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**SURVEILLANCE OF TELEWORKERS: A  
GROUNDED THEORY APPROACH**

by

William Grant Clary, B.S.

A Dissertation Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Business Administration in Computer Information Systems

COLLEGE OF BUSINESS  
LOUISIANA TECH UNIVERSITY

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GRADUATE SCHOOL

**March 16, 2022**

Date of dissertation defense

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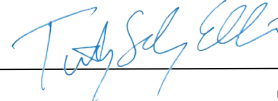
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**Doctor of Business Administration, Computer Information Systems Concentration**



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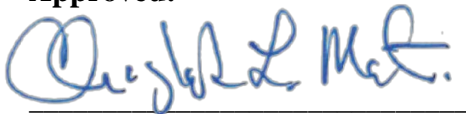
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## **ABSTRACT**

In March of 2020, the WHO declared COVID-19 a pandemic. The pandemic mandated teleworking across the world as many organizations tried to social distance. Two years into the pandemic, we have seen quite the increase in telework. Thus, with the benefits being realized, it is reasonable to expect a continuance in telework after the pandemic is over. When forced to work from home, many variables with the work process must be changed, including how managers surveil their employees. My work is an early, exploratory effort to understand how teleworkers are surveilled and how they feel about being surveilled at home.

I conducted seven in-depth interviews with individuals who are working from home. The results are two-fold. First, I provided a description of the two types of surveillance – behavior- and outcome-based surveillance. Next, I create a visual model that demonstrates how surveillance can interact with other constructs to affect well-being. The model suggests perceived surveillance will restrict autonomy, which will in turn reduce one's well-being. Though the relationship between autonomy and well-being is well-established in the literature, my model suggests this relationship can be moderated by perceived justice. When one feels the surveillance is just, the relationship between autonomy and well-being is weakened. Justice perceptions are influenced by the congruence of surveillance expectations (CoSE). CoSE, as I define it, is the fit between

how one perceives they are being surveilled and one's expectations of how they should be surveilled.

My findings pose several implications for teleworker managers, outlined in Chapter 5. The qualitative data supporting the induced relationships are disclosed in the appendix.

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## **DEDICATION**

This dissertation is dedicated to my grandfather, Billy Rucker,  
and my parents, John and Martie Clary.

## TABLE OF CONTENTS

ABSTRACT.....	iii
APPROVAL FOR SCHOLARLY DISSEMINATION .....	v
DEDICATION .....	vi
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
ACKNOWLEDGEMENTS .....	xii
CHAPTER 1 INTRODUCTION .....	1
CHAPTER 2 BACKGROUND .....	7
Telework/Telecommuting.....	7
Employee Well-Being.....	10
Employee Surveillance .....	15
Psychological Needs .....	22
Other Factors and Theoretical Considerations.....	26
Background Overview .....	28
CHAPTER 3 METHODOLOGY .....	30
Qualitative Research in the IS Discipline .....	31
What is GTM?.....	31
History of GTM .....	33
Coding and Analysis .....	34



GTM Contributions.....	35
Rich Descriptions.....	36
Models or Frameworks .....	37
Theory .....	38
GTM Procedures .....	39
CHAPTER 4 RESULTS .....	43
Descriptive Statistics.....	43
Analysis.....	45
Results—RQ1 .....	56
Behavioral-Based.....	56
Outcome-Based.....	58
Results – RQ2 .....	62
Proposition 1 .....	68
Proposition 2 .....	72
Proposition 3 .....	76
Proposition 4 .....	80
CHAPTER 5 CONCLUSION.....	85
Overview.....	85
Contributions.....	90
Theoretical Contributions .....	93
Practical Contributions.....	97
Future Research .....	100
Limitations .....	104

Conclusion .....	106
REFERENCES .....	108
APPENDIX A INTERVIEW GUIDE .....	129
APPENDIX B HUMAN USE APPROVAL LETTER .....	132
APPENDIX C OPEN CODES.....	134

## LIST OF TABLES

Table 2-1	<i>General Health Questionnaire (from del Pilar Sanchez-Lopez &amp; Dresch, 2008)</i> .....	15
Table 4-1	<i>Descriptions of Interviewees</i> .....	44
Table 4-2	<i>Behavioral-Based Surveillance Quotes</i> .....	58
Table 4-3	<i>Outcome-Based Surveillance Quotes</i> .....	61
Table 4-4	<i>Construct Definitions</i> .....	66

## LIST OF FIGURES

<b>Figure 4-1:</b>	Visualization of Interview Workflow .....	46
<b>Figure 4-2:</b>	Induced Research Model.....	62
<b>Figure 4-3:</b>	Quotes Related to Proposition 1 .....	70
<b>Figure 4-4:</b>	Quotes Related to Proposition 2 .....	74
<b>Figure 4-5:</b>	Quotes Related to Proposition 3 (Int1) .....	77
<b>Figure 4-6:</b>	Quotes Related to Proposition 3 (Int2) .....	79
<b>Figure 4-7:</b>	Quotes Related to Proposition 4 (Int1) .....	81
<b>Figure 4-8:</b>	Quotes Related to Proposition 4 (Int2) .....	82

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# CHAPTER 1

## INTRODUCTION

*“...If They Are Workers, There Are No Disorders, No Theft, No Coalitions, None of Those Distractions That Slow Down the Rate of Work, Make It Less Perfect, or Cause Accidents.” – Foucault 1995, pp. 201*

The above quote from Michel Foucault’s *Discipline & Punish: The Birth of the Prison* (Foucault, 1995) lists the intended purposes of surveillance. The goal of surveillance is to ensure order. Foucault’s book describes a prison with a watchtower in the middle. The watchtower can see into every cell; however, the prisoners cannot see back into the watchtower. This prevents prisoners from knowing when they are being watched and, in turn, prevents them from engaging in undesired behavior. In a similar vein, managers surveil their employees to ensure adequate work is done for their compensation (Clary, 2021). Interesting questions arise when an entire country’s workforce is sent to work from home. Specifically, how can we know they are working when they are at home?

In March of 2020, the World Health Organization characterized coronavirus disease (COVID-19) as a global pandemic. This infamous and novel disease has led to significant disruptions in the global economy and organizational processes. Social distancing is a practice encouraged by epidemiologists to slow the spread of the disease.

As the pandemic quickly spread throughout the world and governments mandated social distancing, many employees did not have any other option for retaining their job other than telework – a phenomenon I refer to as *mandated telework*.

Telework, sometimes referred to as telecommuting or remote work, is an alternative work arrangement in which employees use telecommunication equipment to work at locations other than their employer's physical location (Belanger et al., 2001). With rises in Internet and technological capabilities, the ability to telework has become increasingly more accessible. Employees and employers can now have two-way, synchronous communications through digital platforms (de Reuver et al., 2018). As a result, telework has been an emerging research trend (Raghuram et al., 2019).

The workforce was caught off guard by the degree to which social distancing abruptly occurred, but luckily organizations have been experiencing technological changes, disruptions, and transitions since before the pandemic. As defined by Vial (2019), a digital transformation is a process of improving an entity by having significant changes through combinations of information, computing, communication, and connectivity technologies. Digital transformations have become ubiquitous in business infrastructure, increasing interconnections among products, processes, and services (Bharadwaj et al., 2013). Research on how organizations undergo digital transformations is an essential topic for IS strategy (Piccinini et al., 2015). Practitioners can also benefit from a better understanding of implementing new digital technologies (Fitzgerald et al., 2014). Combining the shift in digital transformations with the mandated teleworking situation, businesses were able to send their employees to work from home.

The digital transformation of the current times results in increased technologization of work and leadership as well as changes in workplace communication and collaboration (Colbert et al., 2016; Schwarzmüller et al., 2018). Digital platforms strongly influence communication methods (Cristea & Leonardi, 2019) as computing permeates the digital and physical worlds more closely than ever before. For example, eHealth technologies help individuals improve their health literacy (Lustria et al., 2011), telehealth devices allow for doctors to remotely view patients' throats during checkups (Holland Healthcare Inc., n.d.), and Amazon's *Just Walk Out* technology allows for consumers to have contactless shopping (PYMNTS, 2021). With the rise in technological capabilities, organizations have consistently endured changes in their work design and leadership (Schwarzmüller et al., 2018).

However, few were ready for the widespread mandated telework to occur. To combat the unique and unprecedented circumstances of the pandemic, organizations were forced to resort to having employees work remotely. In a sense, COVID-19 spring boarded organizations into exhausting their telework capabilities as telework allows employees to continue their work-related duties due to the location flexibility. Job positions that were previously only done on the organization's physical premises have fallen victim to this mandated telework situation.

As mentioned, interesting questions arise when an organization's workforce is forced to change its processes. In particular, one might ask how to manage the workers when they are at home. Managing employees from afar raises concerns for both employees and employers. If too invasive, the employee might not feel comfortable, feel the surveillance is unethical, or even feel there are privacy violations, which could have



legal consequences. If too relaxed, the employer might be concerned the employee is not fulfilling the workload.

Organizational managers are naturally inclined to surveil their subordinates. In the workplace, surveillance refers to management monitoring the amount or quality of one's work-related efforts, attention, action behavior, or output (adapted from Ball, 2010). Managers need a way to ensure the objectives for the lower-level employees are met and review their performance to ensure the work-related efforts are adequate for compensation and continued employment. Surveillance practices might be justified to maximize productivity or ensure employees adhere to organizational policies.

As technology has entered the workplace for work-related purposes, so has the potential for surveilling employees electronically (Sanders et al., 2013). In addition to monitoring communication on the company's platforms, managers can virtually monitor all aspects of an employee's behavior while at the workplace (Sanders et al., 2013). However, working from home creates a new work process for some. The change to working from home might cause a needed change in the ways in which one is surveilled.

This novel dilemma led me to my first research question:

***RQ1: In what ways do employers surveil their teleworking employees?***

As shown, the COVID-19 pandemic forced a technology change (as people are now using ICT for telework), which affects people's work processes (Schwarzmüller et al., 2018). Such radical changes in the workplace often cause people to feel uncomfortable and disrupted (Orlikowski, 1993). With the new change and new understanding of ways employers surveil their teleworkers, I consider how it will affect the employee's well-being.

Organizational human resource management (HRM) research has made much progress over the past few years. For example, some researchers discuss the process where HRM can improve organizational performance (Jiang et al., 2012; Paauwe et al., 2013). However, others argue there has been too much emphasis on improving performance rather than employee well-being (Guest, 2017). For example, claims have been recently made that management and leadership literature disregard employee well-being, considering well-being as a secondary outcome at best (Beer et al., 2015; Inceoglu et al., 2018; Montano et al., 2017). Some leadership research even claims to study well-being but equates well-being with job satisfaction (e.g., Kuoppala et al., 2008), which is a distinct construct. The emphasis on employee productivity in the literature is not surprising. Academic research aims to provide managers with the knowledge to improve productivity, efficiency, etc. This might influence research to have a slight bias towards viewing the organization from the employer's point of view.

Understanding factors affecting employee well-being is essential for organizations (A. M. Grant et al., 2007). Having high employee morale could also benefit the organizations' public perceptions. For example, organizations might receive awards for being an excellent company to work for. Further, an organization's public image is a significant factor in attracting individuals, which improves recruitment (Lyons & Marler, 2011). Corporate reputation and image are often part of long-term strategic management, providing higher profits (Fillis, 2003). Organizations well-known for their employees' well-being are honored by the recognition from groups such as *Fortune* (see *Fortune* magazine's list of the "100 Best Companies to Work for") and American Psychological Association (see APA's awards for Psychologically Healthy Workplaces). Further, Fuller

et al. (2003) claim when employees feel the organization cares about their well-being and contributions, organizational commitment is increased.

Much uncertainty lies in how teleworkers feel about surveillance. This led me to my second research question:

***RQ2: How do these ways of surveillance affect the employee's well-being?***

I chose to use a grounded theory approach to answer these research questions. Grounded theory methodology (GTM) is a data-driven and induced approach (Urquhart, 2013). Data-driven refers to letting the data guide the results, as opposed to testing a theory with statistical tests. The data is acquired through interviews that are fully immersed in the context (in my case, a teleworker). I chose this approach because the exploratory nature is useful in a novel context (Wiesche et al., 2017).

The rest of this dissertation is structured as follows: First, I provide a background in Chapter 2 that describes technology-based ways of monitoring employees, telework, employee well-being, employee surveillance, psychological needs, and other contextual factors to consider for the investigation. Next, in Chapter 3, I provide a detailed description of the qualitative research methodology applied to answer the research questions. Chapter 4 demonstrates the results of the methodology, and Chapter 5 discusses what these results mean.

## **CHAPTER 2**

### **BACKGROUND**

This chapter provides general background on surveillance in the workplace and the shift to digitally monitoring employees, psychological needs, and other topics that might be of interest. Given the nature of the ground-theory methodology (discussed in Chapter 3), the researcher must set aside theoretical ideas to let the theory emerge from the data. However, it should be noted no researcher should ignore existing theories and work in the area; qualitative researchers should “have an open mind as opposed to an empty head” (Giles et al., 2013).

#### **Telework/Telecommuting**

Telework, sometimes referred to as telecommuting or remote work, has been defined as using information and communication technologies to bring work to a worker instead of requiring the worker to go to the work (Fairweather, 1999). This teleworking practice is typically thought of as employees working from home or other approved, alternative worksite than the traditional company-provided location. Telework was once described as a workplace revolution (Kelly, 1988) that would provide environmental, social, and economic benefits (Handy & Mokhtarian, 1996).

Because such a large portion of the workforce has telework capabilities (even if to a small extent, such as once per week), much research has been done on telework. For

example, telework researchers have covered topics such as transportation and environmental effects (Hook et al., 2020), legal perspectives (Baruch & Smith, 2002), critical success factors (Pinsonneault & Boisvert, 2001), time, and space (Perin et al., 1998), types of work (Song & Gao, 2020), positive and negative consequences of teleworking (Lim & Teo, 2000), amongst others. Unfortunately, articles have solid points for both the benefits and pitfalls of telework, often in the same paper. Perhaps, inconsistent findings stem from conflicting definitions of telework – particularly, how often the individual teleworks (T. D. Allen et al., 2015; Charalampous et al., 2019; Sullivan, 2003).

Early research on telework found employees to experience social isolation issues due to the absence of coworkers (Daft & Lengel, 1983; Haddon & Lewis, 1994). This claim has been confirmed in similar contexts (e.g., distance learning, Van Slyke et al., 2022). This claim was later extended to say that social isolation reduces performance (Sparrowe et al., 2001) and chances of promotion (Weinert et al., 2014). Also, with the distance between employees and employers, managers might lose control over their employees (Dambrin, 2004). Interestingly, Dambrin (2004) claims employees gain more autonomy when teleworking, and managers must now evaluate their teleworkers by their results.

While preconceived ideas are not encouraged in a grounded-theory method, this is a potential alternative to constant surveillance (measuring employees merely on outcomes). This is an example of something I noted before interviews: do managers only surveil teleworkers by outputs?

The disparate findings on well-being outcomes are most interesting in telework research. Numerous studies support the relationship of telework leading to increased well-being (Anderson et al., 2015; Fay & Kline, 2011; Thatcher & Bagger, 2011; Tietze & Nadin, 2011). However, others claim telework reduces individuals' well-being (C. A. Grant et al., 2013; Mirchandani, 2000; Song & Gao, 2020; Weinert et al., 2014). Some academics claim well-being<sup>1</sup> has not been consistently conceptualized and measured as it is often mistaken for job satisfaction (Inceoglu et al., 2018).

Since the pandemic, there have been dramatic increases in using telecommunication technologies for learning, health, shopping, and work (Mouratidis & Papagiannakis, 2021). This increase in remote-related tasks paved the way for updated literature on telework, but still, the consensus on whether or not telework is good for employees has yet to be formed (Kim et al., 2021). Some advantages identified after the increase in telework include continuing business processes safely and work-life balance (Buomprisco et al., 2021). From the management's perspective, productivity can be increased (Buomprisco et al., 2021; Park & Cho, 2020), but some claim this was only the case for management by outcomes (Kim et al., 2021). Kwon and Jeon (2020) claims that satisfaction is significantly increased when leadership manages by objectives and is committed to teleworking success. Telework since the pandemic also has reported problems for employees like lack of ergonomic work equipment, not having a dedicated work area, and psychosocial conflicts (Buomprisco et al., 2021; Carillo et al., 2021).

---

<sup>1</sup> To ensure consistency on what is meant by well-being, the following section provides an overview of employee well-being.

Management-related negative outcomes such as overwork are also reported adverse effects (Buomprisco et al., 2021; Carillo et al., 2021).

As it relates to employee well-being, several factors serve as barriers when teleworking during the pandemic, such as frequency of telework (Heiden et al., 2021), intrusive leaders, working after hours (Magnavita et al., 2021), loss of autonomy (Miron et al., 2021), and having high perceived power distances (Adamovic, 2022). Further, teleworking can serve as a moderator, reducing the effect of stressors on well-being (Parent-Lamarche & Boulet, 2021). On the other hand, these cited studies also report positive enablers for teleworkers' well-being, such as organizational climate, competencies, positive work-life balance (Miron et al., 2021), and being an individualist (Adamovic, 2022).

### **Employee Well-Being**

Well-being is a complex construct that refers to both one's optimal psychological functioning and one's positive experiences (Ryan & Deci, 2001). Philosophers have been arguing for 2500 years on what constitutes optimal functioning, positive experience, and even what it means to live a good life. The field of psychology has empirically used the well-being construct through two distinct perspectives and paradigms (Ryan & Deci, 2001). One view, hedonism, says one achieves well-being by pursuing personal pleasure and avoiding pain. The other view, eudaimonia, says one's well-being consists of living up to one's potential (Ryan & Deci, 2001).

Hedonism focuses on subjective well-being (SWB), seemingly equated with one's idiosyncratic happiness. Fourth-century Greek philosopher Aristippus taught that life's goal is to experience the most amount of pleasure (Britannica, n.d. A). Defining

well-being merely through pleasure (versus displeasure) serves as an attractive, clear, and unambiguous operationalization for empirical research (e.g., Kahneman, 1999). This might be because measuring subjective well-being would be easier than psychological well-being (PWB; discussed in the following paragraph). Subjective well-being is often measured through Likert scales ranging from very pleasurable to very unpleasurable (Diener, 2009). Kahneman (1999) identified three components of hedonistic well-being: life satisfaction, presence of a positive mood, and absence of a negative mood. Further, individuals can easily use the expectancy-value theory (Eccles et al., 1983; Vroom, 1964) function to determine the costs and benefits when deciding if a behavior will affect their SWB. This consistent and easy-to-evaluate scale might make it easier to achieve consistent scale reliability.

The Greek philosopher Aristotle claims individuals only pursuing pleasure leads to uncivilized acts. Aristotle said well-being is established through virtuous acts such as doing what is worth doing. Eudaimonia is thus distinguished from happiness (Britannica, n.d., C). According to the eudaimonia school of thought, not all virtuous deeds would lead to fulfilling one's desires or pleasures. Individuals can achieve eudemonic well-being (sometimes referred to as psychological well-being or PWB) if their actions are most congruent with their values and represent the realization of one's true potential.

SWB and PWB are not opposite ends of the same continuum. Indeed, they both cover aspects of positive living and happiness. A person can mutually have a sense of well-being through both viewpoints. They are, however, distinguishable from one another. The hedonic viewpoint focuses entirely on one's SWB. Hedonism is personally pursuing more positive outcomes and less adverse outcomes. The eudemonic view



focuses more on PWB, where individuals feel they are optimally functioning and completing meaningful work. Waterman (1993) empirically shows distinct types of experiences. For example, when individuals were fully engaged with achieving personal values and potential, they were strongly related to activities affording personal growth and development.

SWB seems to be less applicable due to the workplace. As one attempts to seek the most amount of pleasure and least pain, this may result in employees becoming lazy and doing what they prefer to do, which might align with what the employer wants from them. Organizational research often uses the eudaimonic approach (PWB) to study employees' feelings of fulfillment and meaning in their jobs, roles, and selves at work (Wrzesniewski et al., 2003). For these reasons, I am interested in the eudemonic viewpoint of well-being. I will be trying to understand the teleworker's PWB throughout the interviews and analysis. Employee psychological well-being is measured by an employee's mental, physical, and general health and their experiences of job satisfaction (Nielsen et al., 2017).

From this eudemonic perspective, employees will experience well-being when experiencing personal growth, having a sense of purpose, and contributing to a larger community (Turban & Yan, 2016). Personal development is an important aspect of eudaimonia (Waterman, 1993). This eudemonic well-being dimension occurs when one experiences work as providing opportunities to learn, develop, and use skills (Waterman, 2007). Experiencing work with a sense of purpose is another dimension of eudaimonia involving goal-oriented activities (Ryff & Singer, 2013). Other research has shown that one's work can provide purpose and meaning (Dik et al., 2013). The feeling that one's

activities are virtuous is a component of eudaimonia (Britannica, N.D. B). Further, society influences what is considered virtuous activities. In other words, one's actions, if deemed virtuous by society, will contribute to the larger community. A. M. Grant et al. (2007) also claim psychological well-being is a multidimensional construct consisting of four dimensions: agency, satisfaction, self-respect, and capabilities.

Managerial practices are driven by goals of improving performance and increasing the well-being of their employees. However, with the multidimensional nature of employees' PWB, these practices might have unintended consequences for some of the dimensions for employee well-being (A. M. Grant et al., 2007). For example, an organization might try enriching tasks or redesigning jobs to increase work engagement and commitment; however, this can also lead to an increased amount of distress (Bakker & Demerouti, 2018). Changing extrinsic rewards (e.g., incentives, rewards, monetary compensations, or non-monetary compensations) can lead to an increased perception of the intrinsic value of their work (Eisenberger et al., 1999). However, this change might also decrease incentives for teamwork; thus, increased incentives could indirectly lower one's social well-being with coworkers due to individual performance (Kerr, 1975, 1995). A recent dissertation shows managerial practices of increasing team-building and collaboration can improve employee performance and work-related well-being (Warde et al., 2020).

Apart from the workplace environment, leadership styles in an organization are another significant factor leading to employee well-being (Inceoglu et al., 2018) and job satisfaction (Fuller et al., 1996, 1999; Morrison et al., 1997). It is often said people don't leave jobs; they leave their bosses. Leadership styles in an organization are a strong

predictor of employee motivation (Hetland et al., 2011; Naile & Selesho, 2014), job satisfaction (Hamidifar, 2010; Voon et al., 2010), and performance (Iqbal et al., 2015). Research highlights management styles when predicting employee turnover intentions, work quality, absenteeism, affective commitment, productivity, and job satisfaction (Slemp et al., 2018).

Effective management of employees should benefit both the individual and the organization (Guest, 2017). Employers need a competent workforce just as employees need a positive work environment (Boxall, 2013). By providing an understanding of the surveillance of teleworkers, we can further predict how it affects employee well-being. The implications are thus applicable for practitioners who manage teleworkers. Further research can also benefit by having a rich understanding of the phenomenon and how it affects/is affected by other constructs, variables, or environments related to well-being.

Measuring psychological well-being has been done in the literature by using the General Health Questionnaire (GHQ), which I use to help guide my interview protocol and identify characteristics of well-being in the analysis. The GHQ is a measure of mental health developed by Goldberg in the 1970s and has become a widely used instrument for measuring one's psychological state (Goldberg, 1988). The GHQ can be used by psychiatrists as a self-administered questionnaire to classify a patient as well or ill (Goldberg & Blackwell, 1970). The scale has been translated and successfully used in the United States (Gilbody et al., 2007) and many other countries such as Germany (Romppel et al., 2013), Malaysia (Zulkefly & Baharudin, 2010), Saudi Arabia (El-Metwally et al., 2018), Columbia (Ruiz et al., 2017), China (Liang et al., 2016), and many others. A recent meta-analysis supports the 12-item GHQ measure to have

acceptable reliabilities and unidimensional (Gnambs & Staufenbiel, 2018). This scale will be used to help analyze some of the interview responses regarding employee feelings about surveillance. The 12-item version of the scale from del Pilar Sanchez-Lopez & Dresch (2008) is shown in Table 2-1.

**Table 2-1**

*General Health Questionnaire (from del Pilar Sanchez-Lopez & Dresch, 2008)*

---

<u>Item</u>
1. Able to concentrate
2. Lost much sleep
3. Playing useful part
4. Capable of making decisions
5. Under stress
6. Could not overcome difficulties
7. Enjoy normal activities
8. Face up to problems
9. Feeling unhappy and depressed
10. Losing confidence
11. Thinking of self as worthless
12. Feeling reasonably happy

---

### **Employee Surveillance**

Foucault (1975) popularized the concept of panopticism, or “all-seeing.” The notion of Foucault’s panopticon primarily stems from Bentham’s (1843) description of the prison-panopticon. English philosopher Jeremy Bentham theorizes of an institution where a single, hidden security guard monitors all inmates. The panopticon is designed to where inmates cannot see the security guard and will not know when they are being monitored. This is thought to make the prisoners act as if they are being watched all the time. Panopticism is “a type of power that is applied to individuals in the form of

continuous individual supervision, in the form of control, punishment, and compensation, and in the form of correction, that is, the modeling and transforming of individuals in terms of certain norms” (Foucault & Rabinow, 1997). Foucault’s (1975) *Discipline and Punish* used the panopticon as a metaphor for the ‘society of discipline.’ Since then, the panopticon has become a widely used metaphor for surveillance, almost becoming its synonym (Galič et al., 2017).

The panopticon acts as an excellent starting point for conceptualizing how employees are monitored at work. Some parallels can be drawn from these prior conceptualizations. For example, just as many panopticon prisoners do not know if they are being watched, employees might not know when their superior is monitoring their work. Also, in the panopticon, the inspectors are perceived as an invisible omnipresence that sustains perfect discipline. The inspector is thought to be all-seeing. Similar to today’s situation, subordinate might perceive their superior to have the ability to be watching at any time.

There are also aspects of the panopticon that are not fitting for the workplace. First, employees are not prisoners. Panoptic models fit into a disciplinary society in which the primary purpose was to create a society of control or a disciplinary society (Haggerty, 2006). Next, the panopticon is limited to physical constraints, such as a prison. The panopticon metaphor could be applied to employees in the physical workplace. For example, locating employees where their computer screens are turned towards the manager might enact the panopticism effect. Another aspect of the panopticon is the desire to change the subordinates’ behaviors to a specific norm. The purpose of the panopticon was to apply such a high perception of power to the inmates

that they would be reformed. Organizations might encourage their employers to be more productive, but not in such a coercive manner. Finally, the prisoners have no free will to leave the prison. There is a much higher degree of agency for employees in the workplace. Some employees might not feel a sense of agency if they feel they are “stuck in a job,” but prisoners in the panopticon have an objectively lower degree of agency. This short list of examples demonstrates how the panopticon concept is not fitting for a mandated teleworking situation.

Social exchange theory (SET) is a framework for viewing social interaction between two parties (Emerson, 1976). SET dates back to the 1920s (Cropanzano & Mitchell, 2005) and is used to explain the social structures created by exchange relations (Cook & Rice, 2006). Applying this thinking to the workplace, the theory posits social structures, created by repeated exchanges, can constrain or enable actors to exercise power and influence (Cook et al., 2013). In other words, the employment relationship between an employee and an employer assumes an effort-reward expectation. In exchange for the employee’s work, the employer will pay the employee. It is thus expected the employer will evaluate the effort’s quality when providing (or withholding) the reward. Ways in which employers evaluate the employee effort in this exchange can vary. As such, surveillance (apart from the panopticon) and business organizations go hand in hand; employee monitoring is nothing new.

From clocking in, counting and weighing output, and payments by piece rate, organizations have been monitoring their employees for quite some time now. In more general terms, business organizations consist of hierarchies of supervisors that oversee a group of subordinates. Ball (2010) claims surveillance is both necessary and normal.

Employees have always expected to have their performance reviewed, objectives set, and information gathered on their activities.

With the rise of technology, the last few decades have shifted how employers can monitor their employees. Digital media allow managers to monitor the actions of their subordinates. Electronic monitoring has become quite common in the workplace as employers can now watch their employees through technology such as office cameras, access to workplace-communication platforms (intranets), work email, electronic clock-in/out records, etc. Much research has studied the notion of electronic surveillance in the workplace (e.g., M. W. Allen et al., 2007; Felstead et al., 2003). Both Allen et al. (2007) and Felstead et al. (2003) use qualitative methods to provide useful contributions to the field regarding electronic surveillance. However, they both have limitations. Allen does not consider working from home – merely using electronics to monitor employees in the workplace. Felstead (2003) only considered one organization’s case of monitoring by output – a call center.

During a qualitative study, a manager in a telecommunications company said this during an interview (Felstead et al., 2003): “I think it is fairly well known that the perception is that managers lose control of people if they can’t physically see them working . . . How do I know they are doing the job? How am I going to manage them if I can’t see them? If I ring them in the afternoon, and they don’t answer the phone, well where are they and how do I know what they are doing?”

Simply put, supervisors often want to maximize the productivity of the employees. Employees with given tasks are expected to be productive. If an employee is not working, the organization will bear the costs of lower performance and output. Time

theft represents another outcome of costly and unethical behavior. Time theft is defined as employees wasting their time during scheduled work hours (Henle et al., 2010). Time theft is a concern for employers because even though the employee is not producing, they are still being compensated.

Organizations might also want supervision of the employees to protect corporate interests and trade secrets. Many organizations are dependent on their systems' security, and employees are at considerable risk for information system security (Lebek et al., 2013; Spears & Barki, 2010). In turn, organizations must recognize the roles employees have in protecting the assets (Posey et al., 2013). These security issues become inflated when employees are mandated to telework from home.

The Internet of things (IoT) is a network of physical devices with software that is connected through the Internet. IoT capabilities connect devices from all parts of the world. IoT's ubiquity provides us with novel ways of monitoring countless environments (Li et al., 2015; Whitmore et al., 2015). IoT is an emerging way to remotely monitor and surveil employees' performance (Kaupins & Coco, 2017). IoT devices are useful for monitoring and surveilling because they can automatically capture data on employees. IoT, such as ID badges, smartphones, and environmental factors, will transform how businesses monitor their employees (Waber, 2013). Bhave (2014) found supervisors using IoT networks to surveil employees resulted in more organizational citizenship behaviors. However, other studies claim the opposite (Niehoff & Moorman, 1993).

The use of covert, or secret, surveillance is also interesting. Hidden forms of surveillance raise ethical and legal concerns. Employers argue that their ownership of computer equipment entitles them to monitor employees' use of such resources (Roth,



2004). Electronic, covert surveillance could come in the form of secretly monitoring employees' work email communications (Ball, 2010). Other forms of covert surveillance could include secret usage of monitoring computer activity or using hidden cameras or microphones to spy on employees. When working from home, covert surveillance that uses cameras or microphones would be a serious threat to privacy. Ethics remains a significant aspect of surveillance especially with the rise of IoT surveillance (Kaupins & Coco, 2017). The ethics behind appropriate policy in respect to covert surveillance is still under debate (Ball, 2010). Privacy policies allow organizations and users to communicate more clearly the privacy practices (Antón et al., 2007). One could argue it would be ethical to notify employees of the types of data being collected. Covert surveillance can have negative ethical implications as it would violate employee privacy (Guerin, 2013). An employer might also collect unintended information about the employees' personal lives. For example, a wireless health monitor could purposely notify a doctor but unknowingly notify the employer as well (Johnson, 2014).

Outcomes for the constant monitoring of employees can vary. One study found employees to have steady performance patterns when being monitored or alone in a remote place (Griffith, 1993). Others actually found an increase in employee productivity (Davenport & Harris, 2013). Further, Cristea and Leonardi (2019) found digital platforms can act as a new medium for the communication of the employee's work and performance. Others found highly skilled employees to perform better with the social facilitation effect (Aiello & Kolb, 1995; Zajonc, 1965). The social facilitation effect is the increase or decrease of individual performance when working with others. Aiello and Svec (1993) conducted a study using the social facilitation framework to study

computer-monitoring of employee work performance. Aiello and Svec (1993) found task performance to decrease for groups being monitored digitally and “in person.” Beyond Aiello and Svec (1993), there is minimal research conducted on the social facilitation effect of electronic surveillance.

Numerous other studies find negative effects on the employee when being constantly monitored. A previously mentioned study (i.e., Aiello & Kolb, 1995) showed employees being monitored felt more stressed. This finding of monitoring increasing stress has been supported by other recent publications (Ajunwa et al., 2017). Employees might have feelings of being violated or powerless when being monitored electronically (George, 1996; Marx & Sherizen, 1986). Employees sometimes feel if they need to be surveilled, there is little trust between them and the organization (Tabak & Smith, 2005). While Kidwell and Bennet (1993) found some employees to perceive monitoring as fair, they also found other employees think it to be unfair. Further, they found perceived fairness acts as a mediator in the relationship between electronic monitoring and job performance.

Adapting Webster’s dictionary, coercion is an actor’s practice forcing another actor to act involuntarily, typically by use of direct or indirect threats and forces. Sewell & Barker (2006) claim corporate surveillance can coerce employees into working harder than they want. This might be attractive to managers because it minimizes an employee’s chance not to be as productive as possible. When employees feel employers can become too coercive with monitoring, they become more likely to resist resulting in more surveillance justifications for the organization (Anteby & Chan, 2018).

As demonstrated, there are streams of research covering electronic monitoring of employees in the workplace (i.e., in the office or out in the field). There are also research streams that cover monitoring employees at home where the employees knew the monitoring expectations. To my knowledge, there have been no studies investigating a shift to work-from-home programs without expectations of monitoring. For example, at the start of the COVID-19 pandemic, many employees were sent from the office to work from home. Many of these transitions happened without proper training or expectations regarding how work would be monitored. This research study will look at the monitoring of employees from home when expectations were not previously set.

### **Psychological Needs**

Self-determination theory (SDT; Ryan & Deci, 2000) is a widely researched and applied psychology theory (Ryan & Deci, 2019a). SDT was created to serve as a foundational approach to studying internal motivation (Deci & Ryan, 1980). It has since moved on to become useful for general human motivation, personality development, and wellness (Peters et al., 2018). SDT is a grand theory applied to numerous areas such as healthcare, psychotherapy, environmentalism, education, parenting, technology, management, and others (Ryan & Deci, 2019a). SDT claims fulfilling psychological needs are essential for human well-being. Ryan and Deci (2000) consider three needs: autonomy, competence, and relatedness. They argue humans are optimally motivated to experience well-being when all three needs are met.

Autonomy is an individuals' need to have ownership of their behavior and feel psychologically free to determine behaviors. Individuals have a general desire to be the causal agent and experience free will (De Charms, 1968). Autonomy stems from the

locus of causality (the origin of one's action). In other words, autonomy refers to the ability to control the environment or behaviors instead of being pushed/pulled around by outside forces. Deci and Ryan (2002) claim all people are intrinsically motivated to be autonomous. For example, an employer asks an employee to do a task immediately; if the employee voluntarily agrees to do so, the need for autonomy is satisfied. If the employee would rather take a lunch break and complete a different task first but feels obligated to complete the task immediately, the need for autonomy is not satisfied.

The need for competence is one's psychological need to be effective in being able to interact with the environment. The need for competence does not refer to one's skill of being competent; rather, competence refers to a "felt sense of confidence and effectance in action" (Deci & Ryan, 2002; p. 7). Individuals need to feel they are effective in their interactions with the social environment and are given opportunities to exercise their capabilities.

The psychological need for relatedness refers to one's feeling of being connected with others (Deci & Ryan, 2000). Individuals experience relatedness when they are able to care for and be cared for by others or have a sense of belongingness with individuals and the community. This is an interesting construct as it is certainly affected by the socially distanced nature of telecommuting. Individuals might have the luxury of feeling related to their coworkers and employers through the technology provided to work from home. On the other hand, surveilling technologies might also make them feel less related, especially if the dynamics of the software are limited to one-way communication. For example, a manager and subordinate might have two-way communication in person. This allows for the potential the relatedness needs to be filled as the subordinate can

communicate back to the employer. However, if the manager is only watching the subordinate (one way) and only engages in contact with the subordinate when they are not productive, etc., this would be similar to the one-way mirror/panopticon.

It is reasonable to expect that when being watched, one behaves differently. The Hawthorne effect refers to a change in an aspect of behavior when individuals perceive they are being observed (Landsberger, 1958). Applying this thinking to the work context, it will be interesting to see if employees that perceive they are being surveilled will have any changes in their perceived autonomy, competence, or relatedness.

Psychological ownership theory (POT; Pierce et al., 2001) is another popular and general theory that could prove to be a useful starting point for probing interview questions. Ownership is one's ability to use and control the use of an object(s). Psychological ownership is then defined as "the feeling of possessiveness and of being psychologically tied to an object" (Pierce et al., 2001; p. 299). Organizations can give psychological ownership to employees through giving opportunities to exercise control. Psychological ownership theory has its roots in three fundamental human drives that guide the varying dimensions: having a place, need for self-identity, and need for efficacy.

Having a place can be explained by an individual's motive to possess their own territory or space (Pierce et al., 2001). It is argued that having a place is essential because one feels isolated and lost if surrounded by objects that do not belong to oneself (Weil, 1971). Having a place thus is not just a piece of land or dwelling. To have a place is to have a space that provides comfort, pleasure, and security. Regarding the surveillance,

the employer might be perceived as infringing on one's place. Surveillance in one's home might invade one's sense of self-ownership over their home.

The need for self-identity is also essential for psychological ownership. One's possessions serve as expressions of the self because they are closely connected with self-identity. In the organizational context, connections to organizational objects can communicate one's identity. Connections with organizational objects can also explore and reflect on one's own understanding of that identity. It is through these interactions with possessions and reflections on their meaning that help establish and maintain our sense of self-identity. In other words, individuals use ownership to create a self-identity. Surveillance requires one party to forgo information (i.e., the behavior, output, or any other variable being surveilled). Thus, surveilling a teleworker in their home might alter one's sense of possessiveness. Essentially, one could feel they are forgoing information related to what was considered to be their self-identity.

The need for efficacy and effectance is seemingly indistinguishable from SDT's need for competence. They both stem from White's (1963) effectance motivation. Prior literature studying psychological needs too has used a combined scale for the need for competence and need for efficacy (see Karahanna et al., 2018).

POT has been studied in the organizational context. For example, Brown et al. (2005) introduce the term territoriality in an organizational context. They claim psychological ownership leads to a series of territorial behaviors such as control- and identity-oriented marking. The findings suggest individuals' territorial behaviors might provoke defensive behaviors resulting in detrimental outcomes for the organization. This finding could apply to physical space or some sense of psychological ownership.

Psychological ownership for the organization has been empirically shown to have a positive link with employee attitudes and work behavior (Van Dyne & Pierce, 2004). These are useful findings that will aid in formulating questions for the interview.

### **Other Factors and Theoretical Considerations**

There are countless considerations when embarking on a journey of exploratory GTM, such as the one in this dissertation. The aforementioned background provides in-depth guidance on relevant constructs, their ways of measurement, and related constructs. What follows in this subsection is a list of considerations for the interviews or analysis. This is not an exhaustive and constraining list of factors that will be considered. Rather these serve as a starting point of what might be influential factors. There are other potential areas of interest that should be considered in the semi-structured interviews. Indeed, many of these considerations might not come up throughout the interviews or the analysis.

Agency theory provides a useful framework for organizational researchers (e.g., Glinkowska & Kaczmarek, 2015). Agency theory describes the relationship between two actors: a principal and an agent (Eisenhardt, 1989). The principal is the party that delegates work to an agent. Agency theory is considered in organizational theory when an employer gives the employee a task. It places emphasis on the efficient governance of management. Bandura (1982) says self-regulatory capabilities require personal agency, implying agency is one's freedom and determinism (Bandura, 2006). Considering agency theory in the context of teleworkers begs the following questions: To what extent employees in mandated telework will feel their sense of agency is altered? What role will

the surveillance of teleworkers play in the perception of agency? Will there be constraints to human agency and freedom? Are there multiple levels of agency?

Advances in smartphone capabilities introduce the ability to “bring your own device” (BYOD) programs. BYOD programs provide an alternative to traditional work environments allowing employees to utilize their personal technology (smartphones, computers, internet networks, etc.) to conduct business processes (Ansaldi, 2013). It will be interesting to see what kinds of technology are used and how they are used when working from home, if employees have the option to opt-in/opt-out of the BYOD program, and if the employees receive compensation for using their personal devices. This may be a significant factor when considering employees’ well-being due to the state of the mandated telework situations.

Notably, a recent International Conference on Information Systems (ICIS) paper theorizes the moral consequences of new, digital forms of surveillance (Chai et al., 2020). They aim to demonstrate the dark side of digital surveillance. According to their ICIS presentation, it goes through Jensen’s (2010) six-step demoralization process. As implied in the paper, organizations can systematically promote individuals to become morally ambivalent and marginalize the surveillance. It claims employees will eventually become psychologically numb to being surveilled and no longer be concerned about the consequences. Previous research also supports the idea of individuals becoming desensitized towards their actions’ morality (Jensen, 2010).

Kreiner et al. (2009) discuss the boundaries where one’s work and home-life integrate. They discuss types of boundary work tactics to help individuals balance work and home that have become blurred. They also talk about boundary violations where



work breaches the desired work-home boundary. This is expected to show an impact when we ask participants about their feelings towards surveillance in their homes (Derks et al., 2014). Digital platforms are becoming entangled in social and business lives (Orlikowski, 2007), further blurring the boundaries between private and public life (Bauman & Lyon, 2013).

### **Background Overview**

The goal of this background section is to begin to understand current bodies of literature, the psychological states I will be attempting to understand, and guide the formation of my interview protocol. Urquhart considers this a non-committal literature review (Urquhart & Fernandez, 2006; Urquhart, 2013). It is important to note, however, that the coding should not actually impose theory.

When probing the interviewees with open-ended questions, it is important to have an understanding of things such as definitions. For example, I identified and strictly defined surveillance as one's actions, behavior, or output is being monitored by a supervising agent. Understanding that different variables could be monitored leads to a richer understanding of the different types of surveillance that can occur (and shown in Chapter 4).

Outlining the different types of well-being helps prepare for things to note that might indirectly hint at (but not explicitly show) well-being. As pointed out in this chapter, there is still debate on the definition of well-being. PWB is heavily used in the management literature and with justifiable reasons, as I point out. Further, the GHQ helped list different indicators of well-being.

The psychological needs literature helps point to some of the most influential antecedents of well-being. This understanding of what past scholars have found serves as a great starting point to probe interviewees with general questions to look for other factors at play. For example, autonomy, one's perception of being psychologically free to determine their behaviors, is claimed to be essential for well-being. Interestingly, in my first interview, I found a case where this relationship did not hold up (see Chapter 4).

Other variables that might be particular to my context were also discussed and considered in the interview guide. For example, teleworkers using their own devices for work (i.e., BYOD) might have different feelings about the surveillance than those working on company-owned devices. As Chai et al. (2020) point out, one's use of other surveillance-related technology, such as social media or security cameras, might influence the effect surveillance has due to the demoralization of the technology. Kreiner et al. (2009) claims the boundaries between work and personal life can become blurred.

This background chapter was helpful in identifying questions and topics for discussion during the interviews. While some of the concepts discussed here were eventually not used in my model, others serve as essential components.

## **CHAPTER 3**

### **METHODOLOGY**

Scholars in the information systems (IS) field find value in both quantitative and qualitative research. Qualitative studies provide the field with a deep rich understanding of a phenomenon. Through the nature of qualitative work, researchers can investigate topics with strong internal validity. Quantitative research, on the other hand, can more easily demonstrate external reliability through large sample sizes. Many quantitative studies in our field are performed by compiling a survey for distribution across a population. External reliability is thus demonstrated by statistical significance from the survey responses in the population.

For this project, I perform exploratory research on surveillance for employees at home, or teleworkers. There is little work on understanding the employees' perspective on surveillance at home; therefore, I am seemingly embarking on a novel investigation journey. There are numerous ways to investigate unexplored research areas. I chose to employ a qualitative methodology to show internal validity. The central premise of this dissertation is to uncover aspects of electronic surveillance through personalized devices.

Further research *could* be done to verify the results. Validation of a theory, model, or description is beyond the scope of the dissertation.

### **Qualitative Research in the IS discipline**

Literature shows a wide variety of qualitative research methods in the IS literature (Sarker et al., 2018). Positivist case studies are a way for researchers to understand dynamics within single settings or cases that help deduce theories from data (Eisenhardt, 1989; Miles & Huberman, 1994; Yin, 1994). The hermeneutic approach is a way of interpreting texts by referencing the individual's parts of developing a holistic interpretation (Boland, 1991; Sarker & Lee, 2006). Interpretive case studies include inductive descriptions from individual settings that are then generalized into theoretical contributions (Klein & Myers, 1999; Walsham, 1995). Ethnographies are interpretive works where the researcher will document their experiences in a given situation (Agar, 1986; Klein & Myers, 1999; Van Maanen, 2006). Of the list of qualitative research methods, the grounded theory is the most inductive and data-centric approach (Sarker et al., 2018). It is also one of the most frequently adopted types of qualitative research methods in the social sciences (Morse, 2009).

### **What is GTM?**

The seminal book *The Discovery of Grounded Theory* defines grounded theory as a theory-building method in which the theory is discovered from the data (Glaser & Strauss, 1967). The aim of grounded theory is thus to generate or discover a theory (Urquhart, 2013). While theory development is indeed the goal of a GTM (Urquhart et al., 2010), it is not essential for contribution. In a review of GTM-based articles in major IS and related journals, only ten articles (23%) developed a theory as part of their contribution (see Wiesche et al., 2017).

A study using a grounded-theory methodology can make three contributions to research: development of theory, development of a model, or a rich description of phenomena (Wiesche et al., 2017). A theory, defined by Bacharach (1989), is a statement of relations among concepts within a set of boundary assumptions and constraints providing detailed explanations. A model can be defined as a visual representation of abstract variables and their respective relationships amongst one another (Sutton & Staw, 1995). Models might lack explanations for the relationship; however, they can serve as pre-theoretical representations. Rich descriptions are narratives based on observations with few generalizations or abstractions (Van Maanen, 1990). Documenting rich descriptions of phenomena is inherently valuable for future theoretical development. While developing theories through GTM is more impactful (measured by citations), the second two contributions are also valuable for the discipline. Creating models or publishing rich descriptions of novel phenomena can provide early insights and a basis for theorizing (Wiesche et al., 2017). The goal of this dissertation was to create a theory; although even when theories are not achieved, contributions can still be made through building a model or providing a rich description.

As mentioned, grounded theory is a data-centric method for qualitative research, as opposed to interpretation-centric. In GTM, the researcher collects and categorizes data for analysis. Abstractions and generalizations are then crafted through an inductive approach. Grounded theory is a method of systematically obtaining and analyzing data in social research through induction (Glaser & Strauss, 1967). Due to the inductive “theory building,” the role of theory and past literature often plays little role in the analysis.

Rather than using previous literature for theorizing, the point of GTM is to allow the *emergence* of theory from the data.

### **History of GTM**

Glaser and Strauss's (1967) book presented one of the first ways to derive a theory of human behavior from empirical data. Their description of how to perform GTM is vague and left open for much interpretation. Many novice researchers wanted a more systematic how-to process for generating theory. This has led to two different ways in which grounded theory is said to be conducted, namely Glaserian or Straussian.

Corbin and Strauss (1990) provide a step-by-step way of conducting GTM research. Corbin's and Strauss's (1990) work was the groundbreaking manuscript for what provoked a long dispute between the two strands of ways to perform grounded theory methodology. In Corbin and Strauss's 1990 text, they outlined a systematic approach to performing GTM. Their book was written in response to many students questioning the abstract guidelines provided in Glaser and Strauss (1967). Strauss and Corbin (1990) served as an attractive guide for novice researchers to get a grasp on grounded theory research. Their 1990 work provided specific, systematic steps one follows to produce a theory from the data. The Straussian approach is the dominant GTM in the IS field (Wiesche et al., 2017).

Barney Glaser felt Strauss and Corbin (1990) had been too restrictive in their way of presenting GTM. Glaser was not pleased with the book giving "how-to" steps on performing grounded theory methodology. Glaser claims this was too restrictive and forced data into a paradigm, which is not the emergent nature of GTM (Glaser, 1992). Glaser went as far as to request the book pulled from publication! The Glaserian

approach (Glaser, 1978, 1992) has a much more flexible procedure allowing the researcher to follow the data. Although the Straussian approach is the most common in the IS discipline, the Glaserian approach is also successfully employed for contributions in theory development (e.g., Gasson & Waters, 2013), model development (e.g., Huff & Munro, 1985), and rich description (e.g., Volkoff et al., 2005; Zahedi et al., 2006).

The two main ways for conducting GTM, Glaserian and Straussian, differ mainly by ways of coding data into theory. Coding is attaching conceptual labels to data (Urquhart, 2013). Attaching a conceptual label to a piece of data begins the process of analyzing the data. Similar codes are put together to begin to abstract from the specific pieces of data. Theoretical, core categories are then the product of continuous analysis and generalizations.

I point out the differences in each of these ways of conducting grounded-theory methodology to demonstrate there are several ways GTM can be conducted, both of which are supported. For the sake of my dissertation, I chose to use the Glaserian approach (Glaser, 1978, 1992). Glaser's approach seems much closer to grounded theory's original ideas (Glaser & Strauss, 1967; Urquhart, 2013). Following the Glaser approach, this process of achieving theoretical codes is done in three main steps: open coding, selective coding, theoretical coding.

### **Coding and Analysis**

Open coding is the first step in assigning conceptual labels to the data (mind data, in this case, refer to the transcriptions). Open coding is the process of taking this text and assigning codes to the text – line by line or even word by word. The conceptual labels given to the data are descriptive and/or analytical (Urquhart, 2013), contributing to the

iterative and reflective process of open coding. Sometimes it is necessary to give data a descriptive label. The intention of the process, however, is to move from descriptive to analytical open codes. As we use more descriptive codes, analytical possibilities will begin to emerge. The aim is to get to an analytical code rather than one that merely describes it.

Selective coding is the process of organizing our open codes to create some core categories of the theory. This is the first step in beginning to abstract up in the data. There is a bit of grouping that occurs at this stage as one begins to pair up similar open codes. Selective coding is identifying categories that are related to the core category. How one organizes their selective codes is much related to the research problem. These categories create themes that are comprised of the induced theory or model.

When one begins to theorize how the selective codes are connected with core categories, they have begun the theoretical coding process. Theoretical coding is thus the stage where selective codes begin to relate to each other. Connecting selective codes together can be done by merely connecting how categories might be related, ideas about relationships from the literature, or using Glaser's strategy coding family. The strategy coding family consists of groups such as strategies, tactics, mechanisms, managed, way, manipulation, maneuverings, dealing with, handling, techniques, ploys, means, goals, arrangements, dominating, positioning. The idea here is to pair the selective codes with a strategy.

### **GTM Contributions**

As mentioned, my intentions were to (along with every GTM researcher) develop a theory. If a theory is not developed, other theoretical contributions can still be made



(Wiesche et al., 2017). By creating a model of constructs found in the data, a contribution is given to the field's understanding of surveillance during times of teleworking. On the other hand, if a model cannot be comprised from the analysis, the field can benefit from a rich understanding of surveillance in telework situations. Regardless of how the constructs or phenomena relate to others, the field has limited research covering these topics. In another sense, a rich description can provide a means for further research to begin theorizing. Rigorously created rich descriptions can be used in further theoretical development around these phenomena.

Whetten (1989) discusses the building blocks of a theory and theoretical contributions. I use these theoretical contributions to help guide the expected contributions. Outlined in his paper are the what, the how, and the why.

### **Rich Descriptions**

The *what* refers to factors, variables, constructs, or concepts considered. The latent variables, constructs, or concepts should have clear definitions of the domain to be used for theory. In-depth and well-documented interviews provide rich detail of the topic of interest. The method inherently provides a rich and detailed description of the dynamics of being monitored from home and the effects it has on employees. This rich and detailed description is essential for theorizing; without properly defining the concepts in a theory, one cannot make meaningful conclusions from the theory. Therefore, if a detailed description report is the only contribution made, it would still have been valuable for the field.

For example, Zahedi et al. (2006) did a grounded theory methodology to investigate cultural dimensions in websites. Being one of the first to consider cultural

differences in websites, they were able to identify and categorize signifiers. These findings were later able to be used in other theorizing efforts to understand cultural/gender differences, implications, and values (e.g., Borrero et al., 2014; Cyr & Head, 2013; Srite & Bennett, 2008; Trauth, 2013). These dimensions, categories, phenomena, constructs, etc., of monitoring will be created through generalization of the data. Similar to Zahedi et al. (2006), detailed descriptions of generalized categories can be beneficial for future research.

To answer my first research question regarding the ways in which employees are surveilled, I provided a rich description of what I found (see Chapter 4). I outlined what I found to be the two main types of surveillance a supervisor would use for a teleworking employee (behavioral-based and outcome-based). I describe in detail the way in which these two types emerged. Research in this area might benefit from reading and understanding my interpretations.

### **Models or Frameworks**

Whetten's (1989) next building block of a theory is the *how*. The *how* describes the way in which the previously identified concepts (the *what*) are connected to each other. Finding relationships and patterns through analysis of the data would achieve Whetten's *how*. For example, Orlikowski (1993) used a grounded theory method to understand the disparate findings of computer-aided software engineering (CASE) success. She developed a framework to better conceptualize how organizations implement changes in systems development.

In the context of my study, I was able to connect selective codes to build a model. I formulated a model to answer the second research question regarding how surveillance affects well-being. The model is detailed in Chapter 4.

## **Theory**

Theories should do more than just merely explain what and how. Whetten's (1989) third building block is the *why*. The *why* is an explanation of the rationale and logic behind the relationships. A model or framework is quite useful for theorizing but does not suffice as a theory (Sutton & Staw, 1995). Rather, a theory is a "statement of relations among concepts within a set of boundary assumptions and constraints" (Bacharach, 1989). Gregor's (2006) description of her Type IV theory would also add theories are intended for explaining and predicting, which elaborates the importance of Whetten's *why*. Merely creating a model, framework, or listing hypotheses all lack an explanation of why such concepts are connected. Theory is indeed the goal of a GTM study.

To claim a theory, I would need to establish the *who*, *when*, and *where* of the theory (Whetten, 1989). Theories are not limitless. I would have to list the theory's range of application. One constraint already assumed (but not yet elaborated on) in my study is employees working from home. The theory created here would not be applicable to monitoring individuals in the physical office. Other limitations found in the interviews would need to be identified and described.

Also, the theory would need to be able to provide predictions with testable propositions. Theories are more than just explaining how concepts are connected. Theories should be stated in a form that can be tested empirically (Gregor, 2006). As

mentioned earlier, the testing of such a theory is beyond the scope of this dissertation. However, it is essential that the statements made in the theory can be empirically validated. A theory that is not falsifiable is not valuable. Grounded theory methodology has led to the quality creation of theories in the IS field (e.g., Maznevski & Chudoba, 2000).

### **GTM Procedures**

Prior theory and theoretical sampling guided my data collection process. It is discouraged to use prior theory to guide coding categories; this would create a potential bias causing preconceived concepts and relationships before entering the field (Sarker, 2007). However, it is acceptable to use prior theory to help motivate relevance, outline the research gap, and provide guidance for the structured interview (Glaser, 1992). The role of prior literature from Chapters 1 and 2 has done just that. Chapter 1 and Chapter 2's background outlines the history of telework research along with employee well-being and the psychological needs literature. The review of prior literature demonstrates the background of a few different aspects of surveillance during mandated telework; however, past literature has yet to uncover the employee perceptions of this phenomenon. Further, this prior literature has provided guidance in structuring interviews and details of the intended sample.

The interview guide, created through literature reviews and subjective questions of interest, is shown in the appendix (see Table A-1). The interviews were semi-structured, guided by the interview protocol. The interview protocol provides a list of probing questions to spark conversation on one's experience with being digitally surveilled and/or mandated telework. The semi-structured procedure allows asking

ad-hoc questions when something of interest comes up in conversation. This interview guide, along with the rest of the plans for the project, was approved by Louisiana Tech University's institutional review board (IRB; see Figure B-1).

The initial interviews were conducted with actors of interest - employees that have had experience with electronic surveillance in their work from home. The first round of interviews came from personal connections with individuals participating in mandated telework. Further interviewees can be selected through a snowball effect (e.g., Van Slyke, Clary, et al., 2019) in the event that not enough personal connections are on hand. The data from a particular interview is often referred to as a "slice" of data (e.g., Stafford & Treiblmaier, 2020). Each slice of data will be analyzed for initial analysis.

Analysis of the first slice of data is used for further sampling - a method called theoretical sampling. Theoretical sampling is the process of selecting what data to be collected based on previously collected data (Glaser & Strauss, 1967). Theoretical sampling helps in reducing sampling bias and increasing the saturation of our established core categories.

The interviews are transcribed into written text that I used for analysis. Using software called NVivo, transcriptions can be separated into words and given the (open) code names. As mentioned, the analysis process followed Glaser's (1992) process of open coding, selective coding, and theoretical coding. Constant comparison is a key component in the analysis. Constant comparison is a process of continually comparing data throughout the coding process. For example, data labeled in one category might be related to other instances of data labeled in other categories. Constant comparison allows theorizing of the categories to stay under continual review (Urquhart, 2013). Data

collections are continued with constant comparison until theoretical saturation is achieved.

Theoretical saturation is achieved when new slices of data stop providing new theoretical categories and uncovering novel relationships. The number of interviews needed for theoretical saturation can obviously vary. After theoretical saturation is met with data collections, the final analyses result in my contribution, which I elaborate more in the following subsection.

Sarker et al. (2013) elaborate on the importance of transparency. It is essential for the qualitative researcher to ensure the accountability and auditability of their work. This is much easier in quantitative research, where scale items, loadings, and other statistical methods can be explained. Qualitative research should ensure transparency regarding the sample selection, how data is analyzed, and what inferences were made. This will help ensure the justifications for reviews and future research on how conclusions are derived. Apart from detailed descriptions of the sampling process and data analysis, memoing is a technique used to note theoretical ideas during interviews and analysis (Gasson & Waters, 2013).

The fundamental questions motivating this research are, “In what ways do employers now surveil their teleworking employees?” and, “How do these ways of surveillance affect the employee’s well-being?” I begin with the assumption employers have various ways of keeping track of their employees. For example, some employers might have software installed on the employee’s technology that tracks the computer activity. Other examples could range from self-monitoring tools like project plans,

checklists, etc., that share progress with the employer. Some employers might even have video software installed to virtually watch the employee from their remote location.

Another reasonable assumption I made is this variety of ways to monitor have different effects on the employees. One might feel some of these surveillance tactics are overbearing or unreasonable with the expectations. These negative perceptions of the monitoring could have internal psychological effects such as a lower psychological well-being, feelings of boundary violations, loss of perceived autonomy, or feelings of unfairness. Negative feelings about the behavioral effects such as work performance or avoidance/resistance behaviors might also occur.

On the other hand, I did not intend to limit the search to negative effects; employees might actually favor the employers' way of monitoring. I tried to stay open-minded in the process. For example, finding new ways of monitoring are less invasive than being overseen in the office allowing employees to be more productive, creative, or expressive in their work. If I found an employee has enjoyed working remotely and I report the dynamics of being watched by the employer from home, this will be valuable for both employees and organizations.

I used the literature review to craft the interview guide. A total of seven individuals participated in the study. Their responses were transcribed and coded according to the procedures outlined in this chapter. Chapter 4 discusses the results and how the theoretical saturation was reached.

## **CHAPTER 4**

### **RESULTS**

#### **Descriptive Statistics**

Seven individuals were interviewed for the study. The descriptions are intentionally left vague to help mask the identity of interviewees and ensure the confidentiality of their responses. Each interviewee is given a shortened name for simplicity throughout the dissertation (e.g., Int1 is short for Interviewee 1).

The interviewee list was relatively diverse. All interviewees, except for one graduate student (Int6), worked in a full-time position. Each interviewees' organization was relatively large, with 100 or more employees. There were three males and four females. Two of the interviewees were in supervisor positions, supervising a group of teleworkers. Industries from the sample include academic, financial, government contracting, telecommunications, and transportation (i.e., trucking). Some interviewees had decades of experience with telework, while others had no experience prior to the start of the pandemic. Each interview lasted about 30-45 minutes. Geographical locations span across the United States, with most interviewees from the south-central region.

A summary table (Table 4-1) of interviewee information is provided below. More detailed descriptions are in the following subsections.



Table 4-1

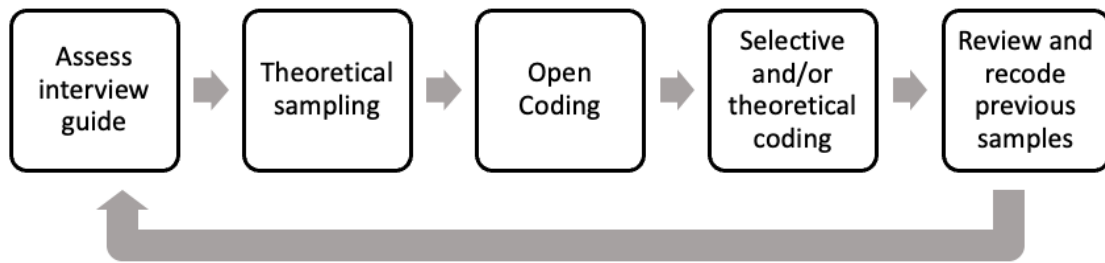
*Descriptions of Interviewees*

<u>Int</u>	<u>Occupation</u>	<u>Organization description</u>	<u>Telework Experience</u>	<u>Monitoring Characteristics</u>
1	Project Engineer	Contracting company for the department of defense	None	6-minute intervals recorded and visible by supervisor and colleagues.
2	Marketing Assistant	Banking/Credit Union	None	Automated, 60-second time-out system on computer
3	Director of product development and corporate strategy	Telecommunication services	10 years of hybrid	Outcome oriented only. No activity metrics tracked. Manages subordinates the same way.
4	Vice President for Technology, Innovation, and Development	Academic institution	None, but managed remote employees for several years (from office)	Frequent meetings with colleagues. Manages subordinates through meetings and outputs as well.
5	Director of Communications	Academic institution	None	Frequent daily communication with supervisor. Supervisor gives expectations but is flexible.
6	Graduate Student	Graduate school	None	Attendance during class taken. Random attention checks throughout class. Strict eye-tracking and noise-tracking software during tests.
7	Human Resources Recruiter	Trucking transportation company	None	Average time to complete task monitored. Supervisor is hands-off if everything is operating as expected.

## Analysis

As mentioned in Chapter 3, the data collection, coding, and analysis is an iterative process (Glaser & Strauss, 1967). The literature review from Chapter 2 helped form an outline for the semi-structured interviews. The semi-structured nature of the interviews allows for ad-hoc questions to be asked (e.g., expanding on interesting comments, etc.). Throughout the studying, the list of interview questions did not significantly change.

Figure 4-1 is a graphical representation of the process used regarding interviews, coding, analysis, etc. In the beginning, I formulated two research questions (see Chapter 1) which warranted a literature review (see Chapter 2). The literature review directed my first version of the interview guide. Next, theoretical sampling is done to select a relevant participant for the study. Given the nature of the in-depth, grounded-theory approach, theoretical sampling allows researchers to have more control over the characteristics of the sample. For example, during my first interview, I wanted to interview an employee working from home for a company that is likely to have strict surveillance – their insights were predicted to be relevant to my study. Next, interviews are transcribed and openly coded. The open codes are grouped together to form selective or theoretical codes. If anything arises that was not considered in the previous coding, preceding interviews are subject to reassessment. The interview guide is adapted according to any emerging ideas. After the interview guide is adapted to fit the emerging context, the next interview occurs.



**Figure 4-1:** *Visualization of Interview Workflow*

As mentioned, theoretical sampling is strategically selecting a participant that will provide the most relevant information (Urquhart, 2013). As such, Int1 was selected as the first interview. I assumed the contracting company for the department of defense would have an intense surveillance, an assumption that was upheld. For example, Int1 has an RFID tag that is tracked when on site. Further, Int1 said, “In certain areas, we still use one-way pagers. We will be like, ‘Hey, someone needs to reach me. I have to go to and get out of this area and go and call them on a landline.’” This culture of strict control is also applied to processes when working from home, “we have to charge [every six minutes of] our time directly to whatever program we’re working on.”

As I began the data collections, I assumed more intense surveillance would have a negative effect on well-being. Though, this was not the case for Int1. This anomaly piqued my interest. Of course, from one interview, it was hard to make meaningful conclusions as to why the loss of autonomy had little effect on well-being. I thought it might be the amount of communication with the employer. Int1 said, “we just shoot each other Skype messages. I mean Skype is integrated into our networks, so we that’s pretty much the best way to reach anyone that or email,” and “one of the things that we did was just while we were all working from home, we would just connect on a Skype call. And

even if it wasn't like a Skype 'meeting,' like specifically to accomplish a certain objective, it was just while we were working." In these skype calls, Int1 said their microphones would typically be on mute. Users might unmute the mic to "ask each other questions and just see each other [...], tell jokes, do whatever, [we just] wanted the social interaction." Further, the supervisor would often be sitting in the skype room. From the positive relationships with the employees explained by Int1, it is assumed the supervisor has a positive relationship with their employees, but I could not yet generalize on what the influential factor is here. The amount of communication was an original thought.

Int1 also mentioned the appreciation for strict timekeeping; Int1 saw personal benefits. "I think that it's honestly a good method of accountability because it's very easy to slack off in the workplace, especially working from home." This quote was later followed up with the comment, "you're slacking off at work, you don't feel good about that. I mean, no one ever feels good about that." This led me to consider that there may be a personality factor that affected the relationship between surveillance and well-being. These personalities did not appear in further interviews, so I dropped this idea and patiently waited to let the data guide me.

After only having one slice of data, I did not yet have many meaningful selective codes to begin theorizing. Int2, in the financial industry, was expected to have relatively intense surveillance characteristics due to the sensitive nature of personal financial data – another assumption held true.

Int2 had significantly lower well-being. In fact, Int2 mentioned considering leaving the organization altogether. The low well-being was measured with tone in voice combined with comments such as "using the company-provided 10-inch laptop. And *little*

*cheap* [emphasis added] mouse and everything. And I just kind of set up wherever I can. The inconvenience really comes with when we're doing data crunching, and I need multiple screens and all kinds of stuff like that. Of course, internet connections, residential versus in the office - it's just not as good." The most inconvenient component of the teleworking experience seemed to be the security layers and time-out system. Int2 said in a negative tone, "[after it kicks you out,] you have to completely go back through all the security layers," and "what aggravates the most within that is the fact that you can be working [Int2 provides examples], if I'm looking at it for 60 seconds, it's still going to time out because I haven't scrolled through it. So that can be very agitating." Int2's communication with their supervisor was also reported to be significantly slower. This did align with my previous interview's idea that communication would be an influential factor in my model. Thus far, my analysis enlightened an understanding of situations where employees are under higher surveillance frequency. I wanted my next interview to be one of low surveillance frequency.

Int3 works in product development and corporate strategy for a telecommunications company. Int3's job responsibilities require a lot of creative work. Int3 mentioned the difficulty in wrapping metrics around both his/her productivity and the subordinates' productivity. Int3 elaborated on their comment, saying their best bosses, in this type of work, are ones who only measure outcomes. Int3 is measured strictly on the quality of deliverables. Int3 had the highest amount of autonomy in my study. For Int3, there is not any clocking-in or clocking-out, no expected times to be working, or any specific hours of availability. Int3 did acknowledge the nature of the work needs this

much autonomy; Int3 said there are some jobs that would be better suited for rigid work schedules.<sup>2</sup>

After this third interview, I began separating surveillance into two main types: behavioral- or outcome-based surveillance. In behavioral-based surveillance, the supervisor is monitoring their subordinate's behaviors as it relates to their work-related tasks. On the other hand, outcome-based surveillance is monitoring the output quality, quantity, or other measurable variables of the subordinate's work-related tasks. I revisited the first two interviews paying careful attention to aspects of the surveillance that were measuring behaviors or outcomes. This differentiation is further elaborated in RQ1 Results section.

Int4 is a supervisor at an academic institution. Int4 supervises a team of both teleworking and in-person employees. When the pandemic mandated telework, Int4's staff had diverse experiences with teleworking; some had positive experiences while others were negative. Int4 emphasized the importance of giving respect and trust to employees. Specifically, Int4 does not like to "big brother" over the subordinates. Int4 says this type of surveillance implies a lack of trust. Int4 said expectations of the subordinate's work load were already in place before the switch home. As long as the employees were still completing their necessary expectations, Int4 did not care about specific behaviors.

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<sup>2</sup> This quote (along with other quotes) could have been coded several ways. For example, Int3 has expectations about the degree of autonomy due to the nature of work. Further, other jobs could have a different nature which could adjust these expectations. In this case, it would be "better suited for rigid work schedules," could be also coded as a just way of surveilling.

Int4 gave some good insight on why they monitor subordinates in the way they do. Several comments such as, “I don’t know that anyone likes the concepts of big brother watching,” “Everyone wants to feel like they are being trusted and respected,” and “be a good supervisor, set expectations, manage your projects and people appropriately, and I think you will not have to worry.” In general, these quotes demonstrated a consideration from their employees’ perspectives. Int4 also mentioned things that were bothersome – no breaks between zoom meetings. “With the online meetings, if [your] schedule is open, and you’re home and supposed to be working – [you might have meetings] scheduled from 1-2, 2-4, 4-5 [with] no breaks. That is a huge issue for people when they’re trying to make an adjustment to the whole style of work which is different than being in the structured office.”

After coding and analyzing comments about trust and respect from Int4, I reflected on previous interviews. In particular, I was still considering why Int1 was so strictly monitored but not bothered by this. Int4 claimed people would not appreciate this type of surveillance.

It became apparent from the analysis that employees had a perception about what is fair. When Int4 discussed the lack of breaks between zoom meetings, this was thought of as unfair. Int4 said, “it might be 10 minutes [or] 15 minutes, but I need time just so I can process what I heard and what I was working on [...] before I switched gears and get ready to focus my attention [elsewhere].” Going back to the first interview, Int1 made comments justifying the employer’s strict surveillance such as, “this work wasn’t in classified space, but it was near classified spaces. So, that’s why that’s why those rules are in place,” and with a positive voice and, “the fact that they do have that kind of

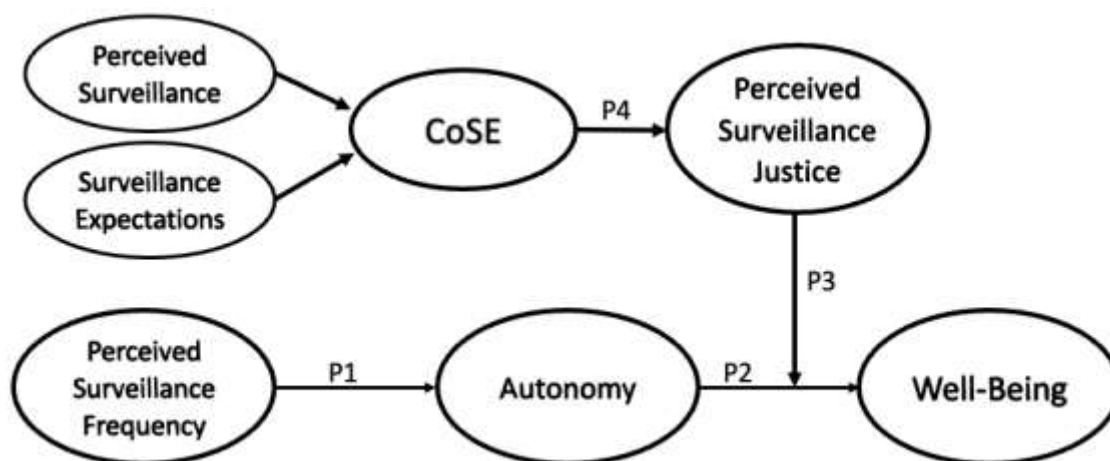
control really, I think helps people say accountable.” Though Int2 did not find the automated time-out system to be fair considering they were actively working. Consider this statement from Int2 “What aggravates the most within that is the fact that you can be working, like I can be, I’m just reading through data, scanning through it, and say I’m looking at the same 50 lines of an Excel file... if I’m looking at it for 60 seconds, it’s still going to time out because I haven’t scrolled through it. So that can be very agitating.”

Through these considerations and analysis of comments, the importance of perceived justice emerged. I then reviewed the literature to find different definitions and dimensions of justice, fairness, and similar constructs. There is not a clear distinction between fairness and justice; the two constructs are used interchangeably (Cohen-Charash & Spector, 2001; Colquitt, 2001; Colquitt et al., 2001; Folger & Cropanzano, 1998; Moorman, 1991). Further, there are several dimensions to justice, such as distributive, procedural, interpersonal, and informational justice (Colquitt, 2001). These justice dimensions are all described as how fair one perceives a given consequence (e.g., how fair is the distribution of outcomes, how fair is the procedure, etc.). I adapt these definitions to the context of surveillance; thus, I loosely define the justice of surveillance by what is perceived to be morally right or fair (as it relates to the surveillance). The emergence of perceived justice led to another iteration of reviewing all transcriptions and coding for justice-related comments.

At this point, the dataset was quite rich. I was able to begin theorizing about how the selective codes fit together. The selective codes I was analyzing at this point were surveillance characteristics, autonomy, perceived justice, and well-being. I began my efforts at inducing a theoretical model to explain my data. To theorize about how these fit



together in a model, I reflected on some of the main points in each interview, consulted with my dissertation committee, and reviewed the literature. It took several iterations of the model to realize that justice was moderating the relationship between autonomy and well-being. Further, it was at this point of analyzing justice comments that I considered what affects higher or lower perceptions of surveillance justice – if expectations of how one should be surveilled align with how they think they are being surveilled. This realization took yet another iteration of the data; I reanalyzed all previous transcripts to identify cases of expectations and justice that could have been missed. The induced model is shown below in Figure 4-2.



**Figure 4-2:** Induced Research Model<sup>3</sup>

Int5's discussion supported the model to a limited degree. Int5 did have a high degree of psychological well-being regarding their work. For example, consider the following quotes: "I've never worked so hard in my life," and, "While it was stressful for

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<sup>3</sup> CoSE is the acronym used for Congruence of Surveillance Expectations.

sure, it's kind of like what I thrive on. So, it was exciting." The organization itself showed support which Int5 appreciated, which supports my surveillance-related model. No novel surveillance-related findings were found in the fifth interview.

However, Int5's general teleworking experience was reported to be extremely negative. It was described as a "really, really bad time." Int5 said, "I always tell people that was probably the worst, however many months it was, I don't even remember a time in my life. Like, I probably need counseling because I get PTSD, honestly." Int5's negative experiences primarily stemmed from having to care for a child at home. Int5 said, "I get anxiety if I have to stay home with my child by myself again."

Apart from the time spent taking care of Int5's child, Int5 was able to actively work on their work-related tasks. The perception of the relationship with his/her supervisor was positive. "[Boss] has always been very good about that [being flexible]. And [boss] knows if [he/she] has to get us after hours, we're going to [be available]." While Int5 did demonstrate how things outside the organization's control can affect a person's well-being, my model still supported the well-being effects as it relates to the ways in which the organization interacts with the employee. Int5 reported they could effectively work from home. When asked about other distractions than the child, Int5 said, "Not for me. Um, I'm pretty like when I'm working, like in the zone," and "there's been times like, if like I had strep throat a couple of weeks ago and I worked from home then just because there was stuff that had to be done and that was fine." Therefore, the model clearly does not account for other non-surveillance-related distractions.

Int6 was a graduate student. As mentioned, this provides a unique perspective in the sense that a student's drive to achieve a goal is similar to an employee in an

organization (Clary et al., 2022). I thought applying the emerging concepts of surveillance in a unique context would give a chance for new patterns to develop or point to more limitations of the model (as Int5 did with personal factors). Even in the student-instructor relationship, the open codes from this analysis were consistent with my model.

Int6 even mentioned the word fair – an often used synonym for justice – a few times. I probed Int6 with open-ended questions related to the dynamics of coursework from home. Int6 mentioned instructors randomly calling on students to check to see if they were paying attention. This was intriguing to me as it seemed like a form of surveillance – the supervisor randomly checking on the behavior of the subordinate. When asked how Int6 felt about this, Int6 said, “I think it’s fair considering that we’re required to be there in class.” Int6 felt positive about their productivity in the online setting. Int6 mentioned being able to multitask and re-watch lectures a second time. Even though autonomy is restricted by the calling on names, Int6 had a relevant sense of well-being. This supports my proposition of justice moderating the relationship between autonomy and surveillance.

Although, not all of Int6’s teleworking experiences were positive. Int6 had negative experiences with the testing surveillance. The software used for testing from home was very restrictive and even invasive. Audio and video were strictly regulated – no employees were permitted to carry active audio or video devices. This was perceived as unfair by Int6. Consider the parenthetical comment in the following quote: “We were told that it tracks your eye movements. So, if your eyes deviated from the screen or they looked at the wall behind you, which is something that I frequently do during tests, is just kind of look around, like I think, it would flag you and report that to the teacher because

you could theoretically have notes painted on your wall.” Among other comments regarding the strict system and its tight surveillance, Int6 said the software was stressful. In short, no new findings related to my current progress emerged from Int6. I felt like I was getting close to theoretical saturation. I proceeded with one more interview.

Int7 described their supervisor as “super hands-off.” There was a lot of autonomy for Int7 regarding when and where to work. Int7, the human resources recruiter, is expected to correspond to leads within 24 hours. The time spent to achieve initial contact is monitored by their work system. Essentially, it would track the time spent for each task and notify the supervisor if the averages were particularly long. Then, the supervisor would meet with the employee to discuss the reason, “which is cool.”

Int7 had a high sense of well-being and enjoyed their job. Int7 said, “The company treats us so well.” Int7 also mentioned the positive relationships with other executives, fun team-building activities, and how the company values its employees. Int7’s open codes successfully fit into my model with no significant or additional changes to the relationship between the constructs.

Sampling can end when the researcher is no longer finding additional properties of their categories (Glaser & Strauss, 1967). This phenomenon is referred to as theoretical saturation. After completing the analysis from Int4, I had a model that emerged from the data. Three more interviews were completed. Apart from limitations (i.e., personal factors prohibiting work such as the child with Int5), no new findings emerged from the interviews 5, 6, or 7. This suggests theoretical saturation was achieved. Thus, with the last three (out of seven) interviews providing no novel findings, I am confident theoretical saturation was achieved.

## Results – RQ1

The grounded-theory methodology allows for contributions in several ways, as discussed in Chapter 3. One type of contribution is a detailed description. Rich and detailed descriptions are essential for theorizing; without properly defining the concepts in a theory, one cannot make meaningful conclusions from the theory. My first research question (RQ1) was, “*In what ways do employers surveil their teleworking employees?*” Due to the nature of the question, it is best to answer “what ways” through descriptive analysis.

### Behavioral-Based

In the context of surveillance, behavioral control is the philosophy of having a surveilling agent assert their power to guide the way in which others carry out tasks (Sewell & Barker, 2006). This management philosophy restricts the surveilled individuals from engaging in undesired behaviors. In other words, the supervisor is monitoring their subordinate’s behaviors (and/or outcomes they are producing). Applying the behavioral-based approach, the supervisor would specify both the behavior expected (e.g., productivity, availability, etc.) and the circumstances upon which the subordinate should behave (e.g., clocked-in, on work premises, etc.; Ball, 2010).

The data shows Int1, Int2, and Int6 all relatively high in the behavioral-based approach. Table 4-2 shows a list of quotes from each of these interviewees relating to the behavioral-based surveillance system in their organization. Int1 was required to track their behaviors in six-minute intervals. Int1 and their colleagues would submit their timesheets into a shared folder for the supervisor. Each of the colleagues could view each

other's six-minute intervals. I categorized this in behavior-based surveillance, do the high monitoring of activities when working.

Int2 and Int6 had an automated surveilling agent, in which both cases it was assumed to report activity to the supervisor. Int2's system automatically logged users out if there were 60 seconds of no activity. Int2's system actively monitors if the employee is actively working. If the behavior shows otherwise, the system logs the user out. When Int2 was asked if the employer knows how frequently the time-out occurs, Int2 said, "I honestly wish I knew, but I have no clue." Further, Int6's system uses a camera to track eye movement and a microphone to monitor the noise levels. Int6 is flagged when their behavior deviates from (a) eyes on the screen or (b) noises that occur in the environment.

Int2's automated time-out system was likely done for security purposes; although this is still a form of surveillance. A supervising agent is monitoring for a certain purpose. In several of the cases and discussion throughout this work, the purpose of surveillance is to ensure the employee is performing their work-related duties. In the case of Int2's automated time-out system, the purpose is for security reasons. Further, Int2 mentioned not knowing if the supervisor monitors the number of times employees are timed out.

Behavior-based monitoring, by its very nature, requires more frequent surveillance. Considering equal tasks given to different employees, monitoring the behaviors of an agent would require more attention. While the surveillance of the output of such a task would only be monitored once (to ensure output quality), surveillance from the supervisor or an automated, computerized agent would check on the behavior of the individual more frequently.

Table 4-2

*Behavioral-Based Surveillance Quotes*

<u>Quote</u>	<u>Interviewee</u>
Every six minutes you basically have to be able to account for. What you were working on when you did that, when, when you made that charge, that code.	Int1
if I think someone's, mischarging, I can look at their timecards, see what they, when they said they were where and what they were doing and for whatever reasons, keep them accountable.	Int1
And then they either keep a little paper record or you go and update it throughout the day for exactly, how much time.	Int1
If I'm looking at [the computer screen] for 60 seconds, it's still going to time out because I haven't [touched the computer].	Int2
Some teachers decided to just randomly call on people. So, like, you never knew, you just always had to be listening and other teachers attendance is required.	Int6
We were told that it tracks your eye movements [...] and it also would flag you if you made noise.	Int6

**Outcome-Based**

As we see in my data, monitoring the output is another way of governing subordinates to ensure they uphold their end of the exchange (to receive their compensation). This management philosophy allows for the employee to determine when and how their own effort can be directed at achieving the tasks. In laymen's terms, the employer is more concerned with the actual deliverable from the employee than when and how it gets complete. Although surveillance is typically thought of as a constant monitoring or watching, it can also be more infrequent. One can have the work-related efforts monitored merely by the quality of amount of output. Therefore, outcome-based surveillance fits in with my definition of surveillance. Surveillance does not have to be monitoring one's behavior; it can include monitoring one's *outcomes*.

Management by objectives is nothing new in either the private sector (Ruth & Brooks, 1982) or the public sector (Rodgers & Hunter, 1992). Management by objectives has three foundational principles: goal setting, participation in decision making, and objective feedback (Rodgers & Hunter, 1991, 1992). Goal-setting theory suggests goals and objectives help direct attention, effort, and actions toward achieving the goal (Locke & Latham, 1990, 2002). Other studies go as far as to claim when an individual has a high goal or objective to achieve, they often have a higher level of performance, as opposed to an easy goal (Latham & Locke, 2007). Participating in decision-making is said to improve worker satisfaction, morale, and performance due to the increase in self-expression, respect, independence, and equality (Blake et al., 1964; Likert, 1967; McGregor & Cutcher-Gershenfeld, 1960). Objective feedback is then given at the end of the evaluation period (Rodgers & Hunter, 1991, 1992).

When surveilling in the workplace, a manager can monitor the amount or quality of one's work-related efforts, attention, action, behavior, or output. By this definition, monitoring the quality of an employee's output has similar elements to management by objectives. The employee is likely to have a sense of the goal (or effort) needed to acquire the reward (objective feedback). Further, if the employee is given the luxury of making their own decisions on achieving the goal, surveillance of output would be similar to management by objectives. Output-based monitoring is still a form of surveillance. However, I consider there to be less frequent surveillance than when behavioral-based. As mentioned in the literature review, surveillance can be the monitoring of several factors, including employee deliverables.



Table 4-3 reports a list of quotes related to interviewees discussing outcome-based surveillance. For example, Int3 is not measured by the amount of time spent on his/her work: “Mine is outcome-based, and so you know it is based off the deliverable. If I hit different deliverables, that is where I am measured.” Indeed, Int3’s supervisor does not monitor Int3’s behavior getting to the output, “And it’s like last night I worked at midnight. That was not because somebody told me to work to midnight, it was because I had a task, and I wanted to continue on with it, and so I did.” Int3 said the creative work he/she does requires this tremendous flexibility; Int3 claims it is hard to wrap metrics around creative thinking.

Other interviewees had similar situations to Int3. For example, Int4 said their employees are measured on their output alone. Int4 said, “You’re not going to get fined that if we find out that you’re actually taking a walk at 9, 10, 11, o’clock when technically you’re actually supposed to be in the office the very structured in the office, but you’re actually taking a walk outside.” Int4 said they do not “big brother” their employees because the employees consistently fulfill the expectations. Int4 is also not supervised heavily by their supervisor when working from home.

Int5 had the flexibility to work in the evenings. Considering the quote, “I really had to shift my work time because in the mornings I tried to really dedicate to my son’s schooling,” demonstrates how as long as Int5 is completing their tasks, the time it takes, and the way in which it is complete does not matter. This allows for the flexibility to dedicate time elsewhere. Similarly, Int7 is given a goal to correspond with leads in under 24 hours. The manager was described as super hands-off (see appendix for more quotes

from interviewees). As long as Int7 is meeting their goals, the employer is happy and “doesn’t come down [Int7’s] throat.”

Table 4-3

*Outcome-Based Surveillance Quotes*

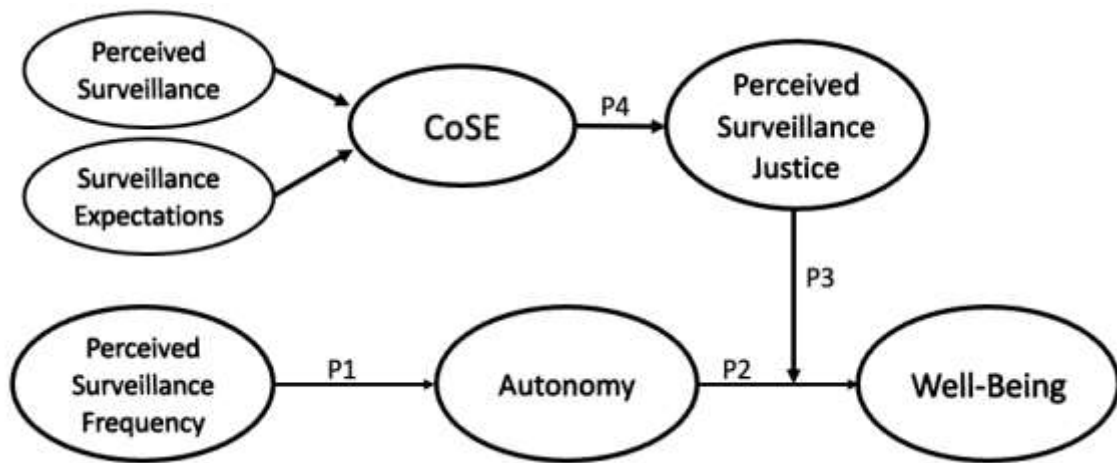
<u>Quote</u>	<u>Interviewee</u>
Mine is outcome based, and so you know it is based off the deliverable. If hit I hit different deliverables, that’s where I measured.	Int3
And it’s like last night I worked at midnight. That was not because somebody told me to work to midnight, it was because I had a task and I wanted to continue on with it, and so I did.	Int3
You’re not going to get fined that if we find out that you’re actually taking a walk at 9, 10, 11, o’clock when technically you’re actually supposed to be in the office the very structured in the office, but you’re actually taking a walk outside	Int4
Working from home, I felt like I had the ability to step outside, smell the fresh air, sit outside on the back porch for a few minutes, look at the tress, listen to the birds, give my mind something else to think about	Int4
I really had to shift my work time because in the mornings I tried to really dedicate to my son’s schooling	Int5
There’s not like a set time limit that we have, but our goal for our team is to contact them or review them within a day of them applying	Int7
as long as I get it done within 24 hours, then they are don’t they, my manager doesn’t like, come down my throat, you know?	Int7

These two types of surveillance found in my study differ. For instance, the amount of monitoring occurring. When one is only being monitored by their output, the surveillance occurs less frequently. On the other hand, when activities are being constantly monitored, surveillance is much more intense.

Next, I discuss the induced model that explains the process of how surveillance can affect well-being.

## Results – RQ2

My second research question (RQ2), “*How do these ways of surveillance affect the employee’s well-being?*” warrants more than a descriptive analysis. There are many variables affecting this complex question. To answer RQ2, I induced a model to visually demonstrate the process (see Figure 4-2).



**Figure 4-2:** Induced Research Model

The primary motivation for this paper was to understand the effects of surveillance on teleworkers. A teleworker is a geographically dispersed worker who uses a form of information and communication technology as a medium to deliver their work-related efforts (adapted from Fairweather, 1999). Teleworker definitions have varied in terms of the amount of time spent teleworking (Van Slyke, Tazkarji, et al., 2019).

I define surveillance as an agent monitoring the amount or quality of one’s work-related efforts, attention, action, behavior, and/or output (adapted from Ball, 2010).

Surveillance is typically done in social exchanges when there are two or more exchanging agents where one agent (e.g., the manager) must monitor the other agent’s (e.g., employee’s) effort or work. Surveillance ensures one agent’s exchange (e.g., effort

or work from the employee) is sufficient for the other (in the work relationship, this is one's compensation). It's also worth noting the surveilling agent can be an automated system – as we see in the case with Int2 and Int6.

There are countless ways and dimensions in which surveillance can occur in the workplace (as we see in the literature review from Chapter 2). Looking at one dimension, frequency, I include in my model a construct called perceived surveillance frequency. Perceptions about surveillance frequency relate to how often one thinks their actions, behavior, or output are being monitored. For example, one with low perceived surveillance frequency could be Int3. This participant claimed to only be measured every other week with their deliverables. Actions leading up to the deliverable were not monitored, which led to a low perceived surveillance frequency. On the other end of this relative continuum, high perceived surveillance frequency could be demonstrated with Int1's timestamp system. For every six minutes of work being tracked, Int1 must have documentation of their effort during that period. Given the high frequency of surveillance, this leads to a higher degree of perceived surveillance frequency.

One's need for autonomy is an individuals' need to have ownership of their behavior and feel psychologically free to determine their behaviors, control their environment, and make their own decisions (Ryan & Deci, 2002). Autonomy has been equated to one's ability to have free will (De Charms, 1968). According to self-determination theory (Deci & Ryan, 2000), having a sense of autonomy (among other constructs) is essential for well-being.

There is no consensus on what well-being is or how it should be measured (Ryan & Deci, 2001). Subjective well-being refers to the hedonistic view of what brings one the

least amount of pain and most pleasure (Kahneman, 1999). Psychological well-being (PWB) refers to one's fulfillment in the work they do and achieving their full potential (Waterman, 1993). Most organizational research uses the eudaimonic (PWB) approach to study employees' feelings of fulfillment in their jobs, roles, and selves at work (Wrzesniewski et al., 2003). This is not surprising as organization research – tailored towards organizational managers, decision-makers, etc. – is most valuable if the study provides enablers for employees achieving their fullest potential. Given the nature of my study being managerially oriented, I define well-being as an employee's positive mental, physical, and general health as well as their experiences of job satisfaction (Nielsen et al., 2017).

Inconsistent definitions are still being discussed regarding the dimension, definition, and scales for justice (See Chapter 2 for details on the justice literature). For the sake of my dissertation, I define perceived organizational justice as one's perceptions about how fair the treatment one gets from the given organization (Greenberg, 1990). Admittedly, empirical literature typically defines justice by its formative dimensions (distributive, procedural, interpersonal, and informational). These different dimensions of justice (dimensions also covered in Chapter 2) can be different types of "treatment," as my definition mentions. I generalize the definition due to the already complex nature of my model. I do expect further research to address which of these dimensions are more/less important in my model; however, accounting for this is beyond the scope of this manuscript. Further, including a four-dimensional mediator in a grounded-theory methodology might assert a sort of accuracy I do not intend. Though my generalized

definition of justice might reduce the rigor of my model (since it does not consider the different effects of dimensionalities), the basic theorization remains.

I define surveillance expectations by extending my current definition of surveillance. Thus, surveillance expectations are how one would presume their work-related efforts (i.e., attention, action, behavior, and/or output) should be monitored by their supervisor. Considering the complexity of surveillance definitions and perspectives, the expectations could relate to different factors of surveillance. For example, one could have expectations on the surveillance type (behavior-based or outcome-based) or frequency (high or low) needed to monitor their work. The constructs definitions are summarized in Table 4-4.

Table 4-4

*Construct Definitions*

<u>Construct</u>	<u>Definition</u>
Autonomy	An individual's ownership of their behavior and feeling of psychologically free to determine their behaviors
Congruence of Surveillance Expectations (CoSE)	The fit between (a) how one perceives they are being surveilled and (b) one's expectations of how they should be surveilled.
Perceived Surveillance	Perceptions of how one's actions, behaviors, or outputs are being surveilled
Perceived Surveillance Frequency	The perception of how often one's actions, behavior, or output is being monitored by the supervising agent.
Perceived Surveillance Justice	One's perception on if the current surveillance is a morally right or fair way to monitor work-related activity
Surveillance	The way in which a supervisor monitors the amount or quality of one's work-related efforts, attention, action, behavior, or output
Surveillance Expectations	Expectations of how one's actions, behaviors, or outputs should be surveilled
Teleworker	A geographically disperse worker using a form of information and communication technology as a medium to deliver their work-related efforts
Well-Being	Psychological well-being (PWB) in which one is optimally functioning in acts that bring fulfillment and realize one's potential

Further, there is likely to be some understanding of how one perceives they are being surveilled by their supervisor. If this perception of surveillance fits with how they expect to be surveilled, the result is a high congruence of surveillance expectations (CoSE). For example, Int1 mentioned it is easy to slack off in the workplace when working from home. Int1 said they expected the employer to track all activity and monitor the employees. Int1 expected there to be rules in place to prevent the slacking off. This expectation was matched when Int1 discussed the nature of their time sheets;

every six minutes of work were recorded. If anyone mischarged their time, they could face negative consequences.

On the other hand, if one perceives the surveillance in a different way than they expect to be surveilled, there is low CoSE. For example, Int2 had more surveillance activity than what was expected for the job. Int2's system would surveil behavior and remove users with longer than 60 seconds of inactivity. Int2 mentioned some of the work-related tasks such as reading data on an excel file or skimming an article for a marketing post. Although the expectations were not explicitly listed by Int2, they were implied by the comments of not being able to complete work-related tasks due to the consequences of inactivity on the computer.

According to the literature (which my data supports), autonomy is restricted by surveillance (Ryan & Deci, 2000). My model shows this reduction in autonomy would reduce one's well-being. The model also posits employees are likely to have expectations of how their work-related processes should be monitored by their supervisor. If one feels they are being surveilled in the way they should, there is a congruence between expectations and perceptions – a term I refer to as congruence of surveillance expectations (CoSE). As CoSE increases, one develops more positive perceptions of justness towards a supervising agent (this could be the supervisor or the organization, depending on the context). Perceptions of justice will, in turn, moderate autonomy's effect on well-being; increased justice will reduce the effect of autonomy on well-being. Thus, as Figure 4-2 demonstrates, if an employee perceives a higher sense of justness (due to the congruence between their expectations of surveillance and how they perceive



they are actually surveilled), the employee is willing to forgo significant degrees of autonomy without a decline in their well-being.

The following subsections provide an explanation of how the data induced the previously described model. Note that the following explanations are examples of demonstrations of the arguments behind my propositions. There were additional interviews, quotes, interpretations, and the like that support each proposition. Though not every single interview quote and (or even interviewee) was analyzed in the following sections, their quotes are coded and reported in the appendix. Rather, I place emphasis on several of the most influential quotes to demonstrate my interpretation.

### **Proposition 1**

Michel Foucault argues the object of surveillance is watched to ensure order (Foucault, 1975). In his 1995 translated book, Foucault lists several examples of what is meant by “order.” Among this list reads, “...if they are workers, there are no disorders, no theft, no coalitions, none of those distractions that slow down the rate of work, make it less perfect, or cause accidents” (Foucault, 1995; pp. 201). Foucault’s general idea is surveillance represents an exertion of power on subordinates to prevent any deviation of the agent in powers’ expectations. In the context of my study, an employer – the agent in power – surveils primarily to ensure the work expectations are being fulfilled (in both outcome- and behavioral-based). Therefore, surveillance, by its very nature, is intended to reduce the autonomy of malicious behaviors (from the perspective of the employer).

Surveillance can vary in degrees, which I refer to as surveillance frequency. Frequently monitoring of efforts (high surveillance frequency) is associated with behavioral surveillance as one is actively monitoring the behaviors associated with the

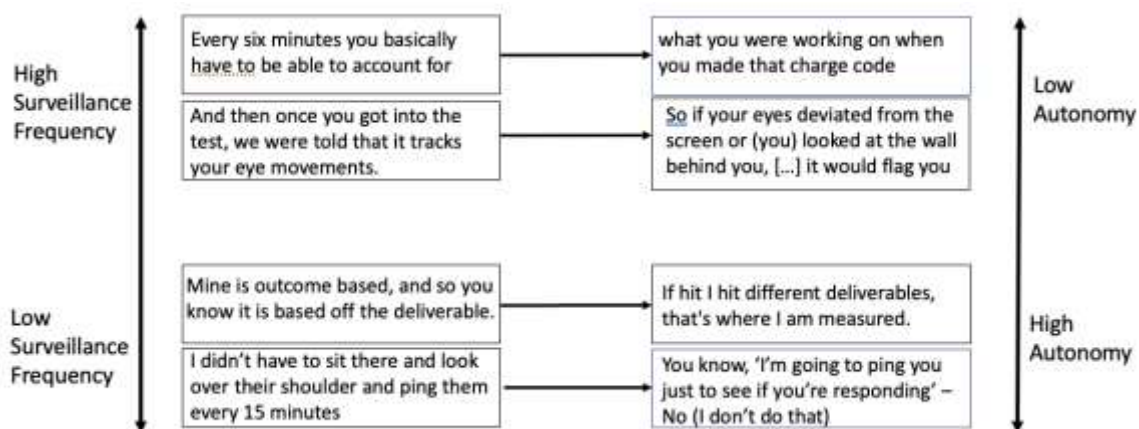
efforts. Subsequently, infrequent monitoring of activities (low surveillance frequency) is associated with the outcome-based surveillance as one is only being monitored when a deliverable is provided.

Throughout the interviews, I found consistent support for the negative relationship between surveillance and autonomy. That is, high surveillance frequency will reduce one's perceived autonomy. There were 35 interview statements that were coded as high surveillance frequency and low autonomy; in 20 cases, I found low surveillance frequency to increase autonomy (see Table C-1 in Appendix for an exhaustive list of quotes). Admittedly, this finding is not surprising or new; rather, this is a confirmation of prior literature and intuition.

This finding was relevant even within subjects. For example, Int1 discussed his/her experience with work-related meetings. Before teleworking, Int1 would attend the meetings and respectfully pay attention to the discussion even though s/he was "not doing a whole hell of a lot." These meetings involved discussion irrelevant to Int1's duties (Int1 was quoted about the technical talk that not many people understood). After the telework shift, Int1 gained more autonomy and could multitask during the meeting. When in-person, Int1 had to actively listen (low autonomy), but when working from home, Int1 did not have his/her camera on (higher autonomy). This is related to surveillance by the nature of Int1's actions and feelings of restricted autonomy. In the meetings in person, others can tell if it looks like Int1 is paying attention or not. I assume Int1 wanted to appear respectful to their colleagues, so Int1 would watch and listen as they speak – even though it was not the behavior of choice (as shown in the quote). Int1 transitioned to using teleconferencing. Int1 said the camera was not required to be turned on, so the

ability to see if Int1 is actively paying attention or working on another task is not present. This resulted in Int1 being able to multitask during meetings, something not done in the face to face meetings.

Figure 4-3 shows examples from the quotes relating to surveillance and autonomy. In Figure 4-3, each textbox has an excerpt from one of the interviewees. The adjacent textbox is from the respective interviewee. For example, the first quote, coming from Int1, might have read, “Every six minutes you basically have to be able to account for and what you were working on when you made that charge code.” As you will note in Figure 4-3, this sentence was evaluated as high on the surveillance frequency continuum and low on the autonomy continuum.



**Figure 4-3:** Quotes Related to Proposition 1

Int1's job characteristics consistently showed a high rating on the surveillance frequency continuum. The employer requires Int1 (and his/her colleagues) to report their activity every six minutes. As they point out, this is an effective way of holding the employees accountable because it prevents “slacking off.” The comment regarding the

inability to slack-off was coded as a reduction in perceived autonomy since one does not feel they have the option.

It is also worth noting the nature of the group meetings Int1 had to attend. Before teleworking, Int1 had to attend in-person meetings and respectfully pay attention to the discussion. However, when working from home, they felt as though they were not as involved in the meeting. This allowed for multitasking while in the meeting (an improvement of autonomy compared to the previous process). In this case, being in person allows for others to visually see one another – which might be associated with higher surveillance frequency since every move is visible by others. Since Int1 mentioned you had to respectfully pay attention, this suggests a restriction in their autonomy to multitask in the meeting. When at home, Int1 can multitask during these meetings since the camera is off, implying with lessened surveillance, one has higher autonomy.

Furthermore, all colleagues of Int1 are available to view each other's work reports, which hints at an even higher degree of surveillance frequency. This was followed up with yet another comment of accountability. Though accountability (among other constructs coded with autonomy) is different from autonomy, it lies on the same general principle of having the ability to make decisions with or without considering another agent (employer or colleague perceptions in this case).

Similarly, Int6 had restricted autonomy in their test-taking experience. Int6 was required to have a camera actively monitor their eye movements – perhaps the highest degree of surveillance frequency I saw. This significantly restricted Int6's perceived autonomy. Shown in Figure 4-3, Int6 felt like they could not look away from the screen without getting flagged.

On the other hand, Int3 and Int4 had different experiences. Quotes from Int3 and Int4 are in the bottom quote in Figure 4-3. Int3's evaluation from their supervisor focuses entirely on output. Regardless of the amount of time, when the work occurs, or how the job is complete, Int3 is measured on output quality alone. This type of surveillance is considered low frequency due to the one-time measure of the deliverable's quality. As demonstrated here, the nature of Int3's surveillance allowed for much more perceived flexibility and autonomy to complete the task.

Similarly, Int4 manages their employees through their output. Int4 sarcastically said, "You know, 'I'm going to ping you just to see if you're responding' – No (I don't do that)." Int4 explained s/he did not care if the employees were actively at their computer every 15 minutes – as long as the job was getting done.

The quotes provided in Figure 4-3 are a demonstration of the support from my data. See Table C-1 in the appendix for a list of more codes. In Table C-1, the surveillance column is rated High or Low to demonstrate how I evaluated the surveillance frequency being discussed. The autonomy column is rated Restricted, Neutral, or Increased to signal how the surveillance frequency affected their autonomy of work processes.

From the literature, my data, and my analysis, I propose the following:

***P1:** The higher perceived surveillance frequency, the more autonomy will be reduced.*

## **Proposition 2**

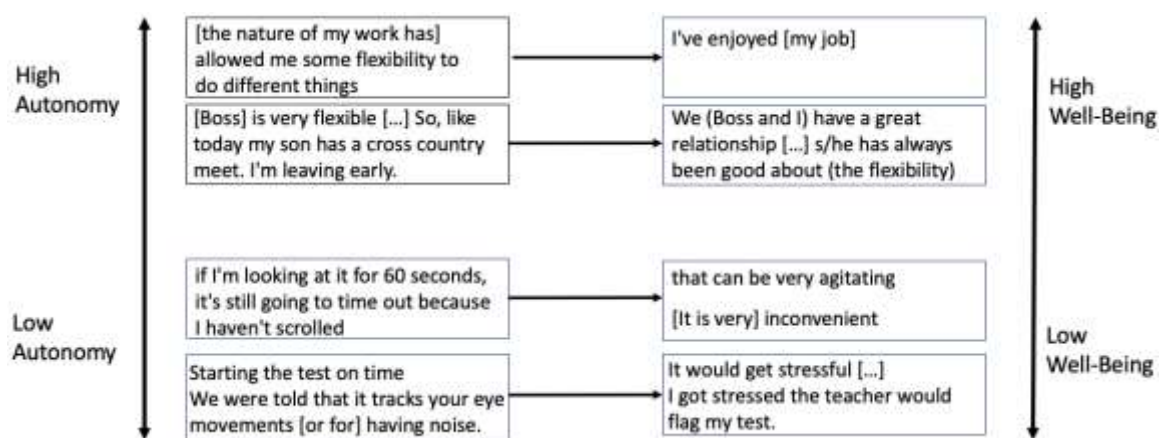
Current literature consistently supports the relationship between autonomy and well-being. For example, self-determination theory (Ryan & Deci, 2000) claims humans

have psychological needs that must be met to achieve well-being, one of which is autonomy. Perceived autonomy relates to someone feeling they have can make their own decisions about behaviors. Rather than one's actions being pushed or pulled around by outside forces, high perceived autonomy is when one feels they can freely determine their actions. Self-determination theory suggests when one does not have a sense of autonomy, it prohibits a certain degree of well-being. This finding has been repeatedly supported empirically (Ryan & Deci, 2019a).

Though there were instances where this relationship did not hold (which I elaborate on in a further section), I found general support for this relationship throughout my interviews. 47 of the 49 high-autonomy cases also related to high well-being.<sup>4</sup> 30 of the 34 high-autonomy cases were coded with high well-being. Figure 4-4 shows a few examples from the quotes relating to autonomy and well-being. As in the case with Figure 4-3, each textbox has an excerpt from one of the interviewees with an adjacent textbox from the respective interviewee. The top two quotes in Figure 4-4 are from Int3 and Int5, respectively. In both cases, the interviewees discussed high degrees of autonomy.

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<sup>4</sup> As shown in Chapter 2, measuring well-being is not consistent in the literature. I do find aspects that relate to well-being such as the optimally functioning, job satisfaction, positive feelings/tone in voice, etc.



**Figure 4-4:** Quotes Related to Proposition 2

Int3 is expected to have output every few weeks that is evaluated, which I rated to be a high degree of perceived autonomy. For example, Int3 can work at any time, any day; Int3 can pick and choose what days and even what times are worked. Further, the hours are not logged or tracked. Later in the interview, Int3 mentions the nature of creative work and how hard it is to wrap metrics around productivity. The nature of this flexibility actually allows Int3 to pick up other part-time jobs. For example, Int3 teaches as an adjunct professor at a local university – a demonstration of the amount of flexibility in the job (which I equate to high autonomy).

Int3 said they do not track their own hours, nor does the employer care. Int3 felt very happy about this autonomy, quoted here saying, “I’ve enjoyed it.” Other positive words were used to describe Int3’s work dynamics (regarding flexibility and autonomy), such as “I love it.”

Although Int5 had quite a negative experience with teleworking, the relationship with the supervisor and organization remained positive. Int5 is quoted in Figure 4-4

describing and even giving an example of the autonomous choice of leaving early. This perception of autonomy led to a positive working relationship.

The bottom two quotes in Figure 4-4 are from Int2 and Int6, respectively. Int2 discusses the automated time-out restrictions in company software. After (60) seconds of inactivity, the system would log the user out – an aggravating feature for Int2.

Another example from Int2’s autonomy restriction (though not surveillance-related) is when Int2 said their direct supervisor was slow to communicate (see Table C-2 in appendix). Often, the information was essential for the workflow to continue. As such, Int2 had inadequate autonomy to proceed with work processes; it required information from another source. This made Int2 feel not as connected, and the lack of communication was a “hindrance,” which I generalize as low well-being.

Reflecting on Int6’s quote in the previous section, there is an automated surveillance system used to proctor tests for Int6. Figure 4-3 demonstrated how this restricted autonomy. Figure 4-4 highlights Int6’s response to this loss of autonomy. Int6 discusses the strict time limits on the testing software on time and the system monitoring eye movement and noise levels. Int6 is quoted mentioning their eyes naturally wander when thinking, things can occur preventing the test from starting on time, or even others in the household causing noise. This was considered stressful, as Int6 says multiple times. The system’s attempt to restrict autonomy (with the intent of reducing cheating on the test) drastically reduced the well-being of the interviewed user.

Table C-2 in the appendix provides an exhaustive list of phrases openly coded. The column labeled “Support?” denotes whether the quote (open code) supports the positive relationship between autonomy (high/low) and well-being (high/low).



From the literature, my data, and my analysis, I propose the following.

*P2: When a teleworker's perceived autonomy is reduced, there will be a decrease in their individual well-being.*

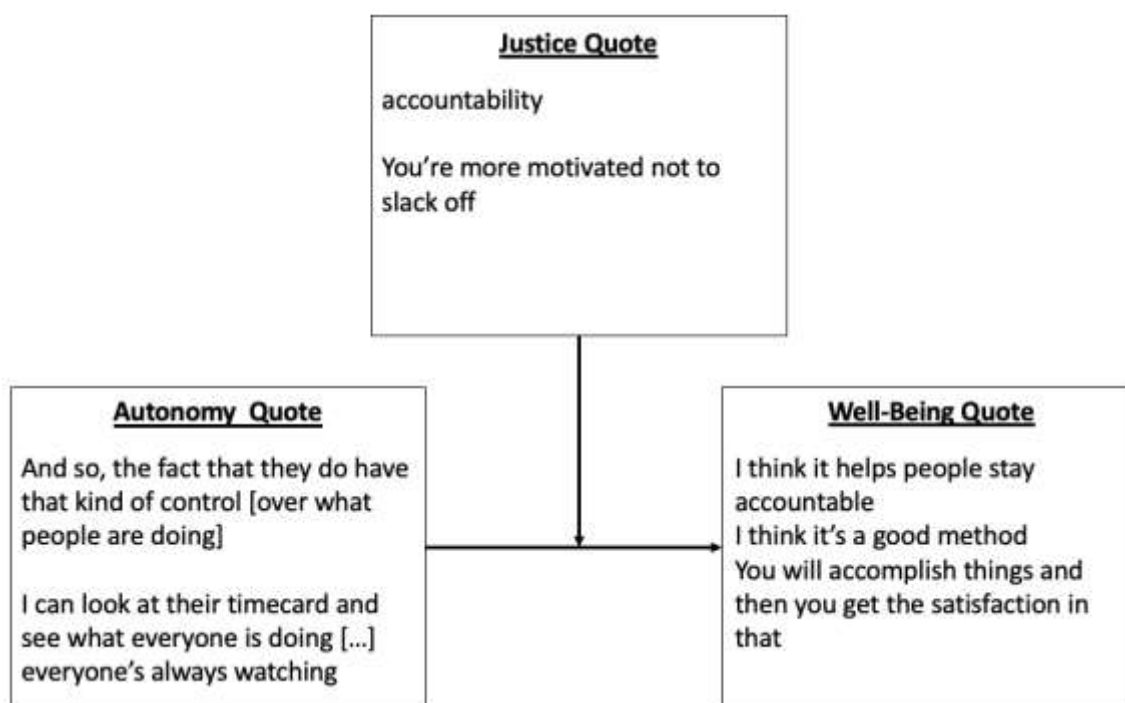
### **Proposition 3**

Chapter 3 discusses the methodology and the importance of not letting previous literature blind the emerging nature of the grounded-theory method. On the other hand, going into this study completely blind would have been just as bad – if not worse. Therefore, I approached the relationship between autonomy and well-being with expectations it would be upheld, though I noticed some situations were contradictory. Given this relationships' establishment in the literature, this was an intriguing finding. Autonomy did, in general, have a positive relationship with well-being in my dataset. The unexpected insignificant cases raised an interesting thought: there is a variable that can nullify this relationship.

Baron and Kenny (1986) claim a moderating variable may be present if a relationship is not as significant as expected. A moderator can be a qualitative or quantitative variable that affects the relationship between an independent and dependent variable. Moderation implies the causal relationship between two variables will change (become stronger, weaker, inverse, etc.) after the addition of the moderator variable in the model.

The data did not support the autonomy to well-being relationship in all cases. One case had restricted autonomy but very high well-being (another with still moderate autonomy). To explore this, I reanalyzed the slices of data with restrictions in autonomy due to surveillance. In particular, I compared cases of high and low well-being (with

autonomy restricted). After several iterations with the data, it became apparent when employees perceived the restrictions of autonomy as just, it did not significantly affect their well-being.



**Figure 4-5:** Quotes Related to Proposition 3 (Int1)

Figure 4-5 analyzes several quotes from Int1, all relating to the 6-minute timecard being required and available for all to see. In this anecdote, we asked Int1 to discuss his/her feelings about the high surveillance frequency. Here are quotes marked in restriction of perceived autonomy due to the strict timecards: “and so the fact that they do have that kind of control really, I think helps people stay accountable,” and “I can look at their timecards, see what they [charged] when they [charged it], where [they charged it],

and what they were doing. And for whatever reasons, [I can] keep them accountable. So, [...] everyone's always watching.”<sup>5</sup>

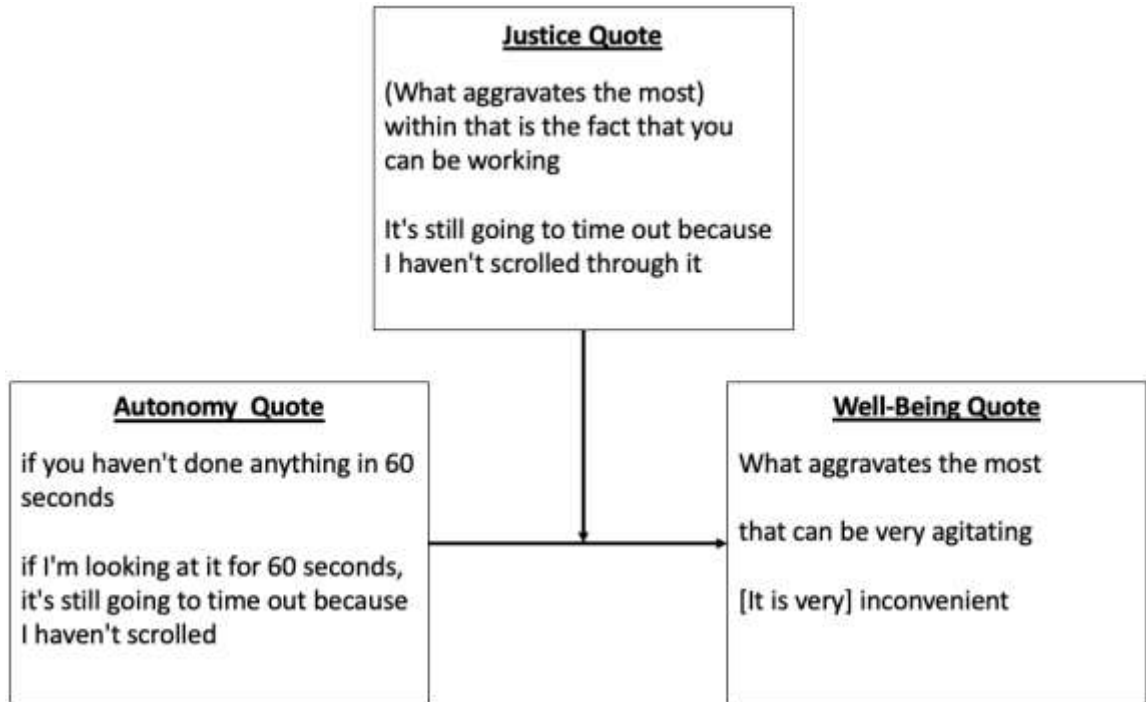
What is interesting, as mentioned earlier, is that the restricted autonomy does not affect well-being like literature would suggest. Int1 mentioned they thought it was actually good because “I think it helps people stay accountable,” and “It's a good system.” To further my point on the description of psychological well-being, I included a quote about optimal functioning: “you will accomplish things, and then you will get the satisfaction in that.”

Perceptions about the justice of surveillance were determined to be the moderating variable in this relationship. Int1 felt this as fair, or just, due to the ability to hold others accountable. It prevents employees from slacking off work, which “no one feels good about.” In essence, the high surveillance is framed in Int3's mind as a fair system for the employees.

Int2 demonstrates an example of a restriction of autonomy that has little to no justice. Figure 4-6 highlights quotes from Int2 regarding the automated time-out system.

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<sup>5</sup> When Int1 refers to a “charge,” it refers to the activity being recorded on a timecard which was used for client billing.



**Figure 4-6:** Quotes Related to Proposition 3 (Int2)

Int2's autonomy is restricted when working from home by a time-out system on the company-provided computer. The time-out systems restrict the autonomy of the user through the requirement of activity on the computer. The quotes here show if there is inactivity for 60 seconds, the system will log the user out. This restriction in Int2's autonomy is quoted as being aggravating, agitating, and inconvenient.

Regarding justice, I induced a lack of perceived justice regarding this system. Int2 mentioned working on work-related tasks when the system timed out. Examples include reading an article for work, reading an email on the computer, or even reading data on an excel file. Even though the employee is working, the system's restrictions do not count this as activity. Therefore "the fact that you can be working" demonstrates a lack of justice from the organization due to the employee performing their assigned tasks. Further, the second comment in the justice quote relates to actually using the computer

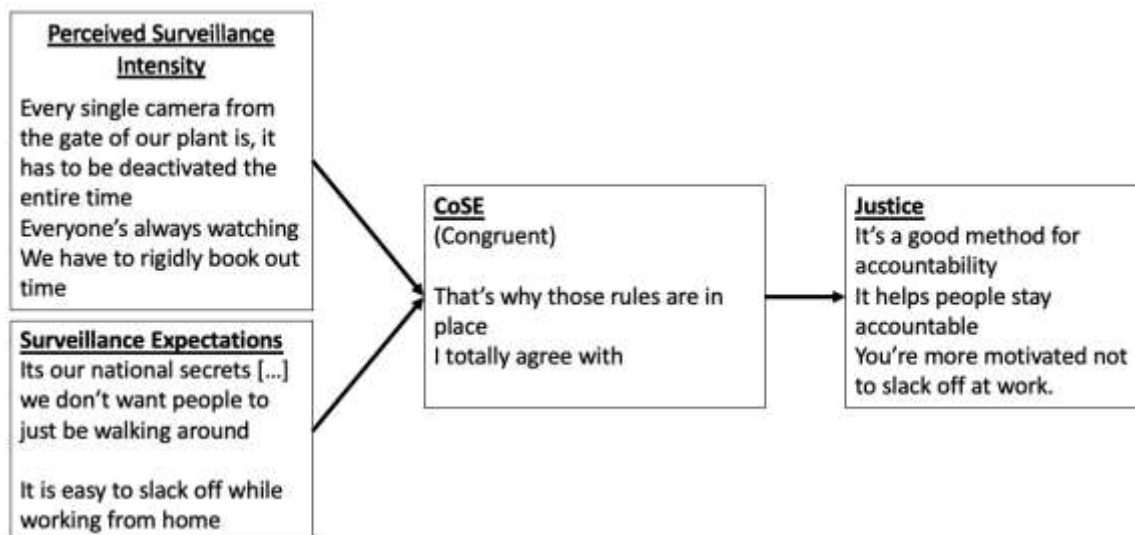
but not touching the mouse (e.g., reading the screen). Table C-3 in the appendix shows the list of all cases related to this proposition.

From my data and analysis, I propose the following.

***P3:** When perceived justice increases, the relationship between autonomy and well-being is weakened.*

#### **Proposition 4**

According to my thinking in Chapter 2, surveilled subjects likely have expectations on how they should be surveilled. Congruence of surveillance expectations (CoSE) is a construct that emerged explaining the fit between how one expects to be surveilled and they perceive they are being surveilled. As such, if one expects their work does not need to have a high degree of surveillance frequency, but there is indeed a high degree of frequency from the surveillance, this will result in a low CoSE. Conversely, if the expectations do not align with how one perceives they are surveilled, CoSE is lower. I found the congruence of expectations (from the surveilled agent's perspective) is the strongest predictor of perceived justice. Figure 4-7 highlights quotes from Int1 regarding the strict nature of surveillance in the office and when working from home.



**Figure 4-7:** Quotes Related to Proposition 4 (Int1)

Int1 had a high perception of congruence. Due to the formative nature of CoSE, it is easiest to demonstrate this by its antecedents: perceived surveillance and surveillance expectations. In Int1's workplace, the expectations are high. This is shown in comments such as, "it's our national secrets [...] we don't want people to just be walking around." This expectation for strict surveillance was indeed matched with high surveillance frequency, "Every single camera from the gate of our plant [must] be deactivated the entire time." Another non-telework discussion occurred with Int1. Int1 discussed the strict surveillance on plant, including the use of radio frequency identification (RFID) tags on everyone on the plant. This RFID surveillance monitors the locations of everyone in the area – demonstrating yet another example of high surveillance frequency.

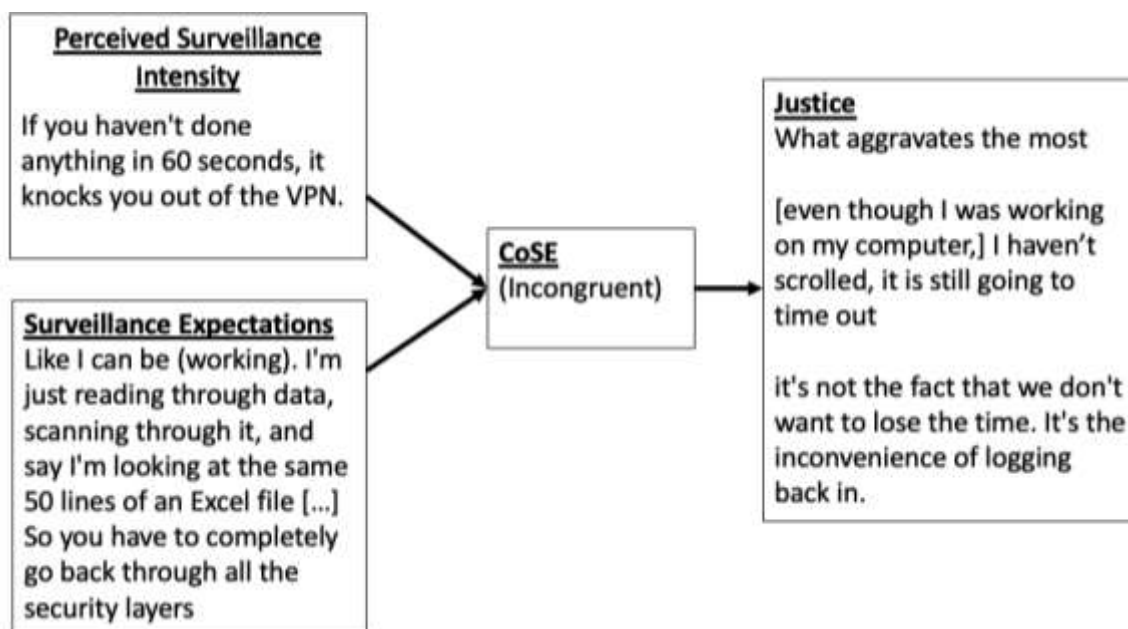
Apart from the on-site example, when working from home, there was also a high surveillance frequency. Int1 and their colleagues were required to report every 6 minutes of work, which was subsequently shared with coworkers and supervisors. This led to the quotes, "everyone's always watching," and "we have to rigidly book our time." These

comments reflect a high degree of perceived surveillance frequency. This type of surveillance was met with expectations of how work should be done from home.

Expectations-related quotes include the ability to slack off when working from home and thus a need to be strictly surveilled.

This high congruence of expectations led to a high amount of perceived justice through quotes such as, “I think that it’s honestly a good method of accountability because it’s very easy to slack off in the workplace, especially working from home,” and “if you know that you can’t [slack off, or else] you will get caught [...], then you’re more motivated to not slack off at work.” Since the high congruency of Int1’s expectations, the actions from the organization were perceived as just.

On the other hand, Figure 4-8 shows Int2 having a low perception of congruence of surveillance expectations. The quotes in Figure 4-8 all concerned the automated, time-out surveillance system on Int2’s computer.



**Figure 4-8:** Quotes Related to Proposition 4 (Int2)

Int2 had a low degree of CoSE. As mentioned, this is formed by one's perceptions of surveillance frequency and expectations. Int2's system was coded as high on the surveillance frequency continuum. The automated time-out system required a user's computer to log out if there were 60-seconds of inactivity. Further, there were several steps of log-in security that users were required to authenticate, including passwords and rotating two-factor authentication tokens.

This surveillance type, in this case, did not align with Int2's expectations. For example, Int2 mentioned the fact they could be doing work-related tasks such as reading an article for longer than 60 seconds. Even in the case that they are actively using their computer, such as reading data on an excel sheet, "say I'm looking at the same 50 lines of an excel file [...], it's still going to time out."

I induced much injustice from Int2's perspective on this. The fact that Int2 was actively working would suggest they are meeting what should be the requirements from the employer. The 60-second timer to boot users out was not capable of considering work outside of computer activity. Merely due to the fact<sup>3</sup> that Int2 "[hasn't] scrolled, it is still going to time out," which seems a bit arbitrary, forcing users to go back through the several layers of security, which required more work from the employee. The quote "it's not the fact that we don't want to lose the time; it's the inconvenience of logging back in" also shows a high degree of perceived unfairness.

Table C-4 in the appendix lists all open codes related to proposition 4. The expectations column marks if the quote shows congruence with expectations and perceived surveillance; the justice column marks if the quote is perceived as just. In seemingly every case, the expectations were congruent with what is perceived as fair.



From my data and analysis, I propose the following.

***P4: Congruence of surveillance expectations will increase justice perception.***

## **CHAPTER 5**

### **CONCLUSION**

#### **Overview**

Since the start of the pandemic, a large portion of the world's population has been exposed to a new workplace: their home. By using information and communication technologies, employees are given more flexibility in where their work needs to be done. After the mandated teleworking situation began, many employers have realized the associated advantages of having employees work from home. Organizations could now save on resources associated with the cost of having employees work in the office (e.g., office space, electricity bills, etc.). Even my data showed benefits from the employees' perspective, such as saving time on the commute, saving time getting ready for work, being able to customize their workspace, or saving on transportation costs.<sup>6</sup> While the shift in the working environment was seen as beneficial for some, some had negative experiences. Having an inadequate home workspace, personal distractions at home (such as other family members), or even the network connections can all be barriers to thriving in the new work arrangements. The novelty and ubiquity of this context led the motivation to understand how employers can effectively manage their employees when

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<sup>6</sup> This is not an exhaustive list benefits from my findings. While many of these benefits were initially coded, they were not a main focus of the model or theorizing.

working from home. Further, I placed emphasis on the effects these forms of surveillance have on well-being.

Interpretations from my data on teleworkers resulted in a rich description of two types of surveillance and a theoretical model that demonstrates how surveillance can indirectly affect one's well-being. I found the ways in which one surveils a teleworker to be generally associated with behavioral- or outcome-based surveillance. For behaviorally surveilled employees, constant productivity, instant availability, or other behavior-related measures over an extended period is the nature of their work expectations. In this case, the manager monitors their behavior and assesses whether they were indeed productive, available, etc., in the agreed-upon period. For output-based employees, the output is typically monitored for quality-expectation purposes (excluding timeframe, cost, etc., type expectations).

Surveillance in my study relates to how one agent monitors another. The monitoring is typically done to see if the other agent is fulfilling previously set expectations. Managers surveil the employee's behaviors or output to ensure their work meets expectations to receive compensation. Social exchange theory (SET) is a popular framework for understanding social interactions and social structures (Emerson, 1976). SET claims exchange relations create social structures (Cook & Rice, 2006). Applying this framework to the workplace, the employment relationship is a social relationship with an effort-reward exchange. In exchange for the employee's work, the employer will pay the employee an agreed-upon amount. Therefore, it is reasonable to expect the employer to evaluate the effort's quality to receive the reward.

Interestingly, surveillance in the traditional (i.e., in the designated work-provided office) can drastically differ from surveillance of one who is in their own home. When working from a remote location, the employee's work-related efforts are evaluated electronically. This might cause one's feelings about the surveillance to differ if working from home. For example, consider a group of hourly-paid employees who are tasked with data entries. In the office, the supervisor could sit across the room to watch their behavior or monitor their screens. The supervisor could even put an electronic camera up to catch an employee not working as expected. This same type of behavioral-based surveillance might have differing effects for employees working from home. When in one's home, I suspect there are boundaries the supervisor would not be permitted to cross. One might justify putting a camera up in the employer-owned office but not in one's personal home. Even the visibility of screens at all times could feel more invasive than if the employer is standing in the back of the room to ensure the workers are being productive. If the screen is shared from home, it could feel as if the employer is sitting at your desk with you.

My results suggest it is the congruence of surveillance expectations that affects whether one thinks the surveillance is justified. Congruence of expectations is formed from the fit between one's expectations of how should be surveilled and how one thinks they are surveilled. If one thinks their work-related tasks should be monitored in a certain way, the surveillance, regardless of how strict it is perceived, is justified.

Importantly, my model includes *perceived* surveillance. Perceptions of surveillance are not always aligned with the actual surveillance. One could think since their employer is watching through the cameras or tracking all active behaviors on the workers' computer, etc., even if that is not actually the case. If Int2 perceives their

supervisor knows and cares the employees are being timed out, this might have outcomes different than if Int2 knew the supervisor never knew. Int2 might feel that every 60-seconds of inactivity is tracked and reported to the supervisor. The perception of surveillance need not be equal to actual “true” surveillance (i.e., Int2’s supervisor might not know or care if employees are timed out).

It is this perception of how one thinks they are being surveilled that causes different effects. One can easily draw parallels between surveillance and Bentham’s Panopticon (Bentham, 1843). The panopticon is designed where the watcher in the middle is able to see all prisoners at any given time (Bentham, 1843). This inflicts what Foucault (1995) refers to as *panopticism* – the automatic (psychologically induced) restraint of one’s behavior. Panopticism restricts behavior merely by the unilateral knowledge of the current state of surveillance. One assumes they are being watched at any given time (implying perceived surveillance). The notion of panopticism is similar to the effects of perceived surveillance in my study. The potential to be watched at any given minute and not knowing if the supervisor is watching can make one assume they are being surveilled at all times.

One dimension of surveillance – the perceived frequency of surveillance – is shown to restrict autonomy. The goal of panopticism is to make prisoners think they are always watched. Therefore, panopticism decreases the autonomy of prisoners; they must assume there is never a moment free from surveillance. My results present similar findings: high perceived surveillance frequency restricts autonomy teleworkers. Intuitively, this makes sense. If autonomy is ownership and freedom to determine

behaviors, then one's freedom to do non-work-related actions is restrained when the supervisor is watching.

As Int1 points out, "it's very easy to slack off in the workplace, especially working from home." The mandated teleworking situation forced employees to work in their own personal homes. For the worker that is used to having boundaries between work and home, this creates an interesting dynamic. Employees are forced to work in an area that is typically private and full of autonomous decisions (autonomous from work, that is). Now, with work-related tasks expected to be completed at home, the organization restricts employee autonomy in an environment where they are used to having autonomy.

Restricting autonomy restricts one's ability for self-determination (Ryan and Deci, 2000). Self-determination theory (SDT) claims autonomy is an innate, psychological need (Ryan and Deci, 2000). SDT shows autonomy is essential for well-being (Deci and Ryan, 2019). The relationship between autonomy and well-being is well-established in the literature. Much of my data also supported this relationship, as one would expect.

Although, there were a few quotes that, when coded, did not fit the literature's well-established relationship. Int1's autonomy was found to be rather restricted, but Int1's well-being was not reduced. I found when one finds the restriction of autonomy from surveillance as just, or fair, the well-being is not affected. This finding suggests that a manager can effectively restrict the autonomy of a teleworker without a loss of well-being, so long as the restriction of autonomy is justified in the teleworker's opinion.

Though my emphasis is on surveillance, the contexts of my constructs might be applied in a more general sense. For example, Int5's negative experience was a result of

having their autonomy restricted by their child at home. Consider the following quotes: “If I wanted to take a nap, he wasn’t letting that happen,” and “it was very hard mentally to kind of navigate being a mom working from home and trying to make sure my son’s schooling didn’t fall behind [...] I tried to really dedicate to my son’s schooling because he was in kindergarten. So, it’s not like he could just do it on his own.” Quotes regarding the child’s schooling and restriction on Int5’s autonomy were not included in the analysis of the hypothesis, but it does help point to the generalizability and support of this relationship.

### **Contributions**

Current literature on surveillance is typically rooted in a few assumptions. For example, my literature review points to several studies considering being in the same geographical location, allowing for physical surveillance of bodily behaviors. Of course, an entire body of literature focuses on surveillance from a distance by means of information and communication technologies (ICT). Even then, most of the electronic surveillance papers assume a) employees are on a physical location provided or agreed upon by their employer – justifying the ethicality of surveilling the organization’s resources or permission for remote-agreed upon location, b) the surveillance is completely covert, and the employee is unaware they are being monitored, or c) an employee is working from completely remote with clear guidance on their expectations (example given in Chapter 2 is the call-center employee). These assumptions of the surveillance literature were challenged due to the novelty of our COVID-19-induced, mandated teleworking situation.

This work is an exploratory attempt to understand this novel and ubiquitous context. Indeed, the research questions were motivated by a worldwide pandemic forcing the world to adopt unique processes that many workers, and even entire organizations, were not ready for. Employees were sent home with little guidance as to how to adjust to the new way of doing things. Further, managers were faced with little guidance or prior experience in managing their subordinates remotely. My model sheds light on some of the countless constructs that can play a role in this new, complex phenomenon.

I also provide much detail on the interviewee's responses. Regardless of the applicability or validity of my interpretations, the rich description of this phenomenon is a contribution in and of itself. Zahedi et al. (2006) conducted a grounded theory approach to understand cultural dimensions in websites. Being one of the first to consider cultural differences in websites, they were able to identify and categorize signifiers. These findings were later able to be used in other theorizing efforts to understand cultural/gender differences, implications, and values (e.g., Borrero et al., 2014; Cyr & Head, 2013; Srite & Bennett, 2008; Trauth, 2013). Therefore, my results and descriptions of each of the transcriptions might serve value to others wanting to theorize on the same, or a similar, topic.

Take, for example, Int1's comment on the visibility of the timesheets by coworkers. Int1 said, "if I think someone's mischarging, I can look at their timecards." This implies a more frequent use of surveillance. Surveillance frequency refers to how often one's work-related tasks, outputs, behaviors, or other measure characteristics are surveilled. This quote also mentions the use of coworkers able to see one's work-related efforts, which I do not theorize about. If one is interested in studying some type of peer



surveillance, this might be of interest even though peer surveillance was not used in the model. Another example could be one interested in researching the use of automated surveillance in which no human agent is monitoring activity. Earlier in section 4.3.1, the automated surveillance in Int2 and Int6's experience. The context and response from these forms of surveillance may serve as useful to one wanting to explore the nature of this phenomenon.

Managers can influence employee well-being (Kelloway & Barling, 2010). It is safe to assume employee well-being improves employee productivity and, in turn, organizational performance. This assumption is also supported in the literature. Jiang et al. (2012) found, in a meta-analysis, positive and significant relationships between investing in employees (i.e., skill-enhancing HR practices, motivation-enhancing HR practices, and opportunity-enhancing HR practices) and positive organizational outcomes (e.g., human capital, employee motivation, operational outcomes, financial outcomes, etc.). Other management scholars claim employee well-being and performance are correlated (e.g., Nielsen et al., 2017; Van De Voorde et al., 2012; Bakker and Demerouti, 2018). Therefore, findings that improve our understanding of employee well-being have indirect, economic benefits.

From a humanistic perspective, this work also serves as an ethical contribution. Significant changes faced during the pandemic have caused rapid shifts in the work environment. Since many organizations were required to meet social distancing guidelines, employees were given little notice about how their new work environment was going to look. We, as scholars, educators, and business professionals, should understand how decisions about managing subordinates affect their sense of well-being.

Changes in work and conditions surrounding work have the potential to decrease employee well-being (Guest, 2017). Thus, with a shift like the one we have just faced, utmost consideration should be given to employees and their feelings about the new work environment. Research on understanding factors affecting employee well-being places emphasis on the individual human's interest rather than mere employee productivity or organizational performance.

As Wiesche et al. (2017) point out, there is not a unique and generally accepted set of GTM procedures. This can make it difficult for researchers to choose the appropriate procedure(s) to use. Further, because of the often-restricted word limit in academic journals, there are limitations on the level of detail one can provide regarding their analysis, idiosyncratic thinking, and interpretations. Throughout Chapters 3 and 4, I provide detail in my decision-making process.

### **Theoretical Contributions**

Self-determination theory (SDT) is an influential<sup>7</sup> theory for understanding factors that affect well-being, specifically autonomy (Ryan & Deci, 2000). SDT posits that having innate psychological needs (i.e., competence, autonomy, and relatedness) satisfied improves one's motivation, mental health, and well-being (Ryan and Deci, 2000). Deci and Ryan (2000) write on page 229, "we assert that there are not instances of optimal, healthy development in which a need for autonomy, relatedness, or competence was neglected, whether the individuals consciously valued these needs. In short, psychological health requires satisfaction of all three needs; one or two are not enough."

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<sup>7</sup> Influential, in this case, is measured by citation count. Ryan and Deci's cited paper on self-determination theory (Ryan & Deci, 2000) has received over 47,000 citations, according to google scholar.

These needs are, as they claim, are necessary conditions for psychological well-being. Satisfying these needs is associated with the most effective functioning.

My results also supported this relationship between reduced autonomy and decreased well-being. Therefore, combining (a) my demonstration of surveillance reducing autonomy with (b) the well-established claim autonomy is essential for well-being, one could assume surveillance<sup>8</sup> would reduce well-being.

It is important to consider the subjective nature and inability to perfectly measure these psychological constructs. Classical test theory (CTT) explains the inherent error accumulated from measurement error, observation error, or even random error. Therefore, according to the paradigm of our field, we can never fully understand one's true level of such psychological constructs; we merely make estimates of their values and weighted effects on other constructs. In essence, there may be a statistically significant effect perceived autonomy has on well-being, with all else held equal. Even then, to what extent would one's autonomy need to be restricted to begin to reduce psychological well-being at an observable amount? Further, the subjective nature of the paradigm of our field makes it impossible to control another impacting variable; the "all else held equal" would be impossible to achieve in the current social science paradigm.

While I do not intend to discredit the relationship between autonomy and well-being, which has been supported heavily in the literature (Ryan & Deci, 2019; Vasconcellos et al., 2020), there are limitations in nearly every social science theory. Identifying boundary conditions for commonly accepted relationships is beneficial for the

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<sup>8</sup> Surveillance in this case was limited to the perceived frequency of surveillance. Other surveillance dimensions and their potential effects are also discussed in future research.

field's understanding (Busse et al., 2017). My findings suggest there are instances where autonomy can be constrained without negatively affecting well-being – implying the potential for moderating variables in the well-established relationship. This is an interesting theoretical contribution. Finding a case of well-established relationships that can be nullified brings new consideration to our previous understanding. My data shows that when one perceives the surveillance as just, it weakens the effect autonomy has on well-being. In the case of Int1, the reduced autonomy has virtually no effect on well-being.

The analysis showed that, in some cases, one can still have high psychological well-being when autonomy is constrained if it is deemed just. Perceptions of surveillance justice refers to how fair one thinks the nature of surveillance is. Therefore, if an employee sees the surveillance restricting their autonomy as just, the negative effect on their well-being is weakened. The emphasis on perceived justice is important for theory. If theory considers how justice perceptions can affect other constructs and relationships leading to well-being, one might be able to find different ways of improving performance without costing employee well-being. For example, prior theory would have suggested anything that reduces the autonomy of employees would lower their well-being. Thus, a manager might consider a cost-benefit analysis of any acts that reduce autonomy (costs of reduced well-being and benefits of restricted autonomy). Considering the role justice plays in this relationship, other forms of management that might inherently reduce employee well-being could be reconsidered.

Perceptions of what is just are deeply rooted in philosophical ideologies that have been argued for centuries (Kohlberg, 1981; Northouse, 2021; Rawls, 2020). People are

likely to have an opinion on if something is just, which can have different antecedents and consequences (Erdogan, 2002).

Expectation congruence was found to have the most influence on justice perceptions. If how one expects to be surveilled is congruent with how they perceive they are being surveilled, this creates a high degree of congruence, which leads to increased perceived justice. Theory should consider how this concept of congruency between expectations and perceptions as it relates to other work-related characteristics.

As mentioned, CoSE has a positive relationship with perceived justice of surveillance. CoSE and perceived justice of surveillance differ mainly by the way consequences are related to each construct. For example, one's expectations of how they should be surveilled might not be congruent with what they perceive. There may or may not be a consequence that results from the incongruence. On the other hand, justice perceptions of surveillance is one's opinion on whether or not the surveillance is fair. A consequence (in this case, surveillance) occurred and was evaluated in terms of the fairness. The result of the evaluation is the perceived justice of surveillance.

Again, my findings here claim the congruency between surveillance expectations and the *perceived* surveillance is the predictor of perceived justice. It is important to note the perception of surveillance frequency does not always equal actual frequency; in some cases, one might not know with certainty the true nature of surveillance. My findings suggest that when one perceives the surveillance is frequently occurring, it will have a different effect on autonomy than the perception surveillance is occurring less frequently – regardless of the actual, true surveillance.

If a supervisor uses a form of covert surveillance, it is reasonable to expect the surveilled subordinate's behavior would not be affected (due to the covertness).

Conversely, if one thinks they are being surveilled, one might be inclined to change their behavior.

### **Practical Contributions**

The novelty of this exploratory research gives insight to decision-makers as they design and implement telework practices. The research questions were motivated by a worldwide pandemic forcing the world to adopt unique processes that countless workers, and even entire organizations, were not ready for. Employees were sent home with little guidance as to how to adjust to the new way of doing things. Further, managers were faced with little guidance or prior experience in managing their subordinates.

I described different forms of surveillance managers could potentially use. A manager can surveil one's output or behavior. For one to have their behavior monitored would require a higher degree of surveillance frequency – how often one's actions, behavior, or output is monitored. Consider an hourly-paid employee expected to answer phones for a call center. If this employee is not available when expected to be “on the clock,” the call might not be answered. Thus, behavioral-based surveillance would ensure the employee fulfills the organization's expectations of availability. Ensuring one is attentive and available would require a higher frequency of surveillance. On the other hand, if an organization hires a blogger to have a weekly article written, the editor might only monitor the quality of the weekly blog posts, which I would consider to be output-based surveillance. Since the work is evaluated once per week (i.e., when the expected weekly article is submitted), the surveillance frequency is much lower than the previous

anecdote. Of course, this is an oversimplification, and there can be instances of high surveillance frequency in the outcome-based surveillance and vice versa.

I found the amount of surveillance frequency affects one's perceived autonomy. Take, for example, Int6's camera-proctored examination for a student. By surveilling a student while taking a test, the proctor intends to prohibit any undesired acts (i.e., restrain autonomy) of the test taker (e.g., from having the autonomous decision to cheat). In the work context, a supervisor in charge of ensuring productivity is tasked with surveilling this productivity work of their employee(s). Behavioral surveillance, perhaps due to the panoptic-nature of this form of surveillance, reduces autonomy to prevent an agent from being unproductive, unavailable, or any other behavior not meeting the expectations of the supervisor. On the other hand, when a single output is the phenomenon being monitored, the autonomy is only intended to ensure alignment of the compensation and deliverable qualities (assuming these outcomes are not given as frequently). Thus, more autonomy is given in terms of when, how, or where the efforts took place.

As I have shown, if employees are likely to change their behavior, it is due to perceived surveillance as opposed to actual surveillance. A supervisor should consider how each of these types of surveillance are perceived by their employees. In other words, effective surveillance might not include any actual surveillance at all. Take, for example, Int2's time-out system: Int2 was unsure if their supervisor knows when the systems times out. Yet, due to the unknowing nature, Int2 assumed the supervisor did track how frequently employees were timed out. This altered Int2's behavior and psychological well-being. It would be interesting (and, in my opinion, surprising) to see if the supervisor actually watched the logs.

Research shows the presence of a security camera can trigger approval-seeking behavior (Van Rompay et al., 2009). A store owner might install fake security cameras to deter theft. This could save the owner resources from having to install the working system and actually monitor it to catch thieves. This concept can be applied to the workplace too. A manager could have a system is designed to make one think surveillance is occurring; this could come in the form of a timing out system, telling employees the computer screen communication software for employer visibility access, or any other design to increase perceived surveillance.

Managers will therefore need to consider if they want to catch an unproductive employee or change their behavior. Suppose the manager wants to reduce the autonomy of employees, the previous examples work. If the manager wants to catch deviant employees, a more covert type of surveillance would be useful. According to my findings, it can be inferred an employee that perceives little surveillance is occurring would have increased perceived autonomy. Thus, a manager could have a secret type of surveillance that watches employees without the employee's knowledge. The covert nature of this surveillance might be better suited for managers wanting to catch behavior rather than deterring it. Ethical principles for types of surveillance should be considered.

Supervisors should surveil employees with clearly set expectations. Reducing ambiguity and unclear expectations can have indirect benefits for employees and employers. I found to be the biggest predictor of justice to be congruence in expectations. Congruence of expectations is formed from the fit between (a) how one perceives they are being surveilled and (b) one's expectations of how they think they should be surveilled. With the emphasis on perceptions of surveillance, it is important for a



supervisor to attempt to uncover their subordinates' perceptions and be clear on their expectations.

Equally important, an employer might be able to adjust expectations of how one should be surveilled. A simple discussion as to why the surveillance is needed might have changed Int2's attitude about the time-out system. In the case of Int2, the perceptions are that the supervisor has access to how frequently one's system is timed out. If these perceptions are not intended, clearly communicating how and why the system is in place might change Int2's perceptions of the surveillance – which would indirectly affect the perceived justice of the surveillance. Alternatively, Int1 seemed to have a clear understanding of the process of surveillance and a reason for why it was in place: to increase accountability.

### **Future Research**

In-depth, qualitative research offers a unique value. Several scholars, including myself, value the rich understanding of studying specific cases. This type of work demonstrates strong internal validity relevant in forming the constructivist philosophical nature of our field. Due to the limited sample size, the work presented runs a risk of low generalizability. Follow-up studies can be conducted to test how this model holds up across a larger sample in the population. By starting with the model presented, scales from previous literature can be adapted and used. A quantitative study will help validate and improve the generalizability of my induced model. Any proposed relationships that do not statistically hold will shed light on where the model can be improved.

Further research should test my model for causality. My model proposes a narrative framework of the working relationships (propositions, as I call them) among the

constructs that emerged from the data. While these constructs and respective relationships were primarily driven by the data, grounded theory methodology allows for reflecting on the literature after the model has emerged (Urquhart, 2013). The combination of data then literature to verify the directionality allows for a more plausible model. However, the method is not without its limitations in the causal inferences made.

Evidence for causality is established after three essential pieces are specified: temporal sequence, concomitant variance, and nonspurious association (Zikmund et al., 2013). Temporal sequence refers to the time order of events; demonstrating temporal sequence is achieved by showing the cause must happen before the effect. Concomitant variation refers to when two phenomena occur at the same time systematically. Nonspurious association means a covariation between the two phenomena is not due to some other variable.

A hypothetical, spurious example could be Int7's well-being, or highly rated perceived justice could be due to other variables apart from the congruence of surveillance expectations. For example, Int7 said, "Like sometimes we'll take off half a day on Friday and go do an activity, or we'll have a whole day of like, just like getting to know each other and like, bonding and stuff," and "even the executive leadership here is super down to earth and cool. Like I rode the elevator with the vice president of our company, and [we] just chit chat like it was just like a friend of mine." Int7's well-being could have stemmed from the positive experiences with executives, team-building activities, etc. Speculatively, there might be some sort of trust that is built with the organization. It would be interesting to see if a construct such as trust would allow more invasive techniques of managing. In other words, if one trusts the organization, they

might be less concerned about the ways they are surveilled. This claim is far beyond the reach of my data, but it highlights an example of further research into other variables influencing my model.

An interesting comment from one of the interviewees was the use of workarounds by their coworkers. There was a mention of taping a worker's mouse to an oscillating fan to prevent the time-out system from booting users out. The idea of using a workaround could perhaps be to regain autonomy from a perceived unfair surveillance system. Int2 said, "I have friends and other companies as well that do different things just to keep themselves logged in." Research on the motivations, types, and consequences of workarounds would be essential for policymakers and supervisors to understand. I suspect new business processes (i.e., teleworking) create new opportunities for things such as these workarounds.

Further research on justifying the type of surveillance would be interesting. A manager might be able to shift the justice perceptions in their favor by providing compelling justifications for the surveillance. According to my data, this change in perceptions would eliminate the effect of autonomy on well-being. Research could look into how to go about doing that and the consequences of this. Also, further research could investigate what leads to these justice perceptions. My data found expectations to be a significant factor in the relationship, but it is likely not the only influential factor.

Consideration of what forms expectations could serve value to decision-makers. For example, it may be that the expectations stem from something the organization can do in the early stages of recruitment, hiring, or training. Conversely, there may be

variables the organization cannot control for. Merely identifying the biggest factors to surveillance expectations might allow for easier identification of these expectations.

As briefly mentioned in the previous section, surveillance needs to be at least somewhat under the radar if you want to catch people in the act. Thus, managers will need to consider if they want to catch an unproductive employee or simply change their behavior. If the manager wants to catch deviant employees, a more covert type of surveillance needs to be used. Further research should consider how one decided to use covert surveillance or not. Ethical principles of covert surveillance should be considered.

Conversely, if a manager wants to change employee behavior and restrict autonomy, a form of false surveillance could be used – one that the subordinate perceives high surveillance when there is little actual surveillance. Similar to covert surveillance, research should elaborate on how to decide to use this type of surveillance along with its ethical principles. Apart from questionable ethics of covert surveillance, such approaches could ultimately be counter-productive.

Speaking of “high surveillance” in the previous section, further research could uncover aspects of surveillance other than frequency. For example, the idea of a higher-level, formative construct could emerge. For example, *surveillance intensity*<sup>9</sup> could be formed by several factors, such as a combination of perceived frequency, invasiveness, and data sensitivity. A higher-level construct might be more informative for those wanting to understand surveillance teleworkers.

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<sup>9</sup> Though I have not seen anything in the literature on surveillance intensity, this is just a hypothetical example of what might exist in this relationship.

### **Limitations**

As mentioned, the sample size limits the generalizability of my findings. Though I only had seven participants, my work does serve as a start for a potential quantitative study for establishing the external validity of my model. If the model were to hold up with a large sample size, the model would gain more credibility. Urquhart suggests stopping data collection when theoretical saturation has occurred (Urquhart, 2013). I am confident I reached theoretical saturation as major concepts ceased to emerge. Though I have much data to support each of my propositions (see Appendix), more samples might have eventually enlightened overlooked aspects of the phenomenon.

Another way to improve the reliability of my work is my own idiosyncratic theorizing process, coding, and other subjective interpretations. Much qualitative work is interpretive and subject, which can inherently limit reliability. However, this is typically overcome in cases like a grounded-theory study by having multiple individuals (e.g., co-authors, paid third parties, etc.) review or replicate coding procedures. If the same findings hold true after review or replication by others, this suggests a much more objective data analysis, improving reliability and justification for my interpretations. Due to the nature of the dissertation, I was the only one to read the transcripts and openly code what I thought were meaningful excerpts.

My sample is the limitation of full-time employed individuals. No part-time employees were studied in the sample, which might be interesting for further research. All employees worked full time (about 40 hours a week) with varying degrees of time spent teleworking. One could assume part-time employees typically work the “busy” jobs that require monitoring of their actual behavior or availability as opposed to outcomes.

Thus, due to the nature of part-time jobs, surveillance might come in a significantly different way (i.e., more restriction on autonomy).

Further, all interviewees were involved with an organization with numerous levels of hierarchy. This implies a certain size of the organization worthy of having several degrees of hierarchy. In other words, no small organizations, start-ups, or otherwise self-employed type individuals were analyzed in this study. Intuitively, the nature of a start-up company might contribute to very different degrees of perceived justice. As mentioned, some perceptions of justice are directed personally at the manager, while others might be directed only at the organization rather than an individual supervisor.

I interviewed citizens in various regions of the United States. Samples with the same contextual dimensions, such as location, might limit the applicability of the findings. For example, Germany has more strict regulations on what types of data can be collected (Schwartz, 2002). While Germany and the United States both have advanced telecommunications, German law contains more protections for citizens under the telecommunications privacy laws (Schwartz, 2002). The difference in laws and cultures may have differing effects on perceived surveillance and perceived justice of the surveillance. If an individual is in a country where their privacy is abused by the government, they might perceive more surveillance as more restricting to their autonomy. Considerations of employees' country and their cultures serve as considerable value to the field and can be valuable in establishing the replicability of the model (e.g., Ma et al., 2020).

Further, I did not interview two people from the same organization.

Interorganizational analysis might have clarified the variations between constructs like perceived surveillance and actual surveillance.

### **Conclusion**

The goal of my work here is to understand the psychological processes behind surveillance and the effects surveillance has on well-being, specifically in the context of teleworkers. My work is motivated by the COVID-19 pandemic mandating teleworking across the world. Many suggest that teleworking arrangements have been beneficial and will not entirely end after the pandemic. My work is an early exploratory research effort on how individuals feel about being surveilled when they are working from home.

I conducted seven in-depth interviews with individuals who are working from home. The results are two-fold. First, I provided a description of the two types of surveillance – behavior- and outcome-based surveillance. Next, I create a visual model that demonstrates how surveillance can interact with other constructs to affect well-being.

My findings pose several implications. My data suggests teleworking employees are going to have expectations on how they should be surveilled. If these expectations are matched with how they perceive the surveillance, there is an increase in perceived justice of surveillance. Thus, a manager should work to understand the employee's expectations. Being able to inform the employee why certain rules are in place may aid in creating more CoSE. On the other hand, finding the expectations cannot be shifted, a decision-maker in the organization might be able to adjust the surveillance used. The data also shows this perceived justice to weaken the relationship between autonomy and

well-being. This suggests if one sees the surveillance as just, an employee might not mind their autonomy being restricted.

Another interesting point is the distinction between perceptions of surveillance and actual surveillance. Perceived surveillance affects how people work, regardless of what is actually being surveilled. The presence of surveillance capabilities might make one assume they can be used at any time. Therefore, managers should give much consideration on how their employees perceive the surveillance, as this can have an indirect effect on well-being.



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**APPENDIX A**

**INTERVIEW GUIDE**

<b>Do you use company equipment, or do you perform your at-home work on your own devices?</b>
<b>How do you feel about working from home?</b>
<b>Tacit knowledge sharing impacted? (information embedded in the social dynamics)</b>
<b>What are your duties when you work at home?</b>
<b>How flexible do you feel your at-home workday is for you?</b>
<ul style="list-style-type: none"> <li>• How do you set your schedule with the company?</li> </ul>
<ul style="list-style-type: none"> <li>• If assigned a new task, how flexible is your schedule to complete it?</li> </ul>
<ul style="list-style-type: none"> <li>• How do you “clock-in/clock-out”?</li> </ul>
<ul style="list-style-type: none"> <li>• How much control, time, format, etc., over each task?</li> </ul>
<b>What are your motivations for the duties you engage in?</b>
<ul style="list-style-type: none"> <li>• Are you motivated by the need to achieve or feel productive?</li> </ul>
<ul style="list-style-type: none"> <li>• Or, are you more motivated by the need to avoid being viewed as <i>unproductive</i>?             <ul style="list-style-type: none"> <li>○ Do you have to stay busy at work to avoid showing <i>unproductivity</i>?</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Do you feel working from home enhances your work-related strengths or reduces them?             <ul style="list-style-type: none"> <li>○ What about work-related weaknesses?</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Is it fair how your employer decides who can work from home and who has to come in to work?</li> </ul>
<b>Do you feel there are clear boundaries between work-life and home-life?</b>
<ul style="list-style-type: none"> <li>• Do you feel your employer is violating personal boundaries that infringe on your home-life? How does that make you feel? Do you do anything to counter that infringement?</li> </ul>
<ul style="list-style-type: none"> <li>• How often does your employer contact you during your at-home work hours?</li> </ul>
<b>Does your employer monitor you as you work at home?</b>
<ul style="list-style-type: none"> <li>• How do you feel about being monitored?             <ul style="list-style-type: none"> <li>○ Do you have any ethical considerations?</li> <li>○ Do you consider how they monitor you to be an invasion of personal privacy?</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Does being monitored affect your work?</li> </ul>
<ul style="list-style-type: none"> <li>• Do you feel there are better ways to monitor the work you do? Ways that are more fair to you? Less intrusive?             <ul style="list-style-type: none"> <li>○ If yes, how would you prefer to be monitored?</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Do you have the option to avoid the surveillance tactics used by your employer?             <ul style="list-style-type: none"> <li>○ If given the option, would you do away with employer monitoring while working at home?</li> </ul> </li> </ul>
<b>Do you feel connected with your colleagues?</b>

<ul style="list-style-type: none"> <li>• When you have a question about your job, is it easy to reach out for help from a coworker? A manager?</li> </ul>
<ul style="list-style-type: none"> <li>• Are you able to offer help to other coworkers or employees when they need it? What kind of help do they need (task and/or personal)?</li> </ul>
<ul style="list-style-type: none"> <li>• Do you know if any of your coworkers are violating work at home protocols?</li> </ul>
<p><b>We want to know about your perceived state of ‘well-being.’ We are interested in learning about the things that make you feel comfortable, happy and productive. What contributes most to your own personal sense of well-being when you are working at home?</b></p>
<p>Are you feeling reasonably happy?</p>
<ul style="list-style-type: none"> <li>• Do you have confidence?</li> </ul>
<ul style="list-style-type: none"> <li>• Do you have self-worth?</li> </ul>
<ul style="list-style-type: none"> <li>• Are you able to enjoy normal activities?</li> </ul>
<p>Are you feeling capable?</p>
<ul style="list-style-type: none"> <li>• Able to concentrate</li> </ul>
<ul style="list-style-type: none"> <li>• Have enough sleep</li> </ul>
<ul style="list-style-type: none"> <li>• Feeling that I am playing a useful part in the firm.</li> </ul>
<ul style="list-style-type: none"> <li>• Feeling capable of making decisions</li> </ul>
<p>Are you dealing with adversity well?</p>
<ul style="list-style-type: none"> <li>• Not feeling stressed</li> </ul>
<ul style="list-style-type: none"> <li>• Able to overcome difficulties</li> </ul>
<ul style="list-style-type: none"> <li>• You feel able to face up to problems</li> </ul>
<p><b>Cause and effect questions that help us understand process and construct interaction.</b></p>
<ul style="list-style-type: none"> <li>• What things about work make you feel happy?</li> </ul>
<ul style="list-style-type: none"> <li>• What things about work impede your effectiveness?</li> </ul>
<ul style="list-style-type: none"> <li>• What aspects of your job do you worry about?</li> </ul>
<ul style="list-style-type: none"> <li>• How does feeling comfortable with your workplace contribute to your effectiveness?</li> </ul>
<ul style="list-style-type: none"> <li>• How does feeling unhappy at work prevent you from being effective.</li> </ul>
<ul style="list-style-type: none"> <li>• What things could help you avoid being unhappy with your work?</li> </ul>
<p>What sort of personal benefits to you expect from doing your work? How does your work contribute to your life goals?</p>



## **APPENDIX B**

### **HUMAN USE APPROVAL LETTER**



OFFICE OF SPONSORED PROJECTS

## MEMORANDUM

TO: Mr. William Clary, Dr. Craig Van Slyke and Dr. Tom Stafford

FROM: Dr. Richard Kordal, <sup>Box</sup> Director of Intellectual Property & Commercialization (OIPC)  
rkordal@latech.edu

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: December 11, 2020

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

HUC 21-045

**"Working from Home and Surveillance Awareness:  
The Presence of 'Teleopticon'"**

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on December 11, 2020 and this project will need to receive a continuation review by the IRB if the project continues beyond December 11, 2021.* ANY CHANGES to your protocol procedures, including minor changes, should be reported immediately to the IRB for approval before implementation. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of Sponsored Projects.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Sponsored Projects or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

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## **APPENDIX C**

### **OPEN CODES**

**Table C-1***Open Codes Related to Proposition 1*

<b>Int</b>	<b>Surveillance</b>	<b>Autonomy</b>	<b>Quote from interviewee</b>
1	High	Restricted	I think that it's honestly a good method of accountability, because it's very easy to slack off in the workplace, especially working from home
1	High	Restricted	We will be like "Hey, someone needs to reach me. I have to go to and get out of this area and, and, go and call them on a landline."
1	High	Restricted	I mean, they can pull every single one of his emails. They pulled all of his internet traffic. They pulled everything down to the minute.
1	High	Restricted	So, yeah, every six minutes you basically have to be able to account for. What you were working on when you did that, when, when you made that charge, that code.
1	High	Restricted	And so, the fact that they do have that kind of control really, I think helps people say accountable.
1	High	Restricted	everyone's always watching
1	High	Restricted	if I think someone's, mischarging, I can look at their timecards, see what they, when they said they were where and what they were doing and for whatever reasons, keep them accountable.
1	High	Restricted	But if you know that you can't and, that you will get caught If you do, then you're more motivated to not slack off at work.
1	High	Restricted	And so, each person usually has their own Excel spreadsheet and then they type down, all of the charge codes that they're given by their managers. And then they either keep a little paper record or you go and update it throughout the day for exactly, how much time.
1	Low	Increased	I think that it's honestly almost better because some of the meetings that I would go to, prior to COVID, like some of the meetings you're, you're just sitting there in the back and like, if you don't have too much to say, and to be two of the most technical people on the team, start talking, technical jargon, then you've got a room of 15 people sitting there not really doing a whole hell of a lot, except trying to absorb whatever these people were saying

Int	Surveillance	Autonomy	Quote from interviewee
2	High	Restricted	If I'm looking at [the computer screen] for 60 seconds, it's still going to time out because I haven't [touched the computer].
2	High	Restricted	[TW arrangements are] more of a hindrance having to wait on that information to come
2	High	Restricted	If my mouse isn't moving, I'm out. So, I have to log back in
2	High	Restricted	What my colleague does at his workspace, he has a small oscillating fan and he has a pencil that he has taped to it. And if he's doing something on the computer or he goes to get up and make lunch (because we're allowed to work through lunch, as long as we're working) he'll just tape it to the mouse and the fan and it'll keep his mouse moving.
3	Low	Increased	Mine is outcome based, and so you know it is based off the deliverable. If hit I hit different deliverables, that's where I measured.
3	Low	Increased	I don't worry about that people's perceptions of how much I'm online.
3	Low	Increased	These other weird KPIs that we try to manage (ourselves like) robots, that's just not how my work is performed. There's a bit of creativity, there's a bit of research, that goes into it.
3	Low	Increased	And it's like last night I worked at midnight. That was not because somebody told me to work to midnight, it was because I had a task and I wanted to continue on with it, and so I did. I had the tools and resources at my disposal in my house to continue to do that.
3	Low	Increased	I mean [my job structure] gives me the flexibility of times when I need to focus on my family. Yeah and maybe if I want to go to a kid's event at school and have lunch with them, or something like that I have the ability to do that, and then I might work later in the evening.
3	Low	Increased	I've enjoyed it, you know it's allowed me some flexibility to do different things
3	Low	Increased	So, it's worked out, I think I've had leaders before be like 'Oh, he's shown on it 1130 at night,' 'yeah so were you.' So it's just one of those things that, right now, with my lifestyle, I can do some of the late night stuff and some of my best thoughts happen.
3	Low	Increased	Speaking of monitoring, I've just noticed in having a team, I have access to these tools and I try not to overly get into them, but like Office now you know

Int	Surveillance	Autonomy	Quote from interviewee
			if you're if you're paying attention to O365, Cortana is telling you how long you're spending email and things like that.
3	High	Decreased	And so, we start wrapping these metrics around productivity, but I think people need to keep in mind when people doing creative work that there's a level of expression that you got to make sure you're in those people feel the flexibility in order to do their best work.
3	Low	Increased	Because an office environment was being provided, it was one of those things that based off, you know performance, productivity, availability, that's what matters.
4	Low	Increased	So that people could understand that you know you're not going to get fined that if we find out that you're actually taking a walk at 9, 10, 11, o'clock when technically you're actually supposed to be in the office the very structured in the office, but you're actually taking a walk outside
4	Low	Increased	Working from home, I felt like I had the ability to step outside, smell the fresh air, sit outside on the back porch for a few minutes, look at the tress, listen to the birds, give my mind something else to think about other than I'm working on this report I'm working on this spreadsheet
4	Low	Increased	I didn't have to sit there and look over their shoulder and ping them every 15 minutes to make sure they are sitting right there. You know, "I'm going to ping you just to see if you're responding" - no.
4	Low	Increased	The thing about it is sometimes people are showing the avatar or their just showing the screen because they're multitasking.
4	Low	Increased	So, to avoid being rude, but still do what I want to do, I am just not going to show you me.
4	Low	Increased	its more about the products that is being presented.
4	Low	Increased	I personally have always cared more about the job getting done, I care more about the projects are being completed as opposed to being able to look down the hallways and okay I can account for you, you, you, and you, I see each of you in your offices, check.
4	Low	Increased	I care more about the product <b>*note more about the product than how it is completed</b>
4	Low	Increased	I'd rather my time be spent doing that than for me being to be standing over my network

Int	Surveillance	Autonomy	Quote from interviewee
			administrator's shoulder and wondering whether or not he stepped out his house for 15 minutes.
5	Low	Increased	I really had to shift my work time because in the mornings I tried to really dedicate to my son's schooling because he was in kindergarten
5	Low	Increased	So, I guess work was flexible though? Absolutely. And [boss] has always been that type of boss
5	Low	Increased	he knows that I'm going to get my job done
5	Low	Increased	Whether that's me being here 8 to 5 and he knows that he can call me at any time and I'm going to answer and do what he needs me to do
5	Low	Increased	It seems like your work is very flexible as far as choosing a schedule. And I wouldn't say that that's necessarily the [organization's] way. Um, but it's definitely how [boss] operates with me and probably [colleague]. I don't know that he operates like that with anybody else.
5	Low	Increased	Do you feel like you have a lot of autonomy? Yes, absolutely. And maybe that's like the nature of my position.
6	High	Restricted	Some teachers decided to just randomly call on people. So, like, you never knew, you just always had to be listening and other teachers attendance is required.
6	High	Restricted	Some people were contacted even if they had signed into the meeting and they had not stayed for the entire time. Like the entire duration of the class, they were contacted that they had not gotten the attendance for that period
6	Low	Increased	Were you ever multitasking? Were you doing other things while you were also in class [with the camera off]? Frequently. Most often, I'd be studying for a different class if there was a test coming up soon. Occasionally I'd do housework. I'd make lunch. I'd eat. Kind of whatever I needed to do, I would do if the lecturer wasn't calling on names.
6	Low	Increased	[I felt] More autonomous than if I was in person, because like I said, I could multitask.
6	Low	Increased	I think sometimes me and my roommate would end up just chatting instead, which is something that you couldn't do [if in person]. She's also in dental school and we couldn't just be sitting there in class having a conversation 'cause that would be disruptive.
6	High	Restricted	So, we took them on lockdown browser, which allows you to not switch to screens.

Int	Surveillance	Autonomy	Quote from interviewee
6	High	Restricted	So, you can't look at your notes, but they were proctored by the teacher
6	High	Restricted	You have to show your entire surroundings and you kind of had to go through this process before you even started a test, which was tedious
6	High	Restricted	And then once you got into the test, we were told that it tracks your eye movements. So if your eyes deviated from the screen or they looked at the wall behind you, which is something that I frequently do during tests, it's just kind of look around, like I think, it would flag you and report that to the teacher because you could theoretically have notes painted on your wall.
6	High	Restricted	And it also would flag you if you made noise.
7	Low	Increased	well, my manager, she is a pretty, like, hands-off
7	Low	Increased	Like, she's super helpful if we need it, but she's also super hands-off. She doesn't want to be overbearing or anything like that.
7	Low	Increased	So she keeps us definitely informed, but also stays away. It doesn't like overbear us, I guess.
7	Low	Increased	it's not like a set, like you have to have it done in 24 hours or you're gonna be fired.
7	Low	Increased	it's just super flexible
7	Low	Increased	There's not like a set time limit that we have, but our goal for our team is to contact them or review them within a day of them applying
7	Low	Increased	But like, as long as I get it done within 24 hours, then they are don't they, my manager doesn't like, come down my throat, you know?



Table C-2

*Open Codes Related to Proposition 2*

<b>Int</b>	<b>Autonomy</b>	<b>Well- Being</b>	<b>Support?</b>	<b>Quote from interviewee</b>
1	High	High	Yes	I [work from home] on my meeting days because I'm going to have to be sitting at the computer doing my meetings anyways. So, today is a meeting that I had probably four hours meetings today or more. and so, yeah, I'd way rather do that and not [get out of my] pajamas, or petting my cat and eating a sandwich.
1	High	High	Yes	And with the skype, I mean, it's kinda nice. Cause you can be checking your email. You can, brushing up on the PowerPoint slides that you've been working on, you can do other things while you're doing these meetings.
1	High	High	Yes	It's a really, it's a really great setup because yeah, if you want to work a Saturday, you can go in and work a full Saturday and take the Monday off.
1	High	High	Yes	A few of our managers actually would set up some group calls, For the whole team, so that like a 20-person group could have a place where, three or four of us can hop in any time and just hang out and chat. And, and she loved it.
1	High	High	Yes	So, it didn't like it was intentionally like not 100% percent on topic, just so that we could all keep our sanity.
1	Low	High	No	How do you feel about them keeping track? I mean, I think that it's honestly a good, method of accountability, because it's very easy to slack off in the workplace, especially working from home.
1	Low	High	No	And so the fact that they do have that kind of control really, I think helps people say accountable.
1	Low	High	No	So, I think it's a good system because I mean, it, you're, everyone's always watching.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
1	Low	High	No	I think long term having that sense of accountability is healthy for a person because, yeah, if you're slacking off at work, you don't feel good about that. I mean no one ever feels good about that
1	Low	High	No	But if you know that you can't and, that you will get caught If you do, then you're more motivated to not slack off at work. and then therefore you accomplish things. And then you get the satisfaction in that
1	High	High	Yes	They they're comfortable with that, so our schedule is technically a flex schedule so that you can, as long as you get 40 between one Friday and the next Friday at 9:00 PM, It's a really, it's a really great setup because yeah, if you want to work a Saturday, you can go in and work a full Saturday and take the Monday off.
1	High	High	Yes	I think that it's honestly almost better because some of the meetings that I would go to, prior to COVID, like some of the meetings you're, you're just sitting there in the back and like, if you don't have too much to say, and to be two of the most technical people on the team, start talking, technical jargon, then you've got a room of 15 people sitting there not really doing a whole hell of a lot, except trying to absorb whatever these people were saying. And with the skype, I mean, it's kinda nice. Cause you can be checking your email. You can, brushing up on the PowerPoint slides that you've been working on, you can do other things while you're doing these meetings.
2	Low	Low	Yes	Now 60 seconds, if you haven't done anything in 60 seconds, it knocks you out of the VPN. So, you have to completely go back through all the security layers.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
				<b>(Question from researcher) This [timing system] is the inconvenient part, right?</b>
2	Low	Low	Yes	Yes, very.
2	Low	Low	Yes	I'm still using the company-provided 10-inch laptop. And little cheap mouse and everything. And I just kind of set up wherever I can. The inconvenience really comes with when we're doing data crunching, and I need multiple screens and all kinds of stuff like that. Of course, internet connections, residential versus in the office - it's just not as good. We have fiber optic in the office.
2	Low	Low	Yes	I would prefer if they gave a little bit more of it so that the work from home environment could be similar to working within the office
2	Low	Low	Yes	What aggravates the most within that is the fact that you can be working, like I can be, I'm just reading through data, scanning through it, and say I'm looking at the same 50 lines of an Excel file... if I'm looking at it for 60 seconds, it's still going to time out because I haven't scrolled through it. so that can be very agitating.
2	Low	Low	Yes	I do a lot of newsletter marketing and edits. And reading through articles and piecing together articles. If my mouse isn't moving, I'm out so I have to log back in.
2	Low	Low	Yes	I would definitely say [I am] not as connected. Getting in touch. My is a very busy person and normally she's just on the other side of an open door. She's just a quick conversation away. [...] It's more of a hindrance having to wait on that information to come.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
2	Low	Low	Yes	[Our communication]’s slowed down, and it’s probably more censored. Not that things get out of hand in the workplace, but knowing that you’re sending your comments over email and stuff, people tend to hold their tongue a little bit more. I mean, I guess at the same time, if it’s in the office, you are using their time to have fun and talk and have a good conversation, but it is cut short over the email
2	Low	Low	Yes	I think accountability is more volatile, I guess you could say when working from home, just because they may be paying attention, but at the same time, are they paying attention?
2	Low	Low	Yes	Yeah, I tend to just eat it. Just like, well, I’m logged out; let me log back in. especially if I’m taking notes on my note pad and then sometimes, I’ll wiggle the mouse if I to remember to
2	Low	Low	Yes	It’s the inconvenience of logging back in.
2	Low	Low	Yes	I’m not happy with maybe the way my boss handled a situation, or how things have been brought down to me in terms of the way workload was delivered. I don’t, I prefer to get the job all at once instead of fragmented. “Okay. You completed that? Oh yeah. Here’s this.”
3	High	High	Yes	I mean it gives me the flexibility of times when I need to focus on my family.
3	High	High	Yes	I also think too when my family sees the flexibility, again my kid sees me show up to an event in the middle of a day randomly. Then, they appreciate that versus me never being able to do that because I’m trying to work an eight to five and get all my hours.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
3	High	High	Yes	I think people need to keep in mind when people doing creative work that there's a level of expression that you got to make sure you're in those people feel the flexibility in order to do their best work.
	Low	Low	yes	[In the office,] There's a lot of walk-by things that can delay and get in your way
3	High	High	Yes	whereas when I'm at home, I'm pretty distraction free, and I stay to myself.
3	High	high	Yes	And it's like last night I worked at midnight. That was not because somebody told me to work to midnight, it was because I had a task and I wanted to continue on with it, and so I did. I had the tools and resources at my disposal in my house to continue to do that.
3	High	Low	Yes	It's worked really well, sure, I mean there's definitely times, where I continue to work where I'd rather you know, maybe stop right at five o'clock, let's say and go do something.
3	High	High	Yes	I also think too when my family sees the flexibility, again my kid sees me show up to an event in the middle of a day randomly. Then, they appreciate that versus me never being able to do that because I'm trying to work an eight to five and get all my hours.
3	High	High	Yes	I've enjoyed it, you know it's allowed me some flexibility to do different things
3	High	High	Yes	So, it's actually [...] been kind of cool - me being hybrid
3	High	High	Yes	So, I've had more success, my leaders have had more success, when we focus on the deliverables and the quality of the deliverables and keep it about that [as opposed to a high surveillance of activities and behaviors]

Int	Autonomy	Well- Being	Support?	Quote from interviewee
				<b>(Question from researcher) What makes you feel happy about work?</b>
3	High	High		Just finding success in the deliverables that I create and receiving positive feedback for them, then receiving compensation or even more opportunities for career growth
3	High	High	Yes	I think it's been an awesome process. I really like the hybrid models too. Whenever I need to go in and meet with people, that opportunity is there, so there's a lot of pluses for both sides.
4	Low	Low	Yes	With the online meetings, if schedule is open and you're home and supposed to be working – scheduled from 1-2, 2-4, 4-5 no breaks. That is a huge issue for people when they're trying to make an adjustment to the whole style of work
4	Low	Low	Yes	A lot of people have gotten zoom fatigue/teams fatigue, people got very tired because they felt like they were in a constant state of online meetings.
4	High	High	Yes	So that people could understand that you know you're not going to get fined that if we find out that you're actually taking a walk at 9, 10, 11, o'clock when technically you're actually supposed to be in the office the very structured in the office, but you're actually taking a walk outside.
4	High	High	Yes	In fact, they become more productive because their minds have had the time to step away, separate, rejuvenate, and a lot of time those are things we don't do in the office
4	High	High	Yes	Working from home, I felt like I had the ability to step outside, smell the fresh air, sit outside on the back porch for a few minutes, look at the tress, listen to the birds, give my mind something else to think about other than I'm working on this report I'm working on this spreadsheet.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
4	High	High	Yes	I think one the things that is a takeaway for me is I have to be purposeful in setting aside time in between meetings almost as if I were on the physical campus and I was walking across to go to a building.
4	Low	Low	Yes	I will tell you one thing that did really bother me and still does somewhat because of the scheduling sometimes and because pretend to think this is so much easier, we will just run back-to-back.
4	Low	Low	Yes	I need it might be 10 minutes might be 15 minutes, but I need time just so I can process what I heard and what I was working on just now before I switched gears and got ready to focus my attention here.
4	Low	Low	Yes	All of the sudden they're at home, they're trying to manage doing the job and they got children in the background distracting them, or other family members.
				<b>(Questions about surveillance from researcher) How would that effect people?</b>
4	Low	Low	Yes	Negative for sure, I mean I don't know that anyone likes the concepts of big brother watching.
4	High	High	Yes	Everyone wants to feel like they're being trusted and respected, and that its more about the products that is being presented [than watching over them].
4	High	High	Yes	I personally have always cared more about the job getting done, I care more about the projects are being completed as opposed to being able to look down the hallways and okay I can account for you, you, you, and you, I see each of you in your offices, check.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
4	High	High	Yes	If being are being respected and feel respected and they feel that you have an interest not just in the job but their quality of life, I think that people are going to be more receptive to truly making the opportunity that is provided (if it is to work from home) a positive one.
4	High	High	Yes	I think that they earned that respect for the work and the job that they do. And a lot of times that's all people want they want: to be respected, they want to be trusted.
4	Low	Low	Yes	People have to recognize that it is meant to be a helpful tool, it's not meant to guide your schedule it's not meant to be used in a way that its taking the place of the breaks that you normally would have
4	Low	Low	Yes	I am not into big brother I do like that show on TV a little bit, but I am not into that. I don't think people appreciate it.
4	High	High	Yes	If you know what they're working on and there are timelines and deadlines, and they're being productive, they're going to give you all they got.
4				I respect them, I really hope they'll respect me. I think if you have that kind of relationship, you can step away because if not, I think people could just drown in that whole concept of are they really working?
5	Low	Low	Yes	That was a little stressful because I'm used to like having my big double screens.
5	Low	Low	Yes	And I know that sounds completely first-world problems, but when you think about it and you're like accustomed to that, and then you go to the like tiny little laptop, that was very stressful.



Int	Autonomy	Well- Being	Support?	Quote from interviewee
				<b>(Question from researcher) So, I guess work was flexible though?</b>
5	High	High	Yes	Absolutely.
5	High	High	Yes	And [boss] has always been that type of boss. Like family comes first and he knows that I'm going to get my job done.
5	High	High	Yes	Whether that's me being here 8 to 5 and he knows that he can call me at any time and I'm going to answer and do what he needs me to do. So, um, we have a great relationship in that aspect. He was very flexible.
5	High	High	Yes	Just an example, Tuesday night, I had to go to [location] for a showcase event. I didn't get home until 12:30 that night. So, like today my son has a cross country meet. I'm leaving early. [boss]'s always been very good about that kind of stuff.
				<b>(Question from researcher) Do you feel like you have a lot of autonomy?</b>
5	High	High	Yes	Yes, absolutely. And maybe that's like the nature of my position.
6	Low	medium	Partial	Like the entire duration of the class, they were contacted that they had not gotten the attendance for that period. I think it's fair considering that we're required to be there in class.
6	Low	medium	partial	I understand why the teachers would require you to be there the full time in person, because if you just walked in and walked out in a live lecture, that wouldn't count as your attendance.
				<b>(Question from researcher) Did you multitask in online classes?</b>
6	High	High	Yes	Frequently. Most often, I'd be studying for a different class if there was a test coming up soon. Occasionally I'd do housework. I'd make lunch. I'd eat. Kind of whatever I needed to do, I would do if the lecturer wasn't calling on names.

Int	Autonomy	Well- Being	Support?	Quote from interviewee
6	High	High	Yes	More autonomous than if I was in person, because like I said, I could multitask.
6	High	High	Yes	And I felt like I saved time in the sense of not having to get up and get ready every morning, make the commute to school.
6	Low	Low	Yes	And if it wasn't working and it would get stressful that you were not starting the test on time.
6	Low	Low	Yes	And then once you got into the test, we were told that it tracks your eye movements. So if your eyes deviated from the screen or they looked at the wall behind you, which is something that I frequently do during tests, it's just kind of look around, like I think, it would flag you and report that to the teacher because you could theoretically have notes painted on your wall.
6	Low	Low	Yes	And it also would flag you if you made noise. And so it bothered people in my home who didn't necessarily want to be affected by my living at home and taking tests. It bothered them that they had to be quiet for those testing times.
6	Low	Low	Yes	I got stressed that the teacher would flag my test for having noise.
6	high	Low	No	I think just having everything at your house at your disposal is distracting. If I was hungry, I could go get a snack. I could leave anytime I wanted. If someone wanted to go somewhere, I could switch to my phone and I could be out and about if I really wanted to be. So that was definitely districting.
6	High	High	Yes	I think in the future of every teacher could have a more streamlined message and every teacher could post a recording of their lecture and possibly give you the option to choose, to attend it live or watch it later, if that works better for your schedule.
6	High	High	Yes	If you miss one line of a lecture, you can just go scroll back through and see

Int	Autonomy	Well- Being	Support?	Quote from interviewee
				exactly what they said. And that was something that was valuable.
7	High	High	Yes	So she keeps us definitely informed, but also stays away. It doesn't like overbear us, I guess.
7	High	High	Yes	Mine is just kind of, I go in when I want to.
7	High	High	Yes	And the majority. Work from home. And so like, we're not required to go into office at all, or we're not required to stay at home.
7	High	High	Yes	But like, as long as I get it done within 24 hours, then they are don't they, my manager doesn't like, come down my throat, you know?
7	High	High	Yes	So it's just kind of like the night before a workday, I'm like, Hm, I think I'm going to go into office tomorrow just to like, see my buddy, my coworkers and stuff that are there.
7	High	High	Yes	I think it's awesome that I have that much flexibility and I really enjoy it
7	High	High	Yes	I think it's fair, but also it's just super flexible. So there's not really anything to complain about.
7	High	High	Yes	well, my manager, she is a pretty, like, hands-off [...] And she'll she's completely open to like helping me and everybody on the team. Like, she's super helpful if we need it, but she's also super hands-off.

**Table C-2:***Open Codes Related to Proposition 3*

Int	Justice	Autonomy	Well-being	Quote
1	High	Low	High	Just every single camera from the gate of our plant is, it has to be deactivated the entire time [...] this is this work wasn't in a classified space, but it was near classified spaces So that's why those rules are in place.
1	High	high	High	Just to kind of maintain that line of communication, we just sat in a Skype call. They just sort of, while we were doing our work, we could ask each other questions and just see each other in a thing, tell jokes, do whatever.
1	High	low	High	There's some antiquated technology behind those locked doors, but it's to keep everything safe.
1	High	high	High	you really just joined by choice. It wasn't, it wasn't a required meeting or anything
1	High	low	High	I mean, I think that it's honestly a good, method of accountability
1	High	low	High	And so the fact that they do have that kind of control really, I think helps people stay accountable
1	High	low	High	So I actually, if I think someone's, mischarging, I can look at their time cards, see what they, when they said they were where and what they were doing and for whatever reasons, keep them accountable. So, I think it's a good system because I mean, it, you're, everyone's always watching.
1	High	low	High	if you're slacking off at work, you don't feel good about that. I mean no one ever feels good about that. But if you know that you can't and, that you will get caught If you do, then you're more motivated to not slack off at work. and then therefore you accomplish things. And then you get the satisfaction in that

Int	Justice	Autonomy	Well-being	Quote
1	High	low	High	So like when you walk past these monitors, they'll actually take down your RFID without really knowing around the planet, which I totally agree with because it's, it's like our national secrets are in some of these rooms, so we don't want people to just be walking around.
1	low	low	low	I think that it's honestly almost better because some of the meetings that I would go to, prior to COVID, like some of the meetings you're, you're just sitting there in the back and like, if you don't have too much to say, and to be two of the most technical people on the team, start talking, technical jargon, then you've got a room of 15 people sitting there not really doing a whole hell of a lot, except trying to absorb whatever these people were saying.
1	High	high	High	And with the skype, I mean, it's kinda nice. Cause you can be checking your email. You can, brushing up on the PowerPoint slides that you've been working on, you can do other things while you're doing these meetings
1	High	low	High	Since we have to rigidly book our time if you work extra hours, You essentially get to take some of that time off the next day, because you have, you have to stick to the 40 hours for a one work
1	High	high	High	They they're comfortable with that, so our schedule is technically a flex schedule so that you can, as long as you get 40 between one Friday and the next Friday at 9:00 PM, It's a really, it's a really great setup because yeah, if you want to work a Saturday, you can go in and work a full Saturday and take the Monday off
2	Low	low	Low	Just your didn't get signed at the VPN. but now 60 seconds, if you haven't done anything in 60 seconds, it knocks you out of the VPN. So you have to completely go back through all the security layers

Int	Justice	Autonomy	Well-being	Quote
				<b>(Question for from researcher) Do they know what you do when you're, I guess they deduce from your workstation going idle that maybe you're doing something else.</b>
2	Low	low	Low	Right. I honestly, I wish I knew. but I have no clue
2	Low	low	Low	How do they think about you taking your dog out during the work day? You think you're aware of? Yes. I feel like they are. I think they'd be ignorant not to be aware of the fact that if you talk about having a dog that you're just going to leave him locked up all day, just like you were at work and not take them out or anything, but that may be my ignorance speaking. I don't know how they feel about it.
2	Low	low	Low	I would prefer if they gave a little bit more of it so that the work from home environment could be similar to working within the office. and the transition would be smoother
2	Low	low	Low	What aggravates the most within that is the fact that you can be working, like I can be, I'm just reading through data, scanning through it, and say I'm looking at the same 50 lines of an Excel file... if I'm looking at it for 60 seconds, it's still going to time out because I haven't scrolled through it. so that can be very agitating
2	Low	low	Low	My boss is a very busy person and normally she's just on the other side of an open door. she's just a quick conversation away. And then same with my coworker were in cubicles right next to each other. It's more of a hindrance having to wait on that information to come
2	Low	low	Low	Did they want us extra thoughts come into mind when you're thinking about, okay, well we're working from home. Do they want us to go meet up and have a drink and hang out after work? If they have us working different schedules in and out of the office
2	Low	low	Low	I think accountability is more volatile, I guess you could say when working from home, just because they may be paying attention, but at the same time, are they paying attention?

Int	Justice	Autonomy	Well-being	Quote
2	Low	low	Low	How things have been brought down to me in terms of the way workload was delivered. I don't, I prefer to get the job all at once instead of fragmented. "Okay. You completed that? Oh yeah. Here's this."
2	Low	low	Low	I would rather see the big picture to start. If things come down to me and are handed down from management that are like that. it tends to affect my work. I feel almost spiteful in doing it. I'm like, okay, am I not trusted to do all of this, at once? What's going on?
3	high	high	high	There's been tons of benefit of having access to people in the office, as well as being able to get on a whiteboard and quickly collaborate
3	high	high	high	It was one of those things that worked through my boss, and we made it happen. At whatever point that had my productivity declined, I would have been required to come back to the office
3	high	high	high	Because an office environment was being provided, it was one of those things that based off, you know performance, productivity, availability, that's what matters
3	high	high	high	And also too, note that my schedule wasn't a rigid schedule, so I say two days in the week three days out. It always depended on what the work product was
3	high	high	high	if the job demanded that I needed to be in the office for the week I made sure that I was available and in the office for the week
3	high	high	high	Mine is outcome based, and so you know it is based off the deliverable. If hit I hit different deliverables, that's where I measured.
3	high	high	high	These other weird KPIs that we try to manage [ourselves like] robots, that's just not how my work is performed. There's a bit of creativity, there's a bit of research, that goes into it
3	high	high	high	the majority of my good leaders are focused on outcomes (as opposed to actual behaviors on the clock)

Int	Justice	Autonomy	Well-being	Quote
3	high	high	high	So, I've had more success, my leaders have had more success, when we focus on the deliverables and the quality of the deliverables and keep it about that
3	high	high	high	I think people need to keep in mind when people doing creative work that there's a level of expression that you got to make sure you're in those people feel the flexibility in order to do their best work
3	high	high	high	We're all working professionals and understand that you know there's deliverables/output. That has to happen
3	high	high	high	We all want to have a job and, in a time, where things look pretty tough as well I think a lot of people appreciate, with the pandemic, the ability for us to still quarantine and be in a safe environment - and be productive, at the same time
4	Low	low	Low	With the online meetings, if schedule is open and you're home and supposed to be working – scheduled from 1-2, 2-4, 4-5 no breaks. That is a huge issue for people when they're trying to make an adjustment to the whole style of work which is different than being in the structured office
4	high	high	high	So that people could understand that you know you're not going to get fined that if we find out that you're actually taking a walk at 9, 10, 11, o'clock when technically you're actually supposed to be in the office the very structured in the office, but you're actually taking a walk outside
				<b>[Questions about surveillance from researcher] How would that effect people?</b>
4	low	low	low	Negative for sure, I mean I don't know that anyone likes the concepts of big brother watching
4	high	high	high	Everyone wants to feel like they're being trusted and respected, and that its more about the products that is being presented



Int	Justice	Autonomy	Well-being	Quote
4	high	high	high	If people are being respected and feel respected and they feel that you have an interest not just in the job but their quality of life, I think that people are going to be more receptive to truly making the opportunity that is provided (if it is to work from home) a positive one
4	high	high	high	We have to trust them to know that they're going to do the job if they're not doing the job, then maybes that's cause for other
4	high	high	high	Use that information as a basis on where or not you need to be big brother or not
4	high	high	high	And a lot of times that's all people want they want: to be respected, they want to be trusted
4	low	low	low	I will tell you one thing that did really bother me and still does somewhat because of the scheduling sometimes and because pretend to think this is so much easier, we will just run back-to-back
4	low	low	low	I need it might be 10 minutes might be 15 minutes, but I need time just so I can process what I heard and what I was working on just now before I switched gears and got ready to focus my attention here
4	high	high	high	We communicate in a lot of different ways. It is just whatever works with them I am okay with
4	low	low	low	I don't think people appreciate [big brother]
4	high	high	high	You have to meet together and have mutual respect. I respect them, I really hope they'll respect me.
4	high	high	high	Be a good supervisor, set expectations, manage your projects and people appropriately and I think you will not have to worry
5	low	low	low	That was a little stressful because I'm used to like having my big double screens.
5	low	low	low	And I know that sounds completely first-world problems, but when you think about it and you're like accustomed to that, and then you go to the like tiny little laptop, that was very stressful.

Int	Justice	Autonomy	Well-being	Quote
5	low	low	low	Are we allowed to? We're not really sure what we're supposed to do
5	low	low	low	No! I had never used zoom before in my life. I had used 'Go to meeting' for like a couple of things in the past, but really nothing. And so we got the zoom license or whatnot, and I had to suddenly figure out how we were going to have like 200 people in different rooms doing zoom meetings. Yeah. It was extremely stressful.
5	high	high	high	[Communication] was [good]. It was not hard to get a hold of him. There was no delay and he and I have a great working relationship.
				<b>(Question from researcher) Do you feel like you have a lot of autonomy?</b>
5	high	high	high	Yes, absolutely. And maybe that's like the nature of my position.
				<b>(Comment from researcher) it seems like your work is very flexible as far as choosing a schedule.</b>
5	high	high	high	And I wouldn't say that that's necessarily the [organization's] way. Um, but it's definitely how [boss] operates with me and probably [colleague].
6	high	low	high	I think it's fair considering that we're required to be there in class. I understand why the teachers would require you to be there the full time in person, because if you just walked in and walked out in a live lecture, that wouldn't count as your attendance
6	high	low	high	We knew that they were proctored
6	low	low	low	And if [the technology] wasn't working and it would get stressful that you were not starting the test on time
6	low	low	low	So if your eyes deviated from the screen or they looked at the wall behind you, which is something that I frequently do during tests, it's just kind of look around, like I think, it would flag you and report that to the teacher because you could theoretically have notes painted on your wall.

Int	Justice	Autonomy	Well-being	Quote
6	low	low	low	And it also would flag you if you made noise. And so other people, who didn't necessarily want to be affected by my living at home and taking tests, it bothered them that they had to be quiet for those testing times. And I, I got stressed that the teacher would flag my test for having noise
6	low	low	low	He could talk to my mom downstairs and our house was small and the voice is carried
7	high	high	high	Really only steps in if we have any questions
7	high	high	high	Like, she's super helpful if we need it, but she's also super hands-off. She doesn't want to be overbearing or anything like that.
7	high	high	high	Cause she trusts that we're doing the right thing.
7	high	high	high	So she keeps us definitely informed, but also stays away. It doesn't like overbear us, I guess.
7	high	high	high	it's not like a set, like you have to have it done in 24 hours or you're gonna be fired
7	high	high	high	It's just kind of like one of our goals is to be able to reply to people and push them through and stuff within a 24 hour [window].
7	high	high	high	Like they can report on me and say, 'Hey, [Int7], you take an average of two days to get back to a candidate' or 'two days to review a candidate.' And they'll say, 'let's try and get that down till one day.' 'Let's try and get that down to 12 hours' or something
7	high	high	high	But like, as long as I get it done within 24 hours, then they are don't they, my manager doesn't like, come down my throat, you know?
7	high	low	high	So there's a lot of like reports that can be done and a lot of things that can be done to like show like exactly when I logged on or when I reviewed this candidate and, so we keep tabs on all of this stuff and Workday does a lot of that for us, which is cool.
7	High		high	The company treats us so well. And we have so many great benefits and they really value their employees here, which is really cool

Table C-4

*Open Codes Related to Proposition 4*

Int	Expectations align?	Just?	Quote about justice
1	yes	yes	Just every single camera from the gate of our plant is, it has to be deactivated the entire time [...] this is this work wasn't in a classified space, but it was near classified spaces So that's why those rules are in place.
1	yes	yes	Just to kind of maintain that line of communication, we just sat in a Skype call. They just sort of, while we were doing our work, we could ask each other questions and just see each other in a thing, tell jokes, do whatever.
1	yes	yes	There's some antiquated technology behind those locked doors, but it's to keep everything safe.
1	yes	yes	So, it didn't like it was intentionally like not 100% percent on topic, just so that we could all keep our sanity
1	yes	yes	you really just joined by choice. It wasn't, it wasn't a required meeting or anything
1	yes	yes	I mean, I think that it's honestly a good, method of accountability
1	yes	yes	And so the fact that they do have that kind of control really, I think helps people say accountable
1	yes	yes	So I actually, if I think someone's, mischarging, I can look at their time cards, see what they, when they said they were where and what they were doing and for whatever reasons, keep them accountable. So, I think it's a good system because I mean, it, you're, everyone's always watching.
1	yes	yes	if you're slacking off at work, you don't feel good about that. I mean no one ever feels good about that. But if you know that you can't and, that you will get caught If you do, then you're more motivated to not slack off at work. and then therefore you accomplish things. And then you get the satisfaction in that
1	yes	yes	So like when you walk past these monitors, they'll actually take down your RFID without really knowing around the planet, which I totally agree with because it's, it's like our national secrets are in some of these rooms, so we don't want people to just be walking around.
1	yes	yes	I think that it's honestly almost better because some of the meetings that I would go to, prior to COVID,

Int	Expectations align?	Just?	Quote about justice
1	no	no	like some of the meetings you're, you're just sitting there in the back and like, if you don't have too much to say, and to be two of the most technical people on the team, start talking, technical jargon, then you've got a room of 15 people sitting there not really doing a whole hell of a lot, except trying to absorb whatever these people were saying.
1	yes	yes	And with the skype, I mean, it's kinda nice. Cause you can be checking your email. You can, brushing up on the PowerPoint slides that you've been working on, you can do other things while you're doing these meetings
1	yes	yes	Since we have to rigidly book our time if you work extra hours, You essentially get to take some of that time off the next day, because you have, you have to stick to the 40 hours for a one work
1	yes	yes	They they're comfortable with that, so our schedule is technically a flex schedule so that you can, as long as you get 40 between one Friday and the next Friday at 9:00 PM, It's a really, it's a really great setup because yeah, if you want to work a Saturday, you can go in and work a full Saturday and take the Monday off
2	no	no	Just your didn't get signed at the VPN. but now 60 seconds, if you haven't done anything in 60 seconds, it knocks you out of the VPN. So you have to completely go back through all the security layers
			<b>(Question from researcher) Do they know what you do when you're, I guess they deduce from your workstation going idle that maybe you're doing something else.</b>
2	no	no	Right. I honestly, I wish I knew. but I have no clue
2	no	no	[My colleagues are] not the biggest fan of it when it comes to security
			<b>(Question from researcher) How do they think about you taking your dog out during the work day? You think you're aware of?</b> Yes. I feel like they are. I think they'd be ignorant not to be aware of the fact that if you talk about having a dog that you're just going to leave him locked up all day, just like you were at work and not take them out or anything, but that may be my ignorance speaking. I don't know how they feel about it.
2	no	no	I would prefer if they gave a little bit more of it so that the work from home environment could be similar to working within the office. and the transition would be smoother

Int	Expectations align?	Just?	Quote about justice
2	no	no	What aggravates the most within that is the fact that you can be working, like I can be, I'm just reading through data, scanning through it, and say I'm looking at the same 50 lines of an Excel file... if I'm looking at it for 60 seconds, it's still going to time out because I haven't scrolled through it. so that can be very agitating
2	no	no	I wonder if AI would work with facial recognition? And that would be nice. Cause then if I step away and automatically lock itself
2	no	no	My boss is a very busy person and normally she's just on the other side of an open door. she's just a quick conversation away. And then same with my coworker were in cubicles right next to each other. It's more of a hindrance having to wait on that information to come
2	no	no	I think accountability is more volatile, I guess you could say when working from home, just because they may be paying attention, but at the same time, are they paying attention?
2	no	no	How things have been brought down to me in terms of the way workload was delivered. I don't, I prefer to get the job all at once instead of fragmented. "Okay. You completed that? Oh yeah. Here's this."
2	no	no	I would rather see the big picture to start. If things come down to me and are handed down from management that are like that. it tends to affect my work. I feel almost spiteful in doing it. I'm like, okay, am I not trusted to do all of this, at once? What's going on?
3	yes	yes	There's been tons of benefit of having access to people in the office, as well as being able to get on a whiteboard and quickly collaborate
3	yes	yes	It was one of those things that worked through my boss, and we made it happen. At whatever point that had my productivity declined, I would have been required to come back to the office
3	yes	yes	Because an office environment was being provided, it was one of those things that based off, you know performance, productivity, availability, that's what matters
3	yes	yes	And also too, note that my schedule wasn't a rigid schedule, so I say two days in the week three days out. It always depended on what the work product was
3	yes	yes	if the job demanded that I needed to be in the office for the week I made sure that I was available and in the office for the week

Int	Expectations align?	Just?	Quote about justice
3	yes	yes	Mine is outcome based, and so you know it is based off the deliverable. If hit I hit different deliverables, that's where I measured.
3	yes	yes	These other weird KPIs that we try to manage [ourselves like] robots, that's just not how my work is performed. There's a bit of creativity, there's a bit of research, that goes into it
3	yes	yes	the majority of my good leaders are focused on outcomes
3	yes	yes	So, I've had more success, my leaders have had more success, when we focus on the deliverables and the quality of the deliverables and keep it about that
3	yes	yes	I think people need to keep in mind when people doing creative work that there's a level of expression that you got to make sure you're in those people feel the flexibility in order to do their best work
3	yes	yes	We're all working professionals and understand that you know there's deliverables/output. That has to happen
3	yes	yes	We all want to have a job and, in a time, where things look pretty tough as well I think a lot of people appreciate, with the pandemic, the ability for us to still quarantine and be in a safe environment - and be productive, at the same time
4	no	no	With the online meetings, if schedule is open and you're home and supposed to be working – scheduled from 1-2, 2-4, 4-5 no breaks. That is a huge issue for people when they're trying to make an adjustment to the whole style of work which is different than being in the structured office
4	no	no	So that people could understand that you know you're not going to get fined that if we find out that you're actually taking a walk at 9, 10, 11, o'clock when technically you're actually supposed to be in the office the very structured in the office, but you're actually taking a walk outside
			<b>(Questions about surveillance from researcher) How would that effect people?</b>
4	no	no	Negative for sure, I mean I don't know that anyone likes the concepts of big brother watching
4	yes	yes	Everyone wants to feel like they're being trusted and respected, and that its more about the products that is being presented

Int	Expectations align?	Just?	Quote about justice
4	yes	yes	If people are being respected and feel respected and they feel that you have an interest not just in the job but their quality of life, I think that people are going to be more receptive to truly making the opportunity that is provided (if it is to work from home) a positive one
4	yes	yes	We have to trust them to know that they're going to do the job if they're not doing the job, then maybes that's cause for other
4	yes	yes	Use that information as a basis on where or not you need to be big brother or not
4	yes	yes	And a lot of times that's all people want they want: to be respected, they want to be trusted
4	no	no	I will tell you one thing that did really bother me and still does somewhat because of the scheduling sometimes and because pretend to think this is so much easier, we will just run back-to-back
4	no	no	I need it might be 10 minutes might be 15 minutes, but I need time just so I can process what I heard and what I was working on just now before I switched gears and got ready to focus my attention here
4	yes	yes	We communicate in a lot of different ways. It is just whatever works with them I am okay with
4	no	no	I don't think people appreciate [big brother]
4	yes	yes	You have to meet together and have mutual respect. I respect them, I really hope they'll respect me.
4	yes	yes	Be a good supervisor, set expectations, manage your projects and people appropriately and I think you will not have to worry
5	no	no	That was a little stressful because I'm used to like having my big double screens.
5	no	no	And I know that sounds completely first-world problems, but when you think about it and you're like accustomed to that, and then you go to the like tiny little laptop, that was very stressful.
			<b>(Question from researcher) did you have any training for the teleworking softwares?</b>
5	no	no	No! I had never used zoom before in my life. I had used 'Go to meeting' for like a couple of things in the past, but really nothing. And so we got the zoom license or whatnot, and I had to suddenly figure out how we were going to have like 200 people in different rooms doing zoom meetings. Yeah. It was extremely stressful.



Int	Expectations align?	Just?	Quote about justice
5	yes	yes	[Communication] was [good]. It was not hard to get a hold of him. There was no delay and he and I have a great working relationship.
			<b>(Question from researcher) Do you feel like you have a lot of autonomy?</b>
5	yes	yes	Yes, absolutely. And maybe that's like the nature of my position.
			<b>(Comment from research) It seems like your work is very flexible as far as choosing a schedule.</b>
5	yes	yes	And I wouldn't say that that's necessarily the [organization's] way. Um, but it's definitely how [boss] operates with me and probably [colleague].
5	yes	yes	[Boss] has always been very good about that kind of stuff. And [Boss] knows if [boss] has to get us after hours, we're going to (be available)
6	yes	yes	I think it's fair considering that we're required to be there in class. I understand why the teachers would require you to be there the full time in person, because if you just walked in and walked out in a live lecture, that wouldn't count as your attendance
6	yes	yes	We knew that they were proctored
6	yes	yes	And if [the technology] wasn't working and it would get stressful that you were not starting the test on time
6	no	no	So if your eyes deviated from the screen or they looked at the wall behind you, which is something that I frequently do during tests, it's just kind of look around, like I think, it would flag you and report that to the teacher because you could theoretically have notes painted on your wall.
6	no	no	And it also would flag you if you made noise. And so other people, who didn't necessarily want to be affected by my living at home and taking tests, it bothered them that they had to be quiet for those testing times. And I, I got stressed that the teacher would flag my test for having noise
6	no	no	He could talk to my mom downstairs and our house was small and the voice is carried
7	yes	yes	And she'll she's completely open to like helping me and everybody on the team.
7	yes	yes	Really only steps in if we have any questions
7	yes	yes	Like, she's super helpful if we need it, but she's also super hands-off. She doesn't want to be overbearing or anything like that.
7	yes	yes	Cause she trusts that we're doing the right thing.

Int	Expectations align?	Just?	Quote about justice
7	yes	yes	So she keeps us definitely informed, but also stays away. It doesn't like overbear us, I guess.
7	yes	yes	Yeah, there are definitely like right when you start the position at [organization], they told me exactly what I'd be doing. So I thought that was really good.
7	yes	yes	I knew exactly what I was getting into
7	yes	yes	it's not like a set, like you have to have it done in 24 hours or you're gonna be fired
7	yes	yes	It's just kind of like one of our goals is to be able to reply to people and push them through and stuff within a 24 hour [window].
7	yes	yes	Like they can report on me and say, 'Hey, [Int7], you take an average of two days to get back to a candidate' or 'two days to review a candidate.' And they'll say, 'let's try and get that down till one day.' 'Let's try and get that down to 12 hours' or something
7	yes	yes	But like, as long as I get it done within 24 hours, then they are don't they, my manager doesn't like, come down my throat, you know?
7	yes	yes	So there's a lot of like reports that can be done and a lot of things that can be done to like show like exactly when I logged on or when I reviewed this candidate and, so we keep tabs on all of this stuff and Workday does a lot of that for us, which is cool.
7	Yes	yes	the company treats us so well. And we have so many great benefits and they really value their employees here, which is really cool