though distributed teams create more explicit information, and managers felt this explicit information made it relatively easy to track work-related behaviours, this alone was insufficient for managers to enact control. Instead, this research identifies that managers in distributed teams

also monitor for information that can inform them of a change in attitude on the part of their team members. This highlights the importance of monitoring attitudes, even when other control-related information is available.

As discussed above, there is theoretical support that attitude monitoring is part of organisational control in both co-located and distributed teams because of its relevance to difficult to prespecify knowledge work and discretionary effort, but the empirical evidence specifically shows that attitudes are monitored by managers in distributed teams. This considerably improves our understanding of the mechanisms of informal control and creates a more complete picture of control generally, which is valuable for researchers and also for managers in distributed teams who must attempt to enact organisational control to ensure organisational goals are met.

#### 6.12.4 Understanding the Role of Impression Management in Distributed Control

The importance of monitoring for attitude-related information highlights an interesting dynamic in distributed teams: the role of impression management in control monitoring. Managers value information about the attitudes of their team. However, when those team members feel their true attitudes might create an unfavourable impression, they may be inclined to withhold their true attitudes and instead present a more favourable front. As these unfavourable attitudes may be a useful diagnostic or early warning for managers to identify a developing problem, this creates a problem for managers: they can either take the espoused attitude at face value, or attempt to test its veracity. Goffman (1971) suggests that we attempt to verify 'true' attitudes, at least in part, by observing ungoverned or uncensored behaviours, facial expressions, and body language, which is more difficult to do when there are fewer opportunities to observe others, such as when two people are separated by geographic distance.

Understanding that attitudes are monitored, and that impression management can interfere with monitoring attitudes, draws attention to the importance of observation in enacting organisational control. While observation has long been understood as an important element of organisational control (e.g. Bernstein, 2017), the finding here goes beyond simple conceptions of observation as having the ability to watch people work, and highlights one way that social dynamics influence control enactment.

It also highlights how physical proximity can create a fundamental difference between co-located and distributed teams, and explains why this happens (impression management interferes with monitoring attitudes), why it matters (it makes enacting organisational control more difficult in distributed teams) and what the consequences are (managers in distributed teams compensate by emphasising relationships).

Barsness et al. (2005) found that as employees spend more time working remotely from their supervisors, employees' impression management efforts increase so some empirical evidence exists to support managers' concerns. However, little research exists on the role of impression management in distributed teams. Bolino et al. (2016) identify the need for more research in several areas that the research presented here contributes to: the role of technology in workplace impression management, impression management in modern organisations, and research on impression management in virtual teams (p. 400). This research also contributes a new perspective on how impression management may alter processes and outcomes in distributed work, as well as altering managerial effort.

### **6.13 SUMMARY**

This research identifies an important extension to Ouchi's Behaviour-Output framework for control monitoring by identifying monitoring for attitude-related information. It highlights the role of monitoring attitudes in the use of

informal controls, introduces pastoral monitoring and pastoral control as a framework for understanding how managers access attitude-related information, and identifies a new categorisation of control mechanisms as highly-context dependent or largely context-independent. These findings contribute to both organisational control and distributed team literature and generate practical implications for managers. These points will be summarised more completely in the following Conclusion section.

## 7 CONCLUSION

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### 7.1 PRACTICAL IMPLICATIONS

This research generates some practical implications for managers in distributed teams. In the first instance, managers should be aware that output controls may be difficult to use in distributed teams because distributed teams tend to rely on knowledge-based and team-based work, which make it difficult to prespecify measurable and agreed-upon outputs. Thus, while output-based controls may be useful, managers should not assume that reliance on output measures will be sufficient.

Second, managers should be aware that organisational control mechanisms that work in co-located teams may not automatically work well in distributed teams. Choosing to rely on highly-context dependent controls that rely, for example, on knowledge of individuals to assess performance, may require more time and effort on the manager's part to acquire the context necessary to make accurate assessments.

Related to this, as reported by participants in this research, managers in distributed teams should be aware that managing a distributed team may require more time and feel more effortful than managing a co-located team, and adjust both the scope of their own responsibilities and those of any managers who report to them to account for this. The effort required - to compensate for difficulty in prespecifying useful behaviour and output measures by monitoring attitudes; to keep up with the large quantities of recorded information; and in some cases to span multiple time zones - requires both more time and more effort on a manager's part. Adjusting for this will make managers' jobs more sustainable and likely help them to succeed in their roles.

Third, this extra effort – compensating for difficulties in monitoring attitudes by emphasising relationships, one-on-ones, soliciting discretionary information sharing, and monitoring communication behaviour for indications of attitude change – may have personal outcomes for managers in addition to instrumental outcomes. Depending on the manager’s approach, they may find the work more emotionally taxing, or they may find that the nature of their relationships with their team changes.

Fourth, managers should be aware that some part of their control monitoring will require attention to people’s attitudes and be ready to account for that work. Believing that control can be enacted entirely by specifying behaviours or agreed-upon outputs may lead to ineffective attempts at control, particularly when the work relies on team- or knowledge-based work, discretionary effort, or occurs over a distance where lack of physical proximity hampers observation.

## 7.2 LIMITATIONS AND FUTURE RESEARCH

No research process is truly neutral or detached from the researchers’ prior knowledge, preconceptions, historic context, or the discourses of knowledge the researcher operates within. My professional experience necessarily colours which data I tend to notice and the meaning I make of it. Furthermore, the knowledge of social processes and phenomena cannot be divorced from the social beings who create and sustain them (Numagami, 1998), and from the social nature of knowing them, despite a desire to maintain what Gioia et al. (2012, p. 21) describes as “witting (as opposed to unwitting) ignorance” of existing research. To identify where these preconceptions influenced my research, I took deliberate steps such as testing initial theoretical propositions against the later set of data and creating coding structures that deliberately surfaced and challenged some of those assumptions. However, it is also necessary to acknowledge that the researcher is “in” the research.

In my case, I have worked remotely, managed remote staff, and worked in knowledge-intensive industries like software development. This provided some advantages in the research process: it made me sensitive to the challenges that managers of distributed teams were likely to face, allowing me to go beyond the surface questions required to simply understand the logistical processes necessary to manage distributed, knowledge-based teams. It allowed me to establish credibility and some initial level of trust with participants as I could demonstrate an understanding of distributed work in technology-enabled industries, and participants did not need to explain the basics of the terminology and their workflow. This could also have drawbacks, however. It may have caused me to assume I knew things that in fact I did not, or to overlook areas that could have fruitfully been explored in more depth. A researcher without the same shared background may have challenged assumptions that I simply accepted. However, it is difficult to truly put aside one's prior knowledge and O'Reilly et al. (2012) argue that prior knowledge can be an asset for theoretical sensitivity and thereby assist with new theory development.

The influence of my previous experience seems, from my perspective, to be most likely to have occurred in relation to the use of technology and the role that it plays in enabling distributed workflows and technology-mediated communication. Having spent years working in technology-related industries, I often take the technology to be a "natural" part of the process. It is possible, for example, that the emphasis on monitoring attitudes is driven by specific features or affordances of the technology and that what appeared to be a response to the social process of impression management may instead have been a response to the structure or sociomaterial (Orlikowski, 2007) aspects of the technology in use. Had participants needed to explain more details of their workflow to another researcher, other explanations may have arisen. Therefore, I cannot claim that the mechanisms presented here are the only

true, or even necessarily the best possible, explanations but I hope they highlight new ideas to test and new areas for exploration. Furthermore, these explanations fit with extant theories, as discussed above, which provides support for their usefulness.

The focus for this research was to surface managerial perspectives but I am mindful this leaves the employee perspective relatively silent. While I was fortunate to be able to interview a small number of employees, it is difficult to make more than tentative suggestions based on the small sample, which largely represented employee experiences within a single organisation. As Hafermalz (2020) demonstrates, there are likely other phenomena from the employee point of view that relate to what I have labelled pastoral control. Understanding those phenomena and the theoretical relationships they might entail would deepen our understanding of outcomes and experiences of control. As such, this research identifies new directions for future research to explore.

Related to the limited employee perspective, participants in this research were self-selecting and are generally *choosing* to manage distributed teams. As they all have this in common, it is likely there is some commonality in their opinion of managing distributed teams. Furthermore, these are managers who are largely succeeding at managing distributed teams so there is likely to be some survivorship bias here: the things that cause the biggest problems, that cause working or managing remotely to fail, are by definition unlikely to be present in significant amounts (or not discussed or recognised as such yet) for these participants. A fuller picture could be developed by talking with managers and employees who have chosen to stop working remotely. Managers who have needed or opted to stop utilising distributed teams would provide a difference perspective on the crucial “deal-breaking” problems that distributed teams and managers in distributed teams face. This would provide



context for issues such as impression management and activities such as monitoring attitudes and pastoral control.

Because this research was exploratory in nature and undertaken with the intention to inductively develop theory grounded in the data, I did not directly ask participants about the theorised concepts or theorised relationships between concepts that became apparent during analysis. Had the key theorised concepts and relationships – attitude monitoring, pastoral control, the importance of context in control – been identified in prior research, it would have been possible to take more of a deductive, confirmatory or hypothesis-testing approach. This would have allowed me to explore participant perceptions and experiences to develop a more complete understanding of these concepts and theoretical relationships. However, the exploratory research undertaken here provides a basis for future research, where researchers could test how well these concepts fit practitioner experiences, and to have practitioners either fill missing details or highlight contradictions, thereby increasing the explanation to incorporate more real-world complexity.

Despite these limitations, steps were taken throughout the research to increase the validity, credibility, and rigour of the research (Corbin & Strauss, 2015). Using a two-phase analysis allowed me to refute assumptions against data (Corbin & Strauss, 2015) and the multiple phases of analysis relied on constant comparative methods (Charmaz, 2014; Corbin & Strauss, 2015). Data came from multiple organisations and was systematically compared throughout analysis (Charmaz, 2014). Using more than one data source and participants from a variety of teams and industries allowed for triangulation (Lincoln & Guba, 1986) and increased transferability (Gioia et al., 2012).

All research necessarily relies on researcher interpretation and, as such, only provides one of many possible interpretations of the data. Other researchers,

with different theoretical and practical backgrounds may find other aspects of the data to be more significant or other explanations to be more compelling. However, I believe this initial interpretation, in highlighting and connecting monitoring, impression management, context, informal controls and control enactment across distance, creates new opportunities for conversation, understanding, and debate.

### 7.3 OTHER FUTURE RESEARCH OPPORTUNITIES

A challenge for qualitative research, particularly exploratory and inductive qualitative research, is understanding the transferability of the findings. Identifying the existence of a phenomenon does not necessarily tell us how widespread the phenomenon is or what conditions might lead to, reinforce, or reduce the likelihood of the phenomenon occurring. More research is needed before we can begin to quantify those issues.

For example, in virtual teams, tenure with the team or length of existing relationships has been shown to affect team processes: team members who have known each other for longer work together more effectively (Webster & Staples, 2006). If relationships are a core component of pastoral control and utilised to monitor attitudes, then identifying the role of existing relationships within the team may form a useful “control” or boundary condition that affects the transferability of the findings in this research which specifically relate to the use of relationships in enacting organisational control in distributed teams.

Other boundary conditions or limits to transferability that could be explored include team size, the effects of different geographic distances, and the industry or type of work. The teams in this research spanned several industries, not just software development, which increases the likelihood the findings are transferable. However, distributed teams still tend to be found in knowledge-based and technology-enabled work. It is possible that certain

types of industry attract members who are more or less inclined towards pastoral control and monitoring attitudes for organisational control enactment, which may influence the degree to which these phenomena are observed elsewhere<sup>4</sup>. The same may also be true of task or role type. Task type has been shown to be an important variable in understanding both organisational control and communication and collaboration in distributed teams (Martins et al., 2004; Maynard & Gilson, 2014). While participants in this research manage employees whose work spanned a variety of task and role types, it is possible that certain task or role types lend themselves more strongly to pastoral control or an emphasis on monitoring attitudes through other means.

Similarly, managers in this research noted that managing distributed teams tended to be more effort-intensive than managing co-located teams. Previous research supports this assertion (Dulebohn & Hoch, 2017). This would suggest that managers will prefer to manage smaller teams to ensure their workload is manageable and they are able to be effective. Participant comments in this research suggest that the time and effort required to enact pastoral control and enable monitoring attitudes contributes to the effort required. Therefore, logically pastoral control may only be possible in smaller teams and when required to manage larger teams, managers adopt other means of enacting organisational control. An alternative explanation is that other means are not readily available, so the need to enact pastoral control instead enforces a size limit on teams that managers can manage remotely. Future research could explore these possibilities.

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<sup>4</sup> Many thanks to audience members in the Distributed Collaboration Minitrack at the 53<sup>rd</sup> Hawaii International Conference on System Sciences (HICSS) for their helpful suggestions on possible boundary conditions to transferability.

Geographic distance may also contribute to the transferability of these findings. This could contribute in two ways. First, because being separated from direct reports by multiple time zones could further limit the degree of observability in online communication behaviour, either because it changes the timeliness of the observation or because it limits the amount of time that managers and employees can spend communicating interactively (e.g. on video conference calls).

Second, increased geographic distance increases the likelihood that managers and their direct reports cross cultural as well as geographic boundaries. As noted in the Discussion chapter, impression management is a social, and therefore to some degree at least, a cultural phenomenon. Bolino et al. (2016) note that the majority of research and theorising on impression management has assumed a North American or at least Western context and the degree to which these findings apply in other cultures is yet to be established. It is unclear not just how impression management varies across cultures, but what happens when impression management tactics and cultural expectations are mismatched. If employee impression management affects organisational control enactment for managers, which seems likely, distributed teams that cross-cultural boundaries are likely to be particularly impacted. Future research could explore how these factors interact and which outcomes result.

The use of relationships and pastoral control may also have implications for leadership in distributed teams and future research could explore this. For example, leadership behaviours can be categorised as task-oriented or relationship-oriented (Maynard et al., 2017). In distributed teams, leaders who are more transformational than transactional, and more focused on relationships than tasks are better received in distributed teams (Gilson et al., 2015; Maynard et al., 2017). This suggests the use of relationships by managers in this research to enact organisational control could create additional positive outcomes for these managers, or potentially the use of

relationships is primarily driven by the managers perceiving this is advantageous in distributed teams and leveraging relationships for organisational control is a secondary benefit (even if it occurs as a secondary consideration, its outcomes still stand, however). Future research could explore how these overlapping activities – leadership and the need to enact organisational control - interact with relational activities or reinforce each other. An alternative lens that may be profitable for future research is to consider different leadership styles' expectations of control enactment and whether those expectations interact with or predict a tendency to use pastoral control or to monitor attitudes, and what outcomes that has for distributed teams.

Related to leadership, one of the most studied variables in distributed teams is trust (Gilson et al., 2015). Using pastoral control to gain access to context and information about people's attitudes supposes that building stronger relationships increases trust, and that increased trust makes sharing discretionary information more likely, particularly if the information that is sought could put the sharer at risk (e.g. a person is feeling disengaged or they are concerned they are not working to the appropriate standard). Trust has been identified "both as requirement and as challenge for team effectiveness, particularly in virtual teams" (Breuer et al., 2016, p. 1151) and meta-analyses have shown that trust matters even more in virtual teams than in face-to-face teams (Breuer et al., 2019). Given that monitoring attitudes appears to be important for organisational control in distributed teams, and appears to rely at least in part on intentionally developing trust relationships between managers and employees, and given that trust has been identified as a particularly critical variable for distributed teams, this suggest that further research into these overlapping topics may be fruitful. Exactly how these processes and responses might interact is yet to be determined.

It is also possible that the use of pastoral control might be limited to distributed teams. It would be interesting to explore organisational control enactment in co-located teams and determine whether pastoral control techniques are used even when managers and direct reports are co-located. Pastoral control techniques, for example, might be a specific response to the inability to use direct, casual and unobtrusive observation to judge people's attitudes and thus only necessary when managing remotely. However, managers in co-located teams may also use these techniques to improve their ability to enact control even when they can use direct observation. There are likely to be some complex interactions between the ability to use impression management to influence how you are perceived, the ability to use observation of ungoverned behaviours as a check on impression management, and how monitoring and control are enacted. There are rich grounds for future theorising and empirical research on these interactions.

Beyond this, if we understand monitoring attitudes as distinct from pastoral control (where pastoral control provides a means to access information that improves a manager's ability to monitor attitudes) and where monitoring attitudes can rely on pastoral control or not, then understanding the other ways that managers monitor attitudes will be a valuable addition to our understanding of organisational control. This could vary considerably between co-located and distributed teams, given the different affordances of technology-mediated communication and collaboration and the affordances of physical proximity. If the theorised relationship between enacting informal control and monitoring attitudes holds, then it seems likely that managers in co-located teams will monitor attitudes (given that it is widely accepted that they utilise informal controls). Understanding how managers in co-located teams achieve attitude monitoring would considerably improve our understanding of informal control enactment and may confirm its informational and social prerequisites. Furthermore, this may highlight new

avenues of research in understanding the relationship between organisational control and impression management.

Lastly, future research could build on the relationship between organisational control, information, and context as theorised in this research. To do this empirically would require a way to operationalise the amount of context and how the amount of context interacts with control enactment: with control monitoring, the informational requirements of control, or the type of control that is selected. This may highlight other contingent factors that influence the choice of control, beyond knowledge of task programmability and outcome measurability (e.g. Eisenhardt, 1989a). There may also be relationships between information and context availability and the effectiveness of the control, where quantifying those relationships could help managers more effectively select organisational control mechanisms for their specific organisational circumstance. This is likely to be particularly fruitful for distributed teams but also for organisations with a great deal of ‘internal distance’ where the organisation is highly horizontally or vertically differentiated.

#### **7.4 SUMMARY**

Guided by the research questions introduced in the Literature Review, this research set out to understand how the context of distributed work may alter organisational control processes for managers, and the implications for organisational control theory. The answers to those questions, and the results of this research, are summarised here. As one hopes when embarking on exploratory research, the findings in this thesis open a variety of new paths for future research, suggest new questions, and hopefully generate useful debate on the nature of information, context, monitoring, and attitudes in organisational control. This research also generates a variety of theoretical

and practical implications for organisational researchers with interests in organisational control and distributed teams, and for managers.

The research used an exploratory, qualitative approach with the intention to inductively develop theory grounded in data. The findings indicated several contributions. Extant control theory suggests that to enact organisational control, managers will need to monitor their teams' activities. Control theorising suggests that monitoring will be categorizable as either monitoring behaviours, monitoring outputs, or in some more recent conceptualisations perhaps monitoring inputs. This research demonstrates that managers do apply different criteria when hiring for remote work (input control). This tends to mean an emphasis on previous experience working remotely and preferring to hire seniors over juniors. A preference for seniors over juniors may be influenced by perceived challenges in effectively socialising juniors in the normative and regulative (social rather than technical) aspects of their role, and challenges in monitoring to establish that socialisation is occurring effectively as newcomers may not know what they are missing or may be motivated to ensure they are making a good impression.

Behaviour and output monitoring also both occurred for the participants in my research, though what appeared at first glance to be output control did not meet the criteria of clear, agreed-upon measures of output. Instead output measures tended to be somewhat loosely defined and used in conjunction with other measures or only used as an indicative guide rather than an absolute measure. This is likely because output measures are understood to be difficult to establish for team-based and knowledge-based work (Eisenhardt, 1989a; Ouchi, 1977; Ouchi & Maguire, 1975), which is often the type of work that remote teams undertake.

Behaviour monitoring was also more complicated in these distributed teams than extant control theory would suggest. As physical behaviours could not



be directly observed, behaviour monitoring instead shifted primarily to monitoring communication behaviours. Managers in remote teams found it relatively easy to monitor the work-related activity of their teams. This monitoring is supported by remote teams' need to create large quantities of shared, explicit information to support asynchronous workflow. This ensured that a great deal of information about work-related behaviours is surfaced for managers.

Instead, what managers found difficult was their ability to monitor their team members' attitudes: to identify when a team member might be stressed, disengaged, feeling that they were underperforming, or in some way feeling other than a happy, productive, and engaged member of the team. Managers noted that this was more difficult in remote teams because the lack of physical proximity reduced managers' ability to directly and unobtrusively monitor body language, interactions, changes in behaviour, and other ungoverned behaviour that might indicate a shift in attitude. The fact that managers use their employee's behaviours to allow them to monitor attitudes is a key finding in this research. This suggests that Ouchi's (Ouchi, 1977, 1979; Ouchi & Maguire, 1975) original formulation of control as based on either monitoring behaviour or output should be modified because behaviour is monitored for two separate purposes: work-related behaviour and attitude-related behaviour, where work-related behaviour relates to specific tasks and therefore can be specified using Ouchi's means-end relationship (Ouchi, 1977; Ouchi & Maguire, 1975) or Eisenhardt's task programmability (Eisenhardt, 1985, 1989a). Attitude-related behaviours do not relate to any specific task, though, and how managers might specify attitudes is less obvious.

However, in Ouchi's work (Ouchi, 1979, 1980), later work based on Ouchi (e.g. Kirsch et al., 2010), and in critical management studies (Fleming, 2005; Fleming & Sturdy, 2009; Kunda, 2006), it is understood that organisations do

attempt to enact control through establishing shared values, beliefs, and norms, and by leveraging social patterns. Ouchi (1980) calls this ‘clan control’ and in critical management studies it is often referred to as normative control. Ouchi (1979, 1980) touches on the idea that enacting this type of social, informal control relies on the ability to monitor attitudes but does not formalise this in his frameworks. Based on the findings presented in this thesis, an extension is proposed to Ouchi’s Behaviour-Output framework to include the monitoring of attitudes, thus becoming an Attitude-Behaviour-Output framework.

Furthermore, it is notable that distributed teams tend to be used for knowledge work because knowledge work is more easily digitalised and distributed; it does not rely on shared physical equipment or proximity per se. Knowledge work is also understood to fall outside of the easily specifiable behaviours and agreed-upon measurable outputs necessary for behaviour and output controls. Under those circumstances, organisations are predicted (or advised) to adopt more socially-based informal controls, such as clan control systems. These systems rely more heavily on informal control mechanisms. While some formal control mechanisms will exist, the informational prerequisites (specifiable behaviours and outputs) for key components of work will not be available, therefore the organisation will need to rely more on informal control mechanisms.

How informal control mechanisms are monitored and the informational prerequisites of informal control have not been explicated in the organisational control literature, though as mentioned above, Ouchi (1979, 1980) touches on the idea that they will require the ability to monitor attitudes. This research shows empirically that this is indeed the case. Thus, a crucial component in our understanding of informal control and organisational control generally is brought to light.

While the use of informal control and the consequent need to monitor attitudes is likely to occur in both co-located and distributed teams, managers in distributed teams noted that monitoring attitudes presented specific difficulties for them due to the lack of physical proximity and the inability to unobtrusively observe ungoverned behaviours. Goffman's (1971) description of *impression management* is offered as an explanation for this difficulty. Goffman suggests that when we interact with others, we naturally present ourselves in a way that suits our own ends, whatever those ends might be. This may be something as simple as wanting to appear friendly and interested in the conversation, through to something more complex like wanting to appear important or knowledgeable. Goffman suggests that as we know others will tend to use what he calls their "governable" behaviours to manage the impression they make, we tend to use people's more unconscious, ungoverned behaviours to verify the impression people are giving. People may say they are interested in your life story but roll their eyes or look bored when they think you are not looking, for example. A lack of physical proximity is theorised, in this research, as limiting the opportunities for managers to observe these ungoverned behaviours, thereby making it more difficult for managers to identify when people may be 'putting on a good face' and trying to project a positive impression when in fact a problem exists that the manager may want to know about. This matches managers' descriptions of the challenges they face, and the risk they feel exposed to, in determining if there is a problem when someone on their team may "paint a rosy picture" of their situation.

Where managers want to rely on monitoring attitudes, and where they find this difficult due to a lack of physical proximity and the consequent difficulties in observing ungoverned behaviours, managers in this research evidenced an emphasis on developing relationships with their direct reports via one-on-ones, intentional relationship building, and encouraging personal

information into the workplace. The concept of *pastoral control* is introduced as a framework to understand how managers utilise personal relationships to encourage direct reports to share discretionary information and allow managers more complete access to attitude-related information. Pastoral control, derived from Foucault's (1982) description of pastoral power as exercised by the Church and by the State, seeks access to individual's true attitudes and inner worlds in exchange for the manager's support and assistance as the employee navigates organisational life.

Finally, in more deeply exploring the role of information in organisational control, the importance of context in interpreting organisational control-related information is made apparent. All information requires context to be understood and made meaningful. A notable feature of distributed teams that has been established in previous research (e.g. Cramton, 2001, 2016; Gross, 2013; Gutwin & Greenberg, 2001; Schmidt, 2002) is that distributed teams have less context awareness – less context information – than co-located teams due to the lack of shared physical proximity. Thus, distributed teams can be understood as a low-context condition (context is only available in relatively low amounts) and co-located teams can be understood as a high-context condition (context is available in relatively high amounts). It is suggested that to understand when organisational control mechanisms are appropriate, or to understand the degree of effort that may be required to enact control via these organisational control mechanisms, it may be necessary to categorise control mechanisms as highly context-dependent, and therefore appropriate for high context circumstances, or largely context independent and therefore appropriate for low-context circumstances. This contributes a useful new way to understand when organisational control mechanisms should be utilised.

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## 9 APPENDICES

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### 9.1 APPENDIX A: PARTICIPANT INFORMATION AND CONSENT FORMS

#### 9.1.1 Interview Forms



### *Understanding What's Different in Distributed Teams*

#### INFORMATION SHEET FOR PARTICIPANTS

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

#### **Who am I?**

My name is Rebecca Downes and I am a Doctoral student in the School of Management at Victoria University of Wellington. This research project is work towards my dissertation.



**What is the aim of the project?**

My research seeks to understand how working in a distributed team, where some members are separated by physical distance, is different to working in a traditional, co-located team. I hope that by understanding more about what makes distributed teams different, I can help organisations to make their teams as successful as possible.

This research has been approved by the Victoria University of Wellington Human Ethics Committee (reference number: 0000025544).

**How can you help?**

You have been invited to participate because you're currently part of a team with at least one member working remotely. If you agree to take part, I'll contact you to arrange an interview via video conferencing (e.g. Skype) at a time that suits you. I will ask you questions about your experiences with distributed work. The interview will take 60-90 minutes. I will video record the interview with your permission and write it up later. You can choose to not answer any question or stop the interview at any time, without giving a reason.

You can withdraw from the whole study by contacting me at any time before 31 December 2018. If you withdraw, the information you provided in the interview will be destroyed or returned to you.

**What will happen to the information you give?**

This research is confidential. This means that the researchers named below will be aware of your identity but the research data will be combined

and your identity will not be revealed in any reports, presentations, or public documentation.

**What will the project produce?**

The information from my research will be used in my PhD dissertation and/or academic publications, conferences and presentations.

**If you accept this invitation, what are your rights as a research participant?**

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- choose not to answer any question;
- ask for the recording to be turned off at any time during the interview;
- withdraw from the whole study before 31 December 2018;
- ask any questions about the study at any time;
- receive a copy of your interview recording;
- receive a copy of your interview transcript;
- be able to read any reports of this research by emailing the researcher to request a copy.

**If you have any questions or problems, who can you contact?**

If you have any questions, either now or in the future, please feel free to contact either:

**Student:**

Name: Rebecca Downes

Email: rebecca.downes@vuw.ac.nz

**Supervisor:**

Name: Urs Daellenbach

Role: Associate Professor

School: School of Management

Phone: +64 4 4635732

Email: urs.daellenbach@vuw.ac.nz

**Human Ethics Committee information**

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convenor: Associate Professor Susan Corbett. Email susan.corbett@vuw.ac.nz or telephone +64-4-463 5480.



## *Understanding What's Different in Distributed Teams*

### **CONSENT TO PARTICIPATE**

This consent form will be held for three years.

Researcher: Rebecca Downes, School of Management, Victoria University of Wellington.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to take part in a video recorded interview.

I understand that:

- I may withdraw from this study at any point before 31 December 2018, and any information that I have provided will be returned to me or destroyed.
- The identifiable information I have provided will be destroyed on 31<sup>st</sup> December 2021.
- Any information I provide will be kept confidential to the researcher and the supervisor.
- I understand that the results will be used for a PhD dissertation and/or academic publications and conferences.
- My name will not be used in reports, nor will any information that would identify me.
- I would like a copy of the recording of my interview: Yes ☐ No ☐
- I would like a copy of the transcript of my interview: Yes ☐ No ☐
- I would like to receive a copy of the final report and have added my email address below. Yes ☐ No ☐

Signature of participant: \_\_\_\_\_

Name of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Contact details: \_\_\_\_\_

### 9.1.2 Team Survey Forms



## *Understanding What's Different in Distributed Teams*

### INFORMATION SHEET FOR PARTICIPANTS

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

#### **Who am I?**

My name is Rebecca Downes and I am a Doctoral student in the School of Management at Victoria University of Wellington. This research project is work towards my dissertation.

#### **What is the aim of the project?**

My research seeks to understand how working in a distributed team, where some members are separated by physical distance, is different to working in a traditional, co-located team. I hope that by understanding more about

what makes distributed teams different, I can help organisations to make their distributed teams as successful as possible.

This research has been approved by the Victoria University of Wellington Human Ethics Committee (reference number: 0000025544).

### **How can you help?**

You have been invited to participate because you're currently part of a team with at least one member working remotely. If you agree to take part, I will ask you to complete a short questionnaire. The purpose of the questionnaire is to gather some descriptive data about you and your team.

All information shared during the research is confidential. You can withdraw from the whole study by contacting me at any time before 31 December 2018. If you withdraw, the information you provided in the questionnaire will be destroyed or returned to you.

### **What will happen to the information you give?**

This research is confidential. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation.

### **What will the project produce?**

The information from my research will be used in my PhD dissertation and/or academic publications, conferences and presentations.



**If you accept this invitation, what are your rights as a research participant?**

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- choose not to answer any question;
- withdraw from the whole study before 31 December 2018;
- ask any questions about the study at any time;
- be able to read any reports of this research by emailing the researcher to request a copy.

**If you have any questions or problems, who can you contact?**

If you have any questions, either now or in the future, please feel free to contact either:

**Student:**

Name: Rebecca Downes

Email: rebecca.downes@vuw.ac.nz

**Supervisor:**

Name: Urs Daellenbach

Role: Associate Professor

School: School of Management

Phone: +64 4 4635732

Email: urs.daellenbach@vuw.ac.nz

**Human Ethics Committee information**

If you have any concerns about the ethical conduct of the research you may contact the Victoria University HEC Convenor: Associate Professor Susan Corbett. Email susan.corbett@vuw.ac.nz or telephone +64-4-463 5480.



## *Understanding What's Different in Distributed Teams*

### **CONSENT TO PARTICIPATE IN QUESTIONNAIRE**

This consent form will be held for three years.

Researcher: Rebecca Downes, School of Management, Victoria University of Wellington.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to take part in an online questionnaire.

I understand that:

- I may withdraw from this study at any point before 31 December 2018, and any information that I have provided will be returned to me or destroyed.
- The identifiable information I have provided will be destroyed on 31<sup>st</sup> December 2021.
- Any information I provide will be kept confidential to the researcher and the supervisor.
- I understand that the results will be used for a PhD dissertation and/or academic publications and conferences.
- My name will not be used in reports, nor will any information that would identify me.
- I would like to receive a copy of the final report and have Yes ☐ No ☐  
added my email address below.

Signature of participant: \_\_\_\_\_

Name of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Contact details: \_\_\_\_\_

### 9.1.3 Forms for Managers (Combined Interview, Diary and Survey)



## *Understanding What's Different in Distributed Teams*

### INFORMATION SHEET FOR PARTICIPANTS

You are invited to take part in this research. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to participate, thank you for considering this request.

#### **Who am I?**

My name is Rebecca Downes and I am a Doctoral student in the School of Management at Victoria University of Wellington. This research project is work towards my dissertation.

#### **What is the aim of the project?**

My research seeks to understand how working in a distributed team, where some members are separated by physical distance, is different to working in

a traditional, co-located team. I hope that by understanding more about what makes distributed teams different, I can help organisations to make their teams as successful as possible.

This research has been approved by the Victoria University of Wellington Human Ethics Committee (reference number: 0000025544).

### **How can you help?**

You have been invited to participate because you're currently managing a team with at least one member working remotely. If you agree to take part, there will be three stages to the research.

First, I will ask you and your team to complete a short questionnaire. The purpose of the questionnaire is to gather some descriptive data about you and your team.

Then, I will ask you to complete up to eight (8) online diary entries over the course of eight weeks (one entry per week). The diary entries will record your thoughts and experiences managing staff when some (or all) of your team work at a distance from you. The diaries are designed to be quick to complete, with just six questions.

After you have completed the diary entries, I'll contact you to arrange an interview via video conferencing (e.g. Skype) at a time that suits you. I will ask you questions about the diary entries you've provided to make sure that I've interpreted them correctly and to fill in any details that are unclear to me. The interview will take 60-90 minutes. I will video record the interview with your permission and write it up later. You can choose to not answer any question or stop the interview at any time, without giving a reason.

You will need to ensure that you have permission from your organisation for your team to participate.

You can withdraw from the whole study by contacting me at any time before 31 December 2018. If you withdraw, the information you provided in the questionnaire, diary, and interviews will be destroyed or returned to you.

### **What will happen to the information you give?**

This research is confidential. This means that the researchers named below will be aware of your identity but the research data will be combined and your identity will not be revealed in any reports, presentations, or public documentation.

### **What will the project produce?**

The information from my research will be used in my PhD dissertation and/or academic publications, conferences and presentations.

### **If you accept this invitation, what are your rights as a research participant?**

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- choose not to answer any question;
- ask for the recording to be turned off at any time during the interview;
- withdraw from the whole study before 31 December 2018;
- ask any questions about the study at any time;

- receive a copy of your interview recording;
- receive a copy of your interview or diary transcripts;
- be able to read any reports of this research by emailing the researcher to request a copy.

**If you have any questions or problems, who can you contact?**

If you have any questions, either now or in the future, please feel free to contact either:

**Student:**

Name: Rebecca Downes

Email: rebecca.downes@vuw.ac.nz

**Supervisor:**

Name: Urs Daellenbach

Role: Associate Professor

School: School of Management

Phone: +64 4 4635732

Email: urs.daellenbach@vuw.ac.nz

**Human Ethics Committee information**

If you have any concerns about the ethical conduct of the research, you may contact the Victoria University HEC Convenor: Associate Professor Susan Corbett. Email susan.corbett@vuw.ac.nz or telephone +64-4-463 5480.





## *Understanding What's Different in Distributed Teams*

### **CONSENT TO PARTICIPATE**

This consent form will be held for three years.

Researcher: Rebecca Downes, School of Management, Victoria University of Wellington.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to take part in an online questionnaire, online diary study and a video recorded interview.

I understand that:

- I may withdraw from this study at any point before 31 December 2018, and any information that I have provided will be returned to me or destroyed.

- The identifiable information I have provided will be destroyed on 31<sup>st</sup> December 2021.
- Any information I provide will be kept confidential to the researcher and the supervisor.
- I understand that the results will be used for a PhD dissertation and/or academic publications and conferences.
- My name will not be used in reports, nor will any information that would identify me.
- I would like a copy of the recording of my interview: Yes ☐ No ☐
- I would like a copy of the transcript of my interview: Yes ☐ No ☐
- I would like a copy of my online diary entries: Yes ☐ No ☐
- I would like to receive a copy of the final report and have added my email address below. Yes ☐ No ☐

Signature of participant: \_\_\_\_\_

Name of participant: \_\_\_\_\_

Date: \_\_\_\_\_

Contact details: \_\_\_\_\_

## 9.2 APPENDIX B: SEMI-STRUCTURED INTERVIEW SCHEDULES

These questions provided a basic outline for me to begin the interviews. For almost all responses, I asked follow-up questions and explored topics the participants raised. The intention was that the interviews would feel somewhat conversational, rather than following a pre-specified format.

### 9.2.1 Employee Interviews

Introductions.

Check participants have read and signed consent form and agree to the call being recorded.

Then

1. Can you describe what the company you work for does?
2. Can you describe your role(s) and where your manager and teammates are located?
3. How long have you been in that role / were you in that role?
4. Do you enjoy it?
5. What were some of the biggest challenges?
6. Do you find it difficult to stay in touch with your manager?
7. Do you find it difficult to get a sense of what was being asked of you?
8. Do you find it difficult to know that you were doing the job well (or if you'd gone off track)?
9. How does your manager deal with that?
  - a. Does that work? Is there anything you wish they did differently?

### 9.2.2 Manager Interviews

Introductions.

Check participants have read and signed consent form and agree to the call being recorded.

Then

1. Can you describe what the company you work for does?
2. Can you describe your role?
3. How long have you been leading this team?
4. Can you describe your team for me – how many people, where are they, and what do they do?
5. What made you decide to support remote work in your team?
6. What are some of the biggest challenges?
7. Do you find it difficult to stay in touch with staff?
8. Do you find it difficult to communicate what you want from your team?
9. Do you find it difficult to know your team were doing the job well or if they'd gone off track?
10. How do you deal with that?
11. How do you think that would be different if all your staff were co-located?
12. Do you find some remote roles easier to manage than others?
  - a. Why / why not?
13. Thinking about managing your remote staff day to day, what sort of information is most important to you?
14. Is it easy to get that information?
  - a. If not, how do you work around that?

### 9.3 APPENDIX C: DIARY STUDY QUESTIONS

This survey was duplicated for each of the eight weeks that participants were asked to complete a diary entry. None of the questions were compulsory so participants could choose to skip questions if they preferred.

The diary survey was administered using the online survey tool Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)).

## Diary - Week 1

Q1 Think about one recent incident where you needed to modify the behaviour of someone in your team. For example, someone who was behind schedule or possibly going about a task the wrong way.

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Q2 Please describe the issue:

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Q9 How did you find out about the issue?

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Q3 Is the person:

☐ Based in the office with you (1)

☐ Working remotely from you (2)

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Q4 What did you do to address the issue?

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Q5 How will you know if your intervention has been successful? What information will you have about whether the person has adjusted their behaviour?

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Q6 If the person is remote, is there anything you would have done differently if they were in the office with you? If they are in the office with you, is there anything you would have done differently if they were remote?

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Q7 Are there any other thoughts or comments that you would like to record?

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End of Block: Diary Page

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## 9.4 APPENDIX D: EXAMPLE SURVEY QUESTIONS

The social network analysis survey was administered using the online survey tool Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)). Qualtrics allows the survey to adapt which questions are displayed based on participants' answers as they progress through the survey.

The following display logic is relevant to understand this survey:

- In the question block “Team Relationship Questions”, participants are shown a list of names for every member of the team (including the manager). They select their own name from the list. The subsequent questions are asked about every *other* member of the team. For example, assume the participant answering the question is Amy, and Amy's teammates are Bob, Carol, and Doug. Amy will select her own name from the list, then will be asked how often she communicates with Bob, how often she communicates with Carol, and how often she communicates with Doug. The subsequent questions are automatically populated with names from the dropdown list of team member names. The list of team member names was entered manually when I created a unique survey for each team, based on information provided by the manager.
- The question block “Team Demographics” was only shown to participants who were also managers of their teams.

# Team Survey

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## Start of Block: Individual Questions

Q10 What is your current job or role title?

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Q13 What is your gender

- ☐ Female (1)
- ☐ Male (2)
- ☐ Gender diverse (3)
- ☐ Prefer not to answer (4)

Q14 What is your age?

- ☐ Under 18 (1)
- ☐ 18 - 24 (2)
- ☐ 25 - 34 (3)
- ☐ 35 - 44 (4)
- ☐ 45 - 54 (5)
- ☐ 55 - 64 (6)
- ☐ 65 - 74 (7)
- ☐ 75 - 84 (8)
- ☐ 85 or older (9)

Q15 Which country do you normally work from?

▼ Afghanistan (1) ... Zimbabwe (1357)

Q17 Please enter the postal or zip code where you normally work. If your town does not have a postal code, please enter the town name and region instead.

Q18 How long have you been a member of your current team?

☐ Less than 6 months (1)

☐ 6 months to 1 year (2)

☐ 1-2 years (3)

☐ 2-3 years (4)

☐ 3-4 years (5)

☐ 4-5 years (6)

☐ 5-10 years (7)

☐ 10+ years (8)

-----

Q19 Have you worked remotely in other roles, prior to joining this team?

☐ Yes (1)

☐ No (2)

End of Block: Individual Questions

---

Start of Block: Team Relationship Questions

Q1 Please select your own name from this list

▼ Test User (1) ... Test User (1)

Carry Forward Unselected Choices from "Please select your own name from this list"



Q5 How often do you communicate with each person in your team?

	Very often (1)	Often (2)	Occasionally (3)	Not often (4)	Very rarely (5)	Never (6)
Test User (x1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----



Carry Forward Unselected Choices from "How often do you communicate with each person in your team? "



Q4 When you communicate with your teammates, do you mostly communicate face to face or using technology?

Using technology means email, phone, video conference, chat, etc.

	Entirely face to face (1)	Mostly face to face (2)	Evenly split between face to face and using technology (3)	Mostly using technology (4)	Entirely using technology (5)	Other (6)
Test User (xx1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Carry Forward Unselected Choices from "Please select your own name from this list"



Q3 Thinking of where your team mates normally work, how many hours difference is there between your time zones? (Round up to whole hours)

	Same time zone (1)	1-3 hours (2)	4-6 hours (3)	7-9 hours (4)	10-12 hours (5)
Test User (x1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Carry Forward Unselected Choices from "Please select your own name from this list"



Q6 Compared to the rest of your team, how closely do you work with each of the people below?

	Much more than average (1)	More than average (2)	About average (3)	Less than average (4)	Much less than average (5)
Test User (x1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Carry Forward Unselected Choices from "Please select your own name from this list"



Q7 Roughly how long have you been working in this team with each of the people below?

Please answer in approximate number of years.

For example, if you have worked with someone for roughly one and a half years, you would answer 1.5. Please round up to the nearest quarter of a year (0.25 years = three months).

	Approximate years (1)
Test User (x1)	

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Carry Forward Unselected Choices from "Please select your own name from this list"



Q9 Roughly how long have you known each of your teammates?

Please answer in approximate number of years. For example, if you have known someone for roughly one and a half years, you would answer 1.5.

Please round up to the nearest quarter of a year (0.25 years = three months).

	Approximate years (1)
Test User (x1)	

-----

Carry Forward Unselected Choices from "Please select your own name from this list"



Q8 Do you have any other relevant relationships with the members of your team? For example, you may be good friends socially, play on the same sports team, have worked together previously, etc.

	Other relationships (1)
Test User (x1)	

End of Block: Team Relationship Questions

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### Start of Block: Team Demographics Questions

Q24 Please provide a short description of what your team does - its purpose, its responsibilities, the service it offers, etc.

-----

Q20 How many permanent members does your team have (including full-time and part-time staff)?

-----

Q21 Is your team permanent or temporary?

For the purposes of this study, your team is considered permanent if it fulfils an on-going requirement for the organisation. If your team exists to complete a specific project, please select temporary (even if the project does not have a finish date).

☐ Permanent (1)

☐ Temporary (2)

-----

Q22 Approximately how long has the team existed within your organisation?

Please answer in approximate number of years.

For example, if your team has existed for roughly one and a half years, you would answer 1.5. Please round up to the nearest quarter of a year (0.25 years = three months).

	Approximate years (1)
Team age (1)	

---



Q23 How many people are there in your organisation?

☐ Fewer than 5 (1)

☐ 5-9 (2)

☐ 10-19 (3)

☐ 20-49 (4)

☐ 50-99 (5)

☐ 100-499 (6)

☐ 500-1500 (7)

☐ 1500+ (8)

Q26 How long has your organisation existed?

- ☐ Less than 6 months (1)
- ☐ 6 months to 1 year (2)
- ☐ 1-2 years (3)
- ☐ 2-3 years (4)
- ☐ 3-4 years (5)
- ☐ 4-5 years (6)
- ☐ 5-10 years (7)
- ☐ 10+ years (8)

**End of Block: Team Demographics Questions**