

Fall 2021

The Moderating Effect of Locational Autonomy on the Relationship Between Remote Work and Counterproductive Work Behaviors

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DOI: <https://doi.org/10.31979/etd.vtbx-wfb3>
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THE MODERATING EFFECT OF LOCATIONAL AUTONOMY ON THE
RELATIONSHIP BETWEEN REMOTE WORK AND COUNTERPRODUCTIVE
WORK BEHAVIORS

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Alexandra M. Wong

December 2021

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The Designated Thesis Committee Approves the Thesis Titled

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ABSTRACT

THE MODERATING EFFECT OF LOCATIONAL AUTONOMY ON THE RELATIONSHIP BETWEEN REMOTE WORK AND COUNTERPRODUCTIVE WORK BEHAVIORS

by Alexandra M. Wong

The COVID-19 pandemic intensified remote work, where many companies shifted their employees to working remotely with possibilities of adopting remote work permanently. The purpose of this study was to understand negative consequences of remote work intensity on employee behavior through counterproductive work behaviors (CWBs), and whether a lack of locational autonomy would strengthen this relationship. Locational autonomy was conceptualized as two constructs: choice and approval. Results of an online survey administered to 202 participants revealed no direct relationship between remote work intensity and CWBs and locational autonomy choice had no moderating effects. However, locational autonomy approval moderated the relationships between remote work intensity and three CWB dimensions: sabotage, theft or misuse of time and concealing bad behavior. In direct opposition to the research hypothesis, those with high locational autonomy were more likely to engage in CWBs the more they worked remotely and those with low locational autonomy approval were less likely to engage in CWBs. The results suggest that managers should establish and maintain relationships with remote employees to ensure an appropriate balance between effective supervision and autonomy.

ACKNOWLEDGEMENTS

I would like to express my gratitude to my thesis committee for their dedication and support throughout this entire process. Howard, you continuously shined the light at the end of what seemed like a long tunnel and reassured me that I have the skills to succeed. Your constant support and guidance truly helped me to the end. Megumi, your knowledge in the field is so invaluable, and I truly appreciate all your time and advice that helped bring out the best in my writing. Ed, your mentorship and wisdom have provided me insight on scenarios useful and applicable to my career and life in general, and I'm genuinely honored to work with you. Thank you so much to this committee for supporting my journey.

I also have been extremely blessed to have an amazing support system of family, friends, and coworkers, and could not have been successful without them. There are a few individuals who deserve special recognition. Erin, I couldn't imagine this journey without your friendship, and I am privileged to have finished this chapter with you - cheers to many more. Katie, you were literally there with me from beginning to end. Thank you for listening to my lows and celebrating my wins. Lastly, to my partner, Cris, who supported my dream, pushed me to study and write when I didn't want to, forced me to take breaks when I needed it, and is my number one supporter in any challenge I endeavor.

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Introduction

The ability to work remotely from the office has captivated workforces across the world in varying industries and businesses and has been a rising trend for several years. Remote work adoption enables companies to leverage innovative technology that allows employees to complete their job functions in a location other than the office. Remote work was intensified in March 2020 due to the onset of the global COVID-19 pandemic. The existing research acknowledges remote work to increase job satisfaction and productivity, as well as reduce work-family conflict, which are all positive impacts (Allen et al., 2015; Gajendran & Harrison, 2007). However, the majority of research studied part-time remote work, such as one day a week or a few days a month. These research findings may not be assumed to apply to extensive or full-time remote work. Additionally, existing research focuses on remote work arrangements that allow employees the discretion of where to perform their work, such as the office, their home or another location. The impact of predetermining and mandating an employee's remote work location may have negative consequential outcomes, which has not been explored in the research. The purpose of this study was to understand the negative consequences of extensive remote work on employee behavior through counterproductive work behaviors, and whether the lack of employee discretion on where to perform their work would strengthen the relationship between extensive remote work and counterproductive work behaviors.

The following sections provide a historical overview on the origin of remote work and how remote work is distinguished between the various terms and definitions that have evolved over the years. Next, I review literature addressing the effects of remote work on

attitudes and behaviors including counterproductive work behaviors, which was the dependent variable of focus in this study. Following this, I discuss why it is critical to study the extensiveness of remote work, or intensity, as well as how locational autonomy could impact the relationship between remote work intensity and counterproductive work behaviors.

History of Remote Work

The beginning of remote work, with the home as the designated remote work location, can arguably be dated back as early as the age of the hunter-gatherers to the Medieval times, where societies functioned by combining the workspace with the living space (Reynolds, 2017). Utilizing the same space for both living and working allowed people to maximize their household resources by employing family members to help make a living. The Medieval times saw an evolved sophistication of the work from home set-up where craft and trade shops were centralized inside homes (Reynolds, 2017). The boundaries between work and family rarely existed as the mentality of managing the home also meant managing the family's business (Reynolds, 2017).

The Renaissance era produced the first concept of an office, but still maintained a blended work and living space for businesses and shops (Reynolds, 2017). What progressed with time was the physical division of work from living within the home. The front of the home facing the street, for example, was designated for the business while the living quarters were situated in the back of the house (Reynolds, 2017). However, both the workspace and living space remained in the same building.

In the late 1800s, the Industrial Revolution changed the dynamics of the workforce as factory work pulled people away from their homes, thereby introducing a work-outside-the-home model (Reynolds, 2017). Factories generating mass production of goods progressed societies towards a more industrial lifestyle and predominantly housed the working class. This also resulted in inflexible schedules with set start and end times at the work site and employer-provided equipment and tools, which shifted the central location of work from home to offsite (Reynolds, 2017).

The twentieth century, particularly after World War II, transitioned much of the American workforce from the industrial setting to the modern office space (“The History”, n.d.). Working outside the home became the norm with office jobs particularly viewed as stable and reliable. As the precursors to technology today, this era utilized the telephone, telegraph, public electricity, and typewriter to accomplish work tasks (Reynolds, 2017). By the 1960s, as working outside the home became more popular, the workforce consisted of commuters traveling to modern business offices as well as service workers in blue collar industrial and laborious jobs (Reynolds, 2017). For the majority of the employed, one’s worksite was completely and physically separate from the living space.

In the 1970s, a shift in perspective emerged regarding the downsides of commuting to a central location and whether working from home was the more ideal situation. This idea was supported by several key events. The Clean Air Act was passed in 1970 to control air pollution from business and mobile traffic (United States Environmental Protection Agency, 2017). In 1973, the Organization of Petroleum Exporting Countries (OPEC) imposed an embargo against the United States, which resulted in an oil shortage as well as high gas

prices (United States Department of State, n.d.). This caused strain on the American workforce as they were largely dependent on mobile transportation to get to their worksite. Additionally, Sam Schwartz officially coined the term "gridlock" in 1980, which described traffic congestion due to commuters traveling to urban cities (Adler, 2016). Recognizing the harmful effects of commuting on the environment gave more support to the concept of working away from a centralized location.

Teleworking and Telecommuting

In 1973, Jack Nilles published the first document of teleworking and telecommuting with a core interest of reducing the commute to work while subsequently alleviating traffic and energy consumption (Gan, 2015). Known as the father of telecommuting, Nilles theorized that telecommuting “would be good for business and even better for the environment” (Berthiaume, 2020, para. 5). Nilles recommended that jobs be “redesigned so that employees can be self-contained at each individual location, or a sophisticated telecommunications and IT system must be developed to allow information transfer to occur as effectively as if employees were centrally located” (Gan, 2015, para. 7). His proposal focused on distributing employees to satellite offices rather than forcing them to be physically present in one place (Gan, 2015). Nilles began a new era in the workforce in which employees could accomplish their work tasks away from their central work location while leveraging the advancements of technology, which ultimately contributed to the foundation of today’s current remote work environment.

With the introduction of teleworking and telecommuting, it is important to differentiate the two concepts and explain how they relate to remote work. Telework and telecommuting

are forms of a flexible work arrangement that allow discretion over where and when one works (Thompson et al., 2014). Telework is defined as working from a distance using modern technology and telecommunications to keep contact with the employer or the business (Bailey & Kurland, 2002; Reynolds, 2011; “What is teleworking”, n.d.).

Telecommuting is the specific elimination of a daily commute where employees substitute a portion of their typical work hours to work away from the central workplace using technology and telecommunications (Allen et al., 2015; Reynolds, 2011). With overlaps in definitions, telework may be summarized as the act of working away from the office using technology, whereas telecommuting can be summarized as leveraging telework to eliminate a commute. Although these terms are distinct in technicality, most sources and research refer to them as the same and are used interchangeably in the literature.

Experimentation with telework and telecommuting began in the 1980s, and the introduction of the Internet in 1990 allowed employees to perform their job functions away from the worksite to a remote setting, commonly their home (“The history”, n.d.). This is where telework and telecommuting grew, as employees used technology, telecommunications, and the Internet to work at a distance from the office. Governmental agencies also became interested in the effects of telework and telecommuting with the U.S. Office of Personnel Management and the General Services Administration conducting their own assessments of the benefits and challenges of telecommuting (Reynolds, 2017). Their involvement stimulated larger efforts by companies to incorporate telework and telecommuting into their workforce.

Defining Remote Work

Another popular term used interchangeably with telework and telecommuting is remote work. Early definitions of remote work referred to specific employees who were remotely located from the office, typically in a different geographical area, and work from their home (Marzullo, 2019; “Telework guidance”, n.d.; Uy, 2019) This is a more traditional iteration of remote work. Currently, remote work refers to the ability to work away from a centralized work site or office (Allen et al., 2015; Olson & Primps, 1984). This newer definition of remote work is broader than telework and telecommuting and applies regardless of the physical proximity to the office. Remote work is an umbrella term over all facets of flexible work arrangements, which include telework and telecommuting. It is not specifically stated that telework or telecommuting are needed for remote work to occur, but it can be inferred they are components of remote work.

Although the terms telework, telecommuting, and remote work have distinct definitions as demonstrated, they are fairly synonymous in meaning (Parris, 2018; Uy, 2019). The literature has commonly referred to telework as telecommuting, telework as remote work, and remote work as telecommuting, which demonstrates that these terms are viewed as interchangeable (Allen et al., 2015; O’Neill et al., 2014). This had made it difficult to find research and statistics on the specific terms, especially remote work, and difficult to distinguish findings from one another when they ambiguously blend across the studies (Allen et al., 2015).

To further understand remote work and its current state, there are key details to point out. Remote work can be either full-time or part-time (Kosner, 2020; “What is remote work?”,

2020) and can translate to working from home or any location offsite (Kosner, 2020).

Working from home is typically the primary location for remote workers, but they are not restricted to working out of their home (Simovic, 2021). Remote work has been referred as working from home, but there is a difference in the technicality between these two terms.

Working from home is viewed as a temporary arrangement that alters the typical work routine for a day or so and thus is an identifier of one's alternative work location (Aten, 2019). Remote work is seen as a more established and formal working arrangement requiring a different set of abilities, resources, and skills (Aten, 2019). Remote work has different physical, mental, and emotional demands such that employees need to modify how they communicate, interact, and manage their time and tasks.

In today's workforce, technology and the Internet are fundamentals of most jobs where any form of remote work will naturally exist with their use and integration. The terms telework and telecommuting are becoming outdated, phasing out in popularity, and not referred to in practice anymore (Parris, 2018). Work from home is commonly used but does not capture the impact and intensity remote work carries because it is something done only on occasion versus routinely (Aten, 2019). Remote work is the more accurate description of both the current workforce situation as well as the possible implications from this study's results. For the purpose of this study, I used the term remote work, which refers to the ability to work away from a centralized work site or office (Allen et al., 2015; Olson & Primps, 1984), and included findings of telework, telecommuting and work from home.

Growth of Remote Work

What has made remote work successful thus far is the fundamental allowance of choice in when and where employees work through flexible work arrangements with their employer. Remote work and other flexible work arrangements are options for employees who want to switch their schedules or take care of personal responsibilities. Allowing employees to dictate their schedules has become a benefit employers offer as a strategy to recruit new employees and retain current ones. This has contributed to the significant growth of remote work over the last few years. Between 2005 and 2017, remote work increased by 159% (Reynolds, 2019). In 2019, 16% of the U.S. workforce worked remotely at least part-time (Abrams, 2019). These growth rates show the popularity of working away from the office moving from rigidity to flexibility.

When the COVID-19 global pandemic hit in March 2020, remote work practices were elevated to a level that was never experienced before. In an effort to slow the spread of the virus, state governments mandated their residents shelter-in-place to isolate and quarantine from one another (Wu et al., 2020). Companies that were able to transition their workforce to full-time remote quickly adopted the practice to ensure business continuity. With the shift to remote work, Stanford economist Nicholas Bloom revealed that 42% of the U.S. workforce worked remotely full-time within the first three months of the shelter-in-place mandates (Wong, 2020). By the end of 2020, 33% of U.S. employees worked remotely full-time and 25% worked remotely part-time (Brenan, 2020), which equates to more than half of the U.S. workforce (Ozimek, 2020). This is unprecedented territory for many and findings from prior research on remote work may not entirely apply to this new phenomenon. Remote work has

many benefits, which I will discuss, but there is a need to also analyze its potential negative consequences and costs (Holland et al., 2016), especially as companies assess long-term arrangements and determine whether remote work is a viable and successful solution.

Although remote work was gaining popularity on its own, the COVID-19 global pandemic launched millions of people into practicing remote work full-time, possibly changing the workforce indefinitely. In a study conducted by Ozimek (2020), 61.9% of managers said their workforce would be more remote going forward. In a different study, it was estimated that 66% of remote workers wanted to continue working remotely (Brenan, 2020), and employers are listening to the possibility of continuing remote work as a permanent solution. It is clear the ability to work remotely is not only a desirable option for employees but is also the way of the future (Grasso, 2018). In the same study conducted by Ozimek (2020), the growth rate of full-time remote work over the next five years is expected to double from 30% to 65%. Significant growth like this has been anticipated based on the established benefits that remote work has shown thus far, which is discussed in the next section.

Benefits of Remote Work

The ability to work remotely has been a mutually popular option for employees and employers because remote work is globally viewed as a solution to a variety of problems. From an employee perspective, the ability to work remotely provides benefits such as the elimination of commute times, savings on transportation costs, and a reduction in the need for formal business attire (Bailey & Kurland, 2002; Ozimek, 2020). Remote work also allows employees flexibility in their schedule and the ability to change their routines, thus resulting

in fewer interruptions and a reduction in meetings (Ozimek, 2020). While remote work may be viewed as only an employee perk at face value, there are many strategic opportunities for companies to leverage by incorporating remote work into their workforce.

Employers have realized many benefits remote work brings to them in addition to their employees. Business advantages include financial profit, elimination of physical real estate, improvement in recruitment and retention rates, and cost-effective hiring of employees who live in lower cost locations (Bailey & Kurland, 2002; Olson & Primps, 1984). Additionally, allowing employees to work remotely is a strategy to boost employee morale and increase productivity rates (Ogbonnaya, 2016).

With so many benefits for both employee and employer, remote work options appear as a win-win situation. Yet, the potential negative consequences of remote work, especially full-time, need to be thoroughly evaluated as there could be significant effects on behaviors and attitudes not identified in prior research.

Effects of Remote Work on Work Attitudes

It is important to review the effects of remote work on employee attitudes because it helps to understand the success of remote work as an effective alternative to working in the office. Additionally, it is essential to look at employee attitudes because they directly affect behavior, which is a determinant in measuring individual and team productivity and outcomes (Leonard, 2019). The next section discusses the following attitudes and their relationships with remote work: job satisfaction, well-being, and work engagement.

Job Satisfaction

The popularity of remote work has been attributed to its effects on employee attitudes, with job satisfaction one of the most studied constructs (Allen et al., 2015; Charalampous et al., 2018). Job satisfaction is the “positive (or negative) evaluative judgment one makes about one’s job or job situation” (Weiss, 2002, p. 175). Studies have shown conflicting results of the relationship between remote work and job satisfaction, with mostly positive relationships (Charalampous et al., 2018; Gajendran & Harrison, 2007). However, Golden and Veiga (2005) found that job satisfaction increased as the frequency of remote work increased but leveled off and tapered at higher use of remote work, thus producing a curvilinear U-shaped relationship. This supports the notion that overall remote work increases job satisfaction but can be damaging at higher frequencies.

Employee Well-being

Academic research on the impact of remote work on employee well-being is limited, especially with extended levels of remote work (Grant et al., 2013). Well-being is defined as “a state of complete physical, mental and social well-being” (R. Kim, 2012, p. 2). The media and existing literature have depicted two contradictory but extreme images of remote work as either the best of both worlds or cutting one’s throat, which refers to the differing perspectives of the benefits and struggles associated with remote work (Song & Gao, 2020).

One of the highly studied components of employee well-being is work-family conflict. Work-family conflict is the interaction of work and family demands that remote workers experience because the work role is inserted in the family domain (Eddleston & Mulki, 2017). Gajendran and Harrison (2007) conducted a meta-analysis demonstrating that working

from home lowers work-family conflict and increases the benefits for those who work from home more frequently. However, these results were found on people who primarily telecommuted and worked from home a few days a week (Eddleston & Mulki, 2017). Looking specifically at full-time remote workers (i.e., those who work primarily from home), their experience and approach to managing work and family may be different as the boundaries between the two are more blurred. Eddleston and Mulki (2017) argued that work-family conflict is a significant problem for full-time remote workers because work is more likely to encroach upon the family than the other way around. This demonstrates the distinction of how prevalent work-family conflict can be for full-time remote workers versus part-time remote workers.

Another component of employee well-being studied in relation to remote work is affective well-being and negative emotions and feelings that may be triggered by remote work. One study reported that remote workers experienced more negative emotions than office-based workers (Mann & Holdsworth, 2003). More specifically, the percentage of remote workers who experienced loneliness, irritability, worry, and guilt was higher than that of office workers (Mann & Holdsworth, 2003). This is alarming because remote work is naturally assumed to lead to better employee well-being, but that may not entirely be the case.

One explanation why remote work triggers negative emotions is that employees who work remotely, regardless of whether it is part-time or full-time, report working longer hours (Grant et al., 2013). This contributes to the perception that remote workers are “always on” in which they are expected or feel obliged to always be available (Charalampous et al., 2015).

This can create an inability to disconnect and disengage from work, which ultimately can translate to poor well-being and health problems (Charalampous et al., 2015).

Work Engagement

Researchers and businesses have also been interested in the relationship between remote work and work engagement. Work engagement is defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). Work engagement is important because it focuses on the individual’s attitudes and feelings towards the workplace and their colleagues, which help produce better outcomes (Hickman & Robison, 2020). Thus, remote work is viewed as a strategic way to increase engagement as it provides benefits to the employee such as job flexibility (Hickman & Robison, 2020).

A survey conducted prior to the COVID-19 pandemic (Hickman & Robison, 2020) reported that employees who worked remotely were among the most engaged, particularly those who worked remotely 60-80% of the time. Having a part-time remote work arrangement consisting of at least three days a week allowed flexibility in choosing where to work while still providing the ability to meet face-to-face with coworkers and managers (Hickman & Robison, 2020). This study by Hickman and Robison (2020) highlighted the issue of where the optimal level of engagement resides in regard to a remote work schedule.

Effects of Remote Work on Work Behaviors

While the effects of remote work on employee attitudes and well-being are highly sought after and studied, organizations have also looked at the effects of remote work on employee behaviors. Because employee behavior can result in positive or negative business outcomes,

companies are drawn to understanding the behavioral effects of remote work. The next section discusses the following behaviors and their relationships with remote work: job productivity, intent to turnover, and organizational citizenship behavior.

Job Productivity

One of the most studied impacts of remote work on employee behavior is job productivity: whether an employee is more or less productive when working remotely. Research has found a consensus that employees who work remotely are more productive (Bailey & Kurland, 2002; Belanger, 1999; Gajendran & Harrison, 2007; Ozimek, 2020). This is highly reassuring for management when assessing whether their employees will be able to maintain their productivity levels when working away from the office. It has been suggested that these higher productivity rates may be attributed to the time gained from the elimination of commutes, reduced interruptions and meetings, and a lower number of absences or sick days (Belanger, 1999; Gajendran & Harrison, 2007; Kurland & Bailey, 1999). However, it is important to point out that these higher productivity rates are derived from self-reports, which have the potential to be inaccurate or inflated because employees want to claim success or may feel more productive because they are working more hours (Allen et al., 2015; Bailey & Kurland, 2002).

Research on remote worker productivity has largely focused on employees who choose to work remotely on an occasional basis. However, alternative consequences were found for full-time remote workers who are required or forced to work from home. While academic research has identified fewer meetings as one explanation for higher productivity amongst remote workers, the volume of meetings has actually increased as a result of the COVID-19

pandemic (Kost, 2020). For example, in an analysis conducted by the Harvard Business School, workdays increased by 8.2%, or 48.5 minutes, and employees attended 13% more meetings than they did prior to the pandemic (Kost, 2020). This shows that while fewer meetings may have occurred for remote workers when it was an occasional occurrence, meetings are now heavily relied on to keep business going, resulting in an increase in the volume of daily meetings. Both longer workdays and increased meetings are likely to have an impact on remote work productivity, altering previously reported productivity rates.

Intent to Turnover

Another advantage of utilizing remote work arrangements is to optimize employee recruitment and retention rates by way of reducing the intent to turnover (Gajendran et al., 2015). In a study conducted by Gajendran and Harrison (2007), it was found that telecommuting was negatively associated with intent to turnover. Elements of remote work, such as flexibility and autonomy, help alleviate stress on employees, increase their job satisfaction, and are thus negatively related with the intent to turnover (Allen et al., 2015; Gajendran & Harrison, 2007; Gajendran et al., 2015). In support of the benefits of work flexibility, experimental research by Moen et al. (2011) found that employees with greater flexibility arrangements were less likely to turnover than employees with less flexible arrangements. This shows that remote work can be used strategically to help employees balance their external demands and obligations, which in turn lowers their intent to turnover (Kurland & Bailey, 1999).

Organizational Citizenship Behavior

Unlike the other effects of remote work, there is little empirical research on organizational citizenship behavior (OCB) (Gajendran et al., 2015). OCBs are “actions that are generally prosocial in nature” (Smith et al., 2020, p. 1). Examples of these OCBs include helping a coworker or supervisor without being asked, volunteering to help with an assignment, or applying deliberate and conscious efforts to be a team player.

Recent research regarding the relationship between remote work and OCBs has shown that OCBs are not limited to the physical workplace and can transfer to a remote work environment. For example, Smith et al. (2020) found that OCBs at home were positively related with OCBs at work, meaning that OCBs can exist regardless of their location. There is no specific differentiation between OCBs at work and OCBs at home since helping a coworker at work and helping a coworker from home are essentially the same; the location of where the help derived from is the only difference. The reasons remote workers display OCBs are more unique. Examples or reasons include actions of reciprocity towards their supervisor or the organization, minimizing resentment with non-remote coworkers, or providing evidence they are performing their job when they are not visible to others (Gajendran et al., 2015). For example, remote workers may feel the need to continue working and answering emails in their leisure time due to feelings of obligation or to show their supervisor and coworkers that they are in fact working while at home.

A downside and drawback with OCBs are their positive correlation with work-family interference (Smith et al., 2020). This means that engagement in work OCBs is likely to contribute to conflicts in one’s personal life. OCBs are typically performed by highly

engaged and motivated employees, which require higher levels of effort, time, and psychological investment. This may ultimately lead to higher levels of emotional exhaustion and less support to one's family (Smith et al., 2020).

Now that the positive relationships between remote work and employee behaviors have been established, I was also interested in exploring how remote work may affect negative behaviors. Specifically, the next section discusses how remote work may affect counterproductive work behaviors and why it is crucial to study the potential negative consequences of high-intensity remote work.

Counterproductive Work Behaviors

To investigate the potential negative consequences of remote work, the focus will shift to understanding counterproductive work behaviors (CWBs). CWBs, also known as workplace deviance, are unwanted and undesirable employee behaviors that cause harm or are intended to cause harm to an organization or its members, which threaten their well-being and affect the organization financially (Bennett & Robinson, 2000; Holland et al., 2016; Kelloway et al., 2010). There is a wide range of behaviors that can be classified as CWBs, such as theft, sabotage, intentional poor performance, tardiness, absenteeism, violence, revenge, and incivility (Gruys & Sackett, 2003; Kelloway et al., 2010). Regardless of the severity or target of the behavior, CWBs ultimately violate an organization's norms, policies, rules, or procedures with direct financial impacts (Holland et al., 2016). For example, employee theft and fraud have been estimated to cost organizations \$50 billion annually and account for 20% of failed businesses (Coffin, 2003). These financial and economic costs incentivize organizations to understand when and why CWBs are performed (Holland et al., 2016).

Research has explored the dimensionality of CWBs in a few different approaches. Holland et al. (2016) developed the most recent scale to make it relevant and applicable to a telework environment and thus applicable to a remote work environment, which was the focus of this study. Earlier CWB scale development includes Bennett and Robinson (2000), who developed a two-dimensional categorization that focused on an interpersonal-organizational deviance dimension paired with a minor-serious severity dimension. Gruys and Sackett (2003) expanded off the Bennett and Robinson scale and replaced the second dimension of severity with task relevance in order to understand similarities across different CWB actions. Spector et al. (2006) approached the dimensionality of CWB by type: abuse, production deviance, sabotage, theft, and withdrawal.

The newer CWB-telework scale by Holland et al. (2016) totals eight dimensions (abuse, production deviance, sabotage, theft or misuse of resources, theft or misuse of time, substance abuse, concealing bad behavior, and deceitful telework enabling behavior) and was created by incorporating CWB items of existing scales from Bennett and Robinson (2000), Gruys and Sackett (2003), and Spector et al. (2006). Three dimensions from the existing scales were carried over and tailored to retain items relevant and applicable to telework: abuse, production deviance and sabotage. The CWB abuse dimension has been defined as “harmful behaviors directed toward coworkers and others that harm either physically or psychologically” (Spector et al., 2006, p. 448). Since physical abuse is not applicable to a telework environment, relevant examples of abuse are cursing at someone and saying something hurtful (Holland et al., 2016). Production deviance is defined as “purposeful failure to perform job tasks effectively the way they are supposed to be performed” (Spector

et al., 2006, p. 449). Examples of telework production deviance are intentionally doing work incorrectly and avoiding work-related calls (Holland et al, 2016). The definition of sabotage from Spector et al. (2006) is “defacing or destroying physical property belonging to an employer” (p. 449), which is exclusive to physical property. Expanding the definition to fit a telework environment includes examples such as withholding information from a supervisor or coworker and destroying company records or documents (Holland et al., 2016).

Theft is defined as “any stealing or misuse of an employer’s property for personal use and without authorization”, which can include money, time, supplies, merchandise and information (Christiansen, 2020). For the CWB-telework scale, this dimension was split into two categories because of varying opportunities in a telework environment: theft or misuse of resources, and theft or misuse of time (Holland et al., 2016). Creating the two theft dimensions distinguishes how theft could occur in a telework environment given the decreased access to company property and personal belongings of coworkers (Holland et al., 2016). Examples of misuse of time are doing work for a different job and engaging in non-work-related hobbies/tasks during the work shift (Holland et al., 2016). Examples of misuse of resources are taking advantage of company resources for personal purposes or purposely falsifying documentation to your advantage (Holland et al., 2016).

A substance abuse dimension was created after combining the alcohol and drug use dimensions from Gruys and Sackett’s (2003) scale. Substance abuse is defined as behaviors that detract from production on the job (Gruys & Sackett, 2003). An example of remote work substance abuse is using an illegal drug or consuming alcohol while working (Holland et al., 2016).

Lastly, two new dimensions were added that represent other themes specific to a telework environment: concealing bad behavior and deceitful telework enabling behavior (Holland et al., 2016). Concealing bad behavior is defined as “hiding or misinforming others about inappropriate behavior or poor performance” (Holland et al., 2016, p. 178). Examples of concealing bad behavior include lying to cover up a mistake and blaming technology for a missed deadline (Holland et al., 2016). Deceitful telework enabling behavior is defined as “making false excuses or justifications to facilitate telework opportunities” (Holland et al., 2016, p. 178). Examples of deceitful telework enabling behavior includes faking an illness to justify working remotely or faking an appointment to stay home (Holland, et al., 2016).

For the purpose of this study, I used the CWB-telework scale developed by Holland et al. (2016) with modifications specific to remote work instead of telework. Additionally, I did not include the dimensions of theft or misuse of resources and deceitful telework enabling behavior as they were not deemed relevant or applicable to the study of remote work.

The existing CWB research has identified a few perspectives that suggest the motives behind these negative behaviors. Essentially, employees engage in workplace deviance as reactions to perceived injustice (inequity), dissatisfaction, role modeling, or thrill-seeking (Bennett & Robinson, 2000). Aggression or revenge can also be motives for certain CWBs that are more violent and damaging (Spector et al., 2006). The stress/emotion/CWB model is an alternative explanation at the reasoning for these motives, which indicates that certain events in the workplace environment become threatening to an employee’s well-being and can trigger negative emotions like stress, anger or frustration, and result in CWBs (Spector & Miles, 2011). This model is similar to the causal reasoning theory, which considers how

employees evaluate the causes of their outcomes and its effect on their behavior, thus resulting in a behavior as a reaction to the event or experience (Krischer et al., 2010; Martinko et al., 2002). These two theories help explain a cause-and-effect relationship with CWBs.

Alternatively, in response to the stressors and demands that employees perceive, they may engage in CWBs as a coping mechanism to reduce the experience of negative emotions (Krischer et al., 2010). Coping buffers the negative impact of job stressors and reduces employee strain (Krischer et al., 2010). Coping behaviors can appear in forms of employee withdrawal (e.g., taking longer breaks) and production deviance (e.g., intentionally working slowly) (Krischer et al., 2010). This theory provides a different perspective behind CWBs where the employee performs behaviors as an act of self-preservation rather than an intended harmful action on others.

Remote Work and Counterproductive Work Behaviors

In looking at the overall relationship between remote work and CWBs, it is virtually an unexplored domain with little empirical research (Holland et al., 2016). However, the existing literature about remote work and CWBs has been quite specific about examining particular behaviors such as cyberslacking, which is “a phenomenon in which employees are distracted by non-work Internet browsing when they should be accomplishing work tasks” (O’Neill et al., 2014, p. 152). In a study conducted by O’Neill et al. (2014), remote work characteristics of self-management tactics (deciding the order of one’s work or planning ahead), conscious socialization efforts (fostering relationships and increasing meaningfulness in one’s work), and regular upward communication (keeping superior informed of work

progress and issues) were found to moderate the relationship between certain personality traits and cyberslacking. While this is an example of one CWB exacerbated in a remote work environment, it does not provide the entire picture in understanding the overall relationship between remote work and CWBs.

In the process of developing the CWB-telework scale, Holland et al. (2016) identified three main differences between in-person office work and telework: decreased direct contact with supervisors and coworkers, greater schedule flexibility, and decreased oversight. These factors alter the employee experience and consequently impact the existence of CWBs in telework. Decreased contact with supervisors and coworkers refers to the limited opportunities one has with people interaction because they are working away from the office, and therefore provides fewer opportunities for the CWB abuse dimension (Holland et al., 2016). Greater schedule flexibility naturally comes with telework in that employees are able to determine when and where they work remotely, which increases the likelihood of withdrawal-related behaviors and therefore resulted in the removal of this dimension from the CWB-telework scale (Holland et al., 2016). Decreased oversight results from the reduction of manager supervision when working away from the office, and therefore provides more opportunities to misuse time (Holland et al., 2016). These telework-related situational aspects contributed to a new perspective of how CWBs may occur in a telework environment and thus supported the development of the CWB-telework scale.

Popular belief surrounding remote work has been largely positive with many preferring it over physically working in the office. While the benefits of remote work have largely been studied, searched and sought after, not enough focus has been given to the potential harmful

effects of remote work. The research has touched on how job satisfaction and work-family conflict suffer with extreme levels of remote work, but there has not been a focus on whether remote work affects employee behaviors in the same manner. More emphasis should be placed in studying the existence of these behaviors to gain a better understanding of a remote work environment. It is anticipated the workforce will continue to work remotely more in the next several years, and therefore it is important to explore whether there are negative consequences of remote work, specifically on employee behavior. Additionally, another aspect of the remote work literature that needs further exploration is the impact of remote work frequency, or intensity, on employee attitudes and behaviors, which is how remote work was measured in this study.

Remote Work Intensity

A significant discrepancy in the remote work literature is that some results may not be applicable to current practice due to how the frequency of remote work has been studied. Most of the existing research has measured occasional and infrequent remote work arrangements, such as once a week or a few times a month, with the assumption that the findings are applicable to full-time remote work arrangements (Bailey & Kurland, 2002; Wang, 2020). This research presumes the results can be applied across the board to all remote workers regardless of frequency, which may not accurately depict the remote work population (Kurland & Bailey, 1999). This is misleading and provides inconclusive interpretations as there could be differences in outcomes between those who work remotely occasionally versus those who work remotely more extensively (Bailey & Kurland, 2002; Wang, 2020).

The extent of how much one works remotely is referred to as remote work intensity (Gajendran et al., 2015). High-intensity remote work has been defined as consisting of at least three days a week to full-time (Fonner & Roloff, 2010). Alternatively, low-intensity remote work is less than three days a week.

High-intensity remote workers can experience unique negative outcomes that low-intensity remote workers do not (Fonner & Roloff, 2010). Konradt et al. (2003), for example, found that those who worked remotely more than 50% of their time reported higher non-job-related stressors, such as work-family conflict and lack of social support, than those who worked remotely less than 50% of their time. Golden et al. (2008) found that the negative impact of professional isolation, which is the belief that one is out of touch with others in the workplace, on job performance was higher for those who worked remote extensively. These findings demonstrate that outcomes can be different between low and high-intensity remote workers, and that prior research findings cannot be applied generally. These examples give insight into the potentially damaging effects high-intensity or full-time remote work can have on employees.

Given the effects high-intensity remote work has on employee attitudes and behaviors, it is critical to investigate the same concern with the negative side of remote work through CWBs. Allen et al. (2015) emphasized there might be a threshold in how much an individual can work remotely before negative effects are seen. As mentioned previously, Spector and Miles (2001) discussed the job stress/emotion/CWB model, which explains how certain events threaten an employee's well-being and can trigger negative emotions and stress

resulting in CWBs. Given these findings, the following hypothesis was made regarding the relationship between remote work intensity and CWBs:

Hypothesis 1: Remote work intensity is positively related to counterproductive work behaviors.

Frequency, or intensity, of how much one works remote is a notable aspect of this modern work arrangement and it is clear additional exploration is needed to understand the impact on employee behaviors, specifically CWBs. Additionally, another variable of interest to this study that could affect the relationship between remote work and CWBs is locational autonomy.

Locational Autonomy as a Moderator

A major attraction to remote work is job autonomy, which is “the degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out” (Hackman & Oldham, 1976, p. 258). Job autonomy is commonly associated with workplace flexibility, which refers to employee choice in the timing, location, continuity, and amount of work to be performed (Hyatt & Coslor, 2018). Workplace flexibility enhances job autonomy (Allen et al., 2015; Belanger, 1999) where “flexibility equals control” (Gajendran & Harrison, 2007, p. 1526).

Job autonomy is relevant to remote work because job autonomy has been shown to produce positive effects on job satisfaction, productivity, and work-life balance (Hyatt & Coslor, 2018). Autonomy allows remote workers to juggle their professional and personal responsibilities, thus decreasing work-family conflict (Allen et al., 2015; Hyatt & Coslor,

2018). Additionally, other aspects of job autonomy allow employees the ability to structure their duties and responsibilities differently than in the office, resulting in higher job satisfaction (Gajendran et al., 2015).

Job autonomy is multi-dimensional and can be distinguished in four styles: work method autonomy (discretion on how the work is performed), work scheduling autonomy (discretion on when to perform a task), work time autonomy (discretion on when to stop and start working) and locational autonomy (discretion on where to perform the job) (De Spiegelaere et al., 2016). Locational autonomy, commonly referred to as flexible work location, was incorporated as the moderator variable in my study because of its relevance to remote work as a newer and modern dimension of autonomy (De Spiegelaere et al., 2016; Kaduk et al., 2019). Locational autonomy is relevant to the current state of the modern workforce due to the COVID-19 pandemic and thus can provide essential insight in how remote work intensity is related to behaviors, specifically CWBs.

Scholars have indicated that there is a need to distinguish and emphasize between these different types of autonomy (Kaduk et al., 2019). However, research specifically on locational autonomy and flexible work location is hard to find in the remote work literature. De Spiegelaere et al. (2016) found a positive relationship between locational autonomy and innovative work behaviors, which are described as employee behaviors related to innovations for organizational benefits. This suggests that employee choice and control over where one works remotely influences positive employee behaviors such as creativity, motivation, and engagement (De Spiegelare et al., 2016).

In another study that focused on employee choice and control, Hyatt and Coslor (2018) proposed that an employer-imposed flexible work schedule without employee choice might produce negative outcomes and be associated with adverse effects on the worker. In support of this, they found that employer-imposed across-the-board work schedules did not reap the same benefits as true flexible work arrangements as those described earlier with remote work (Hyatt & Coslor, 2018). Their findings highlighted the importance of an employee's sense of control and their relationship with positive outcomes (Hyatt & Coslor, 2018). While their study focused on flexibility in a work schedule and is not the same as locational autonomy, their findings are related to employee choice and control, which is foundational for locational autonomy.

Kaduk et al. (2019) also studied employee choice and control through involuntary versus voluntary flexible work schedules with an emphasis on the discretion of when to work remotely. A voluntary flexible work schedule was defined as "chosen and desired by employees" (Kaduk, et al., 2019, p. 414) whereas an involuntary flexible work schedule was defined as "working over and beyond conventional times and places because managers or employers require it" (Kaduk, et al., 2019, p. 414). They found that those who involuntarily worked remotely reported feeling pressure to be "always on" and available, felt higher expectations than if they chose to work remotely, and experienced more work-family conflict (Kaduk et al., 2019). This supports that employee choice and control are critical to positive outcomes as the removal of employee choice and control resulted in negative outcomes. Spector and Miles (2001) also emphasized the importance of control as a moderator factor in the job stress process, where the perception of not having control to cope with job stressors

was a determinant of CWBs. These findings support the value and significance of having control and choosing one's work location.

It is clear the benefits and positive outcomes of remote work can be partially credited to employees' discretion over work location rather than it being determined by the employer. In demonstrating the negative impact of removing choice and control on employee behavior, the research suggests that locational autonomy could impact the effect of remote work intensity on CWBs. A lack of locational autonomy could negatively influence the effects of remote work intensity on CWBs by strengthening the relationship. More specifically, the removal of employee choice and control in the discretion of work location can negatively influence the relationship by increasing the likelihood of undesirable employee behaviors. Given these findings, the following hypothesis was made regarding the moderating effect of locational autonomy:

Hypothesis 2: Locational autonomy will moderate the relationship between remote work intensity and counterproductive work behaviors (CWBs), in that a lack of discretion over one's work location will strengthen the positive relationship between remote work intensity and CWBs.

A lack of discretion over work location will strengthen the relationship between remote work intensity and CWBs because lack of control will increase the adverse effects on employees such as bad behaviors. Employee control over work location has had positive relationships with stress, distress, and burnout (Kaduk et al., 2019). Thus, removal of locational autonomy in a high-intensity remote work arrangement can increase feelings of

stress, distress, and burnout, which may lead to negative employee behaviors through CWBs as a coping mechanism or based on the job stress/emotion/CWB model.

Purpose of the Study

The purpose of this study was to investigate the relationship between high-intensity remote work and CWBs, and whether locational autonomy moderates this relationship. Given the limited research on the relationship between remote work and CWBs, there is little known about whether these negative behaviors translate from an in-office environment to a remote work environment. Additionally, job autonomy is commonly recognized alongside remote work because of the increased beneficial outcomes. When aspects of autonomy are removed or limited, such as the discretion in work location, negative effects on the relationship between remote work and employee behaviors may surface as a result of lack of choice and control.

While remote work has historically painted a positive image of increased productivity, satisfaction, and well-being, not enough light has been shed on the potential downside of remote work when practiced extensively. Given the trend of how increased remote work affects other attitudes and behaviors, a similar effect with CWBs can be hypothesized, in that remote work intensity has a positive relationship with CWBs and this relationship could be moderated by locational autonomy.

Method

Participants

A total of 242 individuals participated in this study. Participants were recruited during the spring of 2021, 14 months after the COVID pandemic started, using a social networking site (LinkedIn) comprised of my personal and professional colleagues, as well as professional email distribution lists that allowed solicitation of the study. The criteria to be included in the sample were that individuals had to be employed and work remotely in some capacity in their current role. Those who indicated they were not employed or working remotely were automatically taken to the end of the survey and excluded from data collection. Additionally, participants who had extreme amounts of missing data were excluded from the sample. Consequently, the final sample consisted of 202 participants.

Table 1 reports demographic information of the sample. In terms of age, the sample was somewhat evenly distributed across a wide range of ages, with a high number of participants 35 to 44 years (34.2%), followed by 45 to 54 years (21.8%), 25 to 34 years (20.3%), and 55 to 64 years (17.3%). The sample consisted of 64.4% females, 34.2% males, and 1.5% non-binary. In terms of their family and living situation, majority of the participants (77.2%) were either married or lived with a partner, whereas the rest of the participants (22.8%) lived alone. A majority of the participants also reported they had children, with 32.7% reporting two children and 19.8% participants reporting one child. Alternatively, 37.6% participants reported they had no children.

Table 1
Demographic and Background Characteristics of Participants (N = 202)

| Variable | <i>n</i> | % |
|--|----------|-------|
| Age | | |
| 18-24 | 4 | 2.0% |
| 25-34 | 41 | 20.3% |
| 35-44 | 69 | 34.2% |
| 45-54 | 44 | 21.8% |
| 55-64 | 35 | 17.3% |
| Over 64 | 9 | 4.5% |
| Gender | | |
| Male | 69 | 34.2% |
| Female | 130 | 64.4% |
| Non-binary | 3 | 1.5% |
| Married or Living with Partner | | |
| Yes | 156 | 77.2% |
| No | 46 | 22.8% |
| Number of Children | | |
| 0 | 76 | 37.6% |
| 1 | 40 | 19.8% |
| 2 | 66 | 32.7% |
| 3 | 12 | 5.9% |
| 4 or more | 8 | 4.0% |
| Length of Employment at Current Company | | |
| Less than 6 months | 10 | 5.0% |
| 6 months to 1 year | 5 | 2.5% |
| 1 to 3 years | 46 | 22.8% |
| 3 to 6 years | 45 | 22.3% |
| 6 to 10 years | 39 | 19.3% |
| More than 10 years | 57 | 28.2% |
| Months Working Remotely | | |
| Less than 6 months | 12 | 5.9% |
| 6 months to 1 year | 37 | 18.3% |
| 1 to 3 years | 146 | 72.3% |
| More than 3 years | 7 | 3.5% |
| First Job Working Remotely | | |
| Yes | 132 | 65.3% |
| No | 70 | 34.7% |

Details of employment were measured and found that 28.2% of participants had been employed for more than 10 years, 22.8% of participants were employed for one to three years, 22.3% of participants were employed for three to six years, and 19.3% of participants were employed for six to 10 years. A large percentage of the sample (72.3%) had been working remotely for one to three years compared to a smaller percentage of participants (18.3%) who had been working remotely for six months to one year. Lastly, the sample showed many of the participants were working remotely for the first time (65.3%) compared to having worked remotely in previous jobs (34.7%).

To summarize the sample, the distributed ages of the participants were comparable in size and almost half of the participants had been working in their current role for at least six years, which shows many of the participants are in the heart of their careers. Lastly, more than half of the participants indicated family responsibilities, such as marriage, living with a partner, or having kids. Overall, this study's sample appropriately characterized the current workforce.

Measures

Remote Work Intensity

Remote work intensity was defined as the extent of how much one works remotely (Gajendran et al., 2015). Remote work intensity was measured using one item on a 1 to 6 scale that asked, "How many hours do you work remotely per week?" Response choices were 1 = *less than 8 hours*, 2 = *8 to 16 hours*, 3 = *16 to 24 hours*, 4 = *24 to 32 hours*, 5 = *32 to 40 hours*, and 6 = *more than 40 hours*.

Locational Autonomy

Locational autonomy was measured by four items influenced by Kaduk et al. (2019), who studied voluntary versus involuntary flexible work. Two items assessed how much autonomy, or choice, participants had in choosing where to perform their job functions. The items were “I have a choice of completing my job functions in the office or remotely” and “I have a choice of working remotely at home or another location.” To avoid response bias, the other two items were worded in the opposite direction with the assumption that manager approval was the opposite of having choice. These items were “I need approval from my manager to work remotely at my home” and “I need approval from my manager to work remotely from a location different from my home,” which were rated on a 5-point Likert scale (1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neither Agree nor Disagree*, 4 = *Agree*, 5 = *Strongly Agree*).

After reverse scoring two of the items (“I need approval from my manager to work remotely at my home,” and “I need approval from my manager to work remotely from a location different from my home”), the average response to the four items yielded an overall score for locational autonomy, which includes a range of scores between 1.00 to 5.00. A higher mean score indicated more perceived locational autonomy, which translates participants felt they had discretion over where they could perform their job functions. Alternatively, a lower mean score suggested less perceived locational autonomy, which meant that participants did not feel they had a choice over where they can perform their job functions, and thus the decision could be made for them by their manager or organization.

The internal consistency reliability of the scale (Cronbach's alpha) demonstrated low reliability ($\alpha = .39$).

Due to the low reliability of the four locational autonomy items, there was concern that the scale was measuring more than one construct. Consequently, the items were split into two dimensions of locational autonomy: choice and approval. The two items included in the choice dimension were "I have a choice of completing my job functions in the office or remotely," and "I have a choice of working remotely at home or another location." This dimension demonstrated moderate reliability ($\alpha = .61$). A higher mean score indicated participants felt they had choice in their work location. Alternatively, a lower mean score indicated participants felt they did not have a choice in their work location.

The two items included in the approval dimension were "I need approval from my manager to work remotely at my home" and "I need approval from my manager to work remotely from a location different from my home," both of which were reverse scored. This dimension also demonstrated moderate reliability ($\alpha = .58$). A higher mean score indicated participants felt they did not need manager approval in determining their work location. Alternatively, a lower mean score indicated participants felt they needed manager approval in determining their work location. The higher reliability of the two dimensions justifies separating the locational autonomy scale into two variables measuring locational autonomy choice and locational autonomy approval.

Counterproductive Work Behaviors

The Counterproductive Work Behavior (CWB) for Telework scale by Holland et al. (2016) was modified to include 20 items via six dimensions regarding negative behaviors

specifically applicable to a remote work environment. The 20 items were prefaced with “How often have you done each of the following things while working remotely in your current job?” The items were measured on a 5-point Likert scale (1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Very Often*). The average response to each dimension was calculated, with possible scores ranging between 1.00 to 5.00. A higher mean score indicated participants engaged in more CWBs while working remotely. A lower mean score indicated that participants did not engage or rarely engaged in CWBs while working remotely.

The first dimension was abuse, defined as harmful behaviors directed toward coworkers and others (Holland, et al., 2016; Spector et al., 2006). Three items measured this construct. An example of an item that measured abuse was “started an argument with my supervisor or coworker.” The internal consistency reliability of abuse demonstrated moderate reliability ($\alpha = .59$).

The second dimension was production deviance, defined as “purposeful failure to perform job tasks effectively the way they are supposed to be performed” (Spector et al., 2006, p. 449). Three items measured this scale. An example of an item that measured production deviance was “intentionally did my work badly or incorrectly.” The internal consistency reliability of production deviance demonstrated low reliability ($\alpha = .35$).

The third dimension was sabotage, defined as defacing or destroying property belonging to an employer (Holland et al., 2016; Spector et al., 2006). Three items measured this construct. An example of an item that measured sabotage was “withheld information from a supervisor or coworker, knowing it could hurt their job performance.” The internal consistency reliability of sabotage demonstrated low reliability ($\alpha = .31$).

The fourth dimension was theft or misuse of time, defined as any stealing, use or misuse of work time without permission (Holland et al., 2016; Spector et al., 2006). Four items measured this scale. An example of an item that measured theft or misuse of time was “worked on household tasks.” The internal consistency reliability of theft or misuse of time demonstrated high reliability ($\alpha = .76$).

The fifth dimension was concealing bad behaviors, defined as “hiding or misinforming others about inappropriate behavior or poor performance” (Holland et al., 2016, p. 178). Four items measured this construct. An example of an item that measured concealing bad behavior was “pretended to be online when I wasn’t.” The internal consistency reliability of concealing bad behavior demonstrated moderate reliability ($\alpha = .60$).

The sixth and last dimension was substance abuse, defined as alcohol and drug use behaviors that detract from production on the job (Gruys & Sackett, 2003). Three items measured this scale. An example of an item that measured substance abuse was “had my performance affected due to a hangover from alcohol or drug use.” The internal consistency reliability of substance abuse demonstrated moderate reliability ($\alpha = .65$).

Prior to the CWB scale, two organizational citizenship behavior (OCB) items were included to soften the intensity of the CWB items and decrease any potential participant hesitancy to answer. These two items were extracted from the OCB Checklist created by Fox et al. (2012) and have been established in the research to be applicable at home in a remote work setting. The items, asked in conjunction with “How often have you done each of the following things while working remotely in your current job?” were “worked through meal breaks and other breaks to complete work” and “helped a co-worker who had too much to

do.” The two OCB items used the same 5-point Likert scale as the CWB items but were not included for this analysis.

Demographics

Demographics were obtained using seven items. These items were age, gender, whether they were married or lived with a partner, number of children, length of employment at their current company, how many months they had been working remotely, and whether their current role was the first time they worked remotely. These items were chosen to determine the composition of the participants and its representation of remote workers. See the Appendix for the full version of the questionnaires.

Procedure

The survey was administered online to participants via an online survey tool (Qualtrics). The invitation to participate in the study included a brief description of the study, the estimated time it would take to complete the survey, the survey link, and a reminder that responses would be confidential. Once directed to the survey, participants were provided with a more detailed description and instructions. After reading the instructions, the respondents were asked to confirm their voluntary consent to participate in the study. Each individual had the option to voluntarily opt in or out of the study. If the respondent confirmed their consent, they were guided to the survey, which contained a total of 37 items regarding remote work intensity, locational autonomy, CWBs, and demographic information.

The survey was open to participants for three weeks, where participants could take the survey at their convenience. Those who did not consent to the survey or answered “No” to being currently employed and/or working remotely were directed to the end of the survey and

thanked for their time. Once all the surveys were collected, the data were statistically analyzed using Statistical Package for Social Sciences (SPSS) version 25.

Results

Descriptive Statistics

Descriptive statistics were calculated to assess the central tendency and variability of the study's measured variables. Table 2 displays the means and standard deviations of the measured variables.

Table 2
Descriptive Statistics for Remote Work Intensity, Locational Autonomy and Counterproductive Work Behaviors

| Variable | <i>M</i> | <i>SD</i> |
|----------------------------------|----------|-----------|
| Remote work intensity | | |
| Hours per week | 4.98 | 1.20 |
| Locational autonomy | | |
| Choice | 3.19 | 0.98 |
| Approval | 2.61 | 1.02 |
| Counterproductive work behaviors | | |
| Abuse | 1.07 | 0.25 |
| Production deviance | 1.30 | 0.37 |
| Sabotage | 1.08 | 0.23 |
| Theft or misuse of time | 2.06 | 0.64 |
| Concealing bad behavior | 1.24 | 0.35 |
| Substance abuse | 1.05 | 0.20 |

Note. $N = 202$

The participants reported a high frequency of remote work, meaning that they worked remotely more than 24 hours per week, which is equivalent to three or more days ($M = 4.98$, $SD = 1.20$). Locational autonomy was measured as two variables: choice and approval. The participants reported they had a moderate amount of perceived choice in determining their

work location ($M = 3.19$, $SD = 0.98$). Alternatively, the participants needed a low to moderate amount of approval in determining their work location ($M = 2.61$, $SD = 1.02$).

Six dimensions of CWBs were measured in the study. Theft or misuse of time had the highest mean amongst the participants, which showed this was the most displayed behavior in a remote work environment ($M = 2.06$, $SD = 0.64$). The rest of the CWB dimensions had similar means ranging from 1.05 to 1.30, which suggests that these CWBs were never or rarely exhibited in a remote work environment. Participants reported the least frequent CWB of substance abuse ($M = 1.05$, $SD = 0.20$), followed by abuse ($M = 1.07$, $SD = 0.25$), sabotage ($M = 1.08$, $SD = 0.23$), concealing bad behavior ($M = 1.24$, $SD = 0.35$), and production deviance ($M = 1.30$, $SD = 0.37$).

Pearson Correlations

Using Pearson correlations, the strength of the relationships amongst the measured variables were assessed (Table 3). Amongst the predictor variables, only the approval dimension of locational autonomy had significant relationships with CWBs. Locational autonomy approval had moderately strong relationships with the CWB dimensions of concealing bad behavior, $r(200) = .25$, $p < .01$, theft or misuse of time, $r(200) = .24$, $p < .01$, and sabotage, $r(200) = .20$, $p < .01$. Locational autonomy approval had weak significant relationships with the CWB dimensions of substance abuse, $r(200) = .15$, $p < .05$, and production deviance, $r(200) = .17$, $p < .05$. These results suggested that the less approval needed in determining one's work location, thus higher autonomy, the more likely one would engage in behaviors that misuse work time, conceal bad behaviors, sabotage others, substance abuse and production deviance.

Table 3
Pearson Correlations among the Measured Variables

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------------|------|------|-------|-------|-------|-------|-------|-------|----|
| 1. Remote Work Intensity | -- | | | | | | | | |
| 2. Locational Autonomy: Choice | -.09 | -- | | | | | | | |
| 3. Locational Autonomy: Approval | .01 | -.01 | -- | | | | | | |
| 4. CWB: Abuse | .00 | -.01 | .08 | -- | | | | | |
| 5. CWB: Production Deviance | .00 | -.03 | .17* | .26** | -- | | | | |
| 6. CWB: Sabotage | .01 | -.07 | .20** | .57** | .39** | -- | | | |
| 7. CWB: Theft or Misuse of Time | .10 | -.05 | .24** | .05 | .53** | .15* | -- | | |
| 8. CWB: Concealing Bad Behavior | .03 | -.03 | .25** | .29** | .55** | .41** | .57** | -- | |
| 9. CWB: Substance Abuse | .10 | .04 | .15* | .40** | .39** | .50** | .28** | .43** | -- |

Note. $N = 202$, * $p < .05$, ** $p < .01$, *** $p < .001$

Locational autonomy choice did not have any significant relationships with the CWB dimensions, which suggests that the need for approval in locational autonomy had stronger relationships with CWBs than employee choice. This is perhaps indicative of how the participants viewed approval versus choice. Lastly, remote work intensity did not have any significant relationships with the CWB dimensions, which suggests no direct relationship between the frequency of remote work and CWBs.

Tests of Hypotheses

Hypothesis 1 stated that remote work intensity would be positively related to CWBs. Pearson correlations were computed to assess the relationship between remote work intensity

and the six dimensions of CWB. The results did not show any significant relationships between remote work intensity and CWBs (see Table 3), thus Hypothesis 1 was not supported. There were no direct effects between remote work intensity and CWBs.

Hypothesis 2 stated that locational autonomy would moderate the relationship between remote work intensity and CWBs, in that a lack of discretion over one's work location would strengthen the positive relationship between remote work intensity and CWBs. To test this hypothesis, a total of 12 hierarchical multiple regression (MRC) analyses were conducted with the two moderator variables for each of the six CWB dimensions utilizing three steps. Remote work intensity was entered into the first step to assess its direct effect with each CWB dimension. In the second step, a moderator variable (either the choice or approval dimension of locational autonomy) was entered to test any significant incremental relationships with CWBs. In the third step, the cross-product of remote work intensity and locational autonomy (choice or approval) was entered to test the moderating effect of locational autonomy on the relationship between remote work intensity and CWBs. The results of these analyses are displayed in Table 4.

Looking at the first step of the analyses in Table 4 shows that remote work intensity did not significantly account for any of the variance of the six CWB dimensions. This means that remote work intensity did not significantly contribute to the prediction of CWBs.

Table 4

Hierarchical Multiple Regression Analysis for Remote Work Intensity and Locational Autonomy Predicting Counterproductive Work Behaviors

| Abuse | | | |
|--------|---|----------------|-----------------|
| Steps | | R ² | ΔR ² |
| Step 1 | Remote Work Intensity | .00 | .00 |
| Step 2 | Locational Autonomy - <i>Choice</i> | .00 | .00 |
| | Locational Autonomy - <i>Approval</i> | .01 | .01 |
| Step 3 | Remote Work x Locational Autonomy - <i>Choice</i> | .00 | .00 |
| | Remote Work x Locational Autonomy - <i>Approval</i> | .01 | .00 |

| Production Deviance | | | |
|---------------------|---|----------------|-----------------|
| Steps | | R ² | ΔR ² |
| Step 1 | Remote Work Intensity | .00 | .00 |
| Step 2 | Locational Autonomy - <i>Choice</i> | .00 | .00 |
| | Locational Autonomy - <i>Approval</i> | .03 * | .03 * |
| Step 3 | Remote Work x Locational Autonomy - <i>Choice</i> | .01 | .01 |
| | Remote Work x Locational Autonomy - <i>Approval</i> | .04 | .02 |

| Sabotage | | | |
|----------|---|----------------|-----------------|
| Steps | | R ² | ΔR ² |
| Step 1 | Remote Work Intensity | .00 | .00 |
| Step 2 | Locational Autonomy - <i>Choice</i> | .00 | .00 |
| | Locational Autonomy - <i>Approval</i> | .04 ** | .04 ** |
| Step 3 | Remote Work x Locational Autonomy - <i>Choice</i> | .01 | .01 |
| | Remote Work x Locational Autonomy - <i>Approval</i> | .07 * | .03 * |

Theft or Misuse of Time

| Steps | R ² | ΔR ² |
|--|----------------|-----------------|
| Step 1 Remote Work Intensity | .01 | .01 |
| Step 2 Locational Autonomy - <i>Choice</i> | .01 | .00 |
| Locational Autonomy - <i>Approval</i> | .07 *** | .06 *** |
| Step 3 Remote Work x Locational Autonomy - <i>Choice</i> | .01 | .00 |
| Remote Work x Locational Autonomy - <i>Approval</i> | .09 * | .02 * |

Concealing Bad Behavior

| Steps | R ² | ΔR ² |
|--|----------------|-----------------|
| Step 1 Remote Work Intensity | .00 | .00 |
| Step 2 Locational Autonomy - <i>Choice</i> | .00 | .00 |
| Locational Autonomy - <i>Approval</i> | .07 *** | .06 *** |
| Step 3 Remote Work x Locational Autonomy - <i>Choice</i> | .00 | .00 |
| Remote Work x Locational Autonomy - <i>Approval</i> | .10 ** | .03 ** |

Substance Abuse

| Steps | R ² | ΔR ² |
|--|----------------|-----------------|
| Step 1 Remote Work Intensity | .01 | .01 |
| Step 2 Locational Autonomy - <i>Choice</i> | .01 | .00 |
| Locational Autonomy - <i>Approval</i> | .03 * | .02 * |
| Step 3 Remote Work x Locational Autonomy - <i>Choice</i> | .01 | .00 |
| Remote Work x Locational Autonomy - <i>Approval</i> | .04 | .00 |

Note. N = 202.

The second step of the analysis measured locational autonomy choice or approval. There were no significant findings of locational autonomy choice, which indicates there is no direct effect of locational autonomy choice on the prediction of CWBs. However, locational autonomy approval accounted for significant variance in five of the six CWB dimensions: production deviance, $\Delta R^2 = .03$, $F(1, 199) = 5.60$, $p < .05$; sabotage, $\Delta R^2 = .04$, $F(1, 199) = 8.20$, $p < .01$; theft or misuse of time, $\Delta R^2 = .06$, $F(1, 199) = 12.65$, $p < .001$; concealing bad

behavior, $\Delta R^2 = .06$, $F(1, 199) = 13.61$, $p < .001$; and substance abuse, $\Delta R^2 = .02$, $F(1, 199) = 4.80$, $p < .05$. This result means that locational autonomy approval contributed to predicting almost all of the six dimensions of CWBs above and beyond remote work intensity.

The third step of the analysis included the interaction between remote work intensity and locational autonomy. There were no significant findings of the interaction between remote work intensity and locational autonomy choice, which indicates there was no moderating effect of locational autonomy choice on the prediction of CWBs. On the other hand, the interaction effect of remote work intensity and locational autonomy approval accounted for significant additional variance in predicting three of the CWB dimensions: sabotage, $\Delta R^2 = .03$, $F(1, 198) = 6.69$, $p < .05$; theft or misuse of time, $\Delta R^2 = .02$, $F(1, 198) = 4.22$, $p < .05$; and concealing bad behavior, $\Delta R^2 = .03$, $F(1, 198) = 7.19$, $p < .01$.

The significance of the moderating effect of locational autonomy approval on the relationships between remote work intensity and sabotage, theft or misuse of time, and concealing bad behavior required further analysis as the relationships changed at different levels of locational autonomy approval. A median split of the moderator variable was conducted at 2.50, which split the scores into two categories of 'low' and 'high'. If participants' mean score was 2.50 or less, they were categorized as 'low' locational autonomy approval; if participants' mean score was greater than 2.50, they were categorized as 'high' locational autonomy approval. Then, linear regression analyses were conducted in predicting the three CWB dimensions separately for low and high locational autonomy approval, thus analyzing the moderating effect at varying levels.

Figure 1 illustrates a positive relationship between remote work intensity and sabotage for participants who felt higher locational autonomy approval but a negative relationship for participants who felt lower locational autonomy approval. This indicates that those who did not need manager approval to determine their work location were more likely to engage in sabotage behaviors the more they worked remotely. Alternatively, those who needed manager approval were less likely to engage in sabotage behaviors the more they worked remotely.

Figure 1
Moderating Effect of Locational Autonomy Approval on the Relationship Between Remote Work Intensity and Sabotage

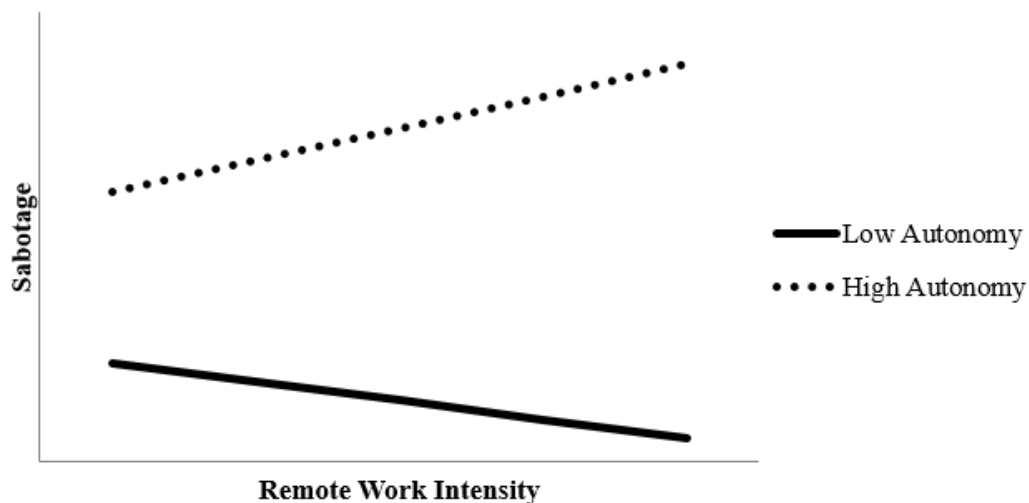
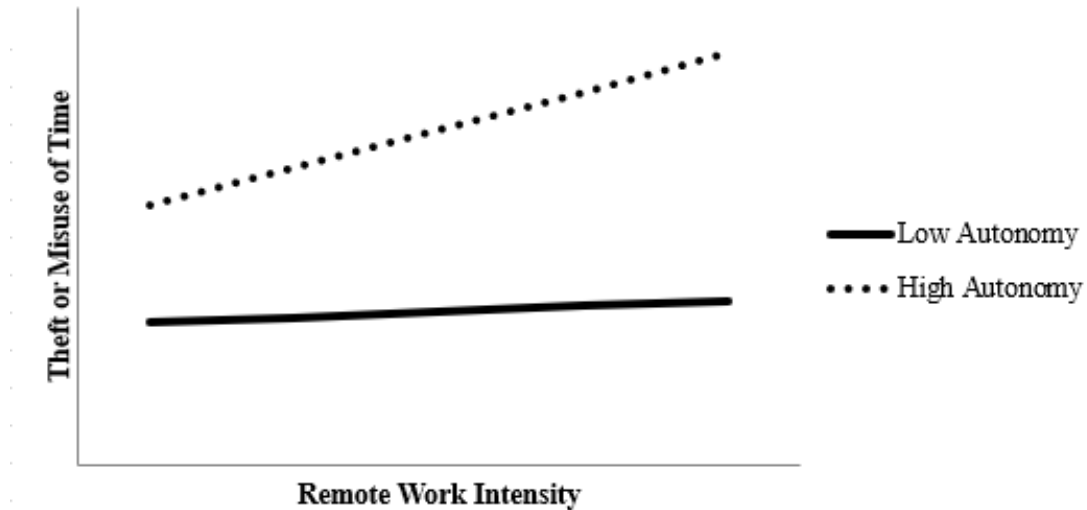


Figure 2 illustrates a positive relationship between remote work intensity and theft or misuse of time for participants who felt higher locational autonomy approval, but no relationship for participants who felt lower locational autonomy approval. This indicates that those who did not need manager approval to determine their work location were more likely to engage in behaviors or activities that steal or misuse company time the more they worked remotely. Those who needed manager approval did not show an increase or decrease in

Figure 2

Moderating Effect of Locational Autonomy Approval on the Relationship Between Remote Work Intensity and Theft or Misuse of Time



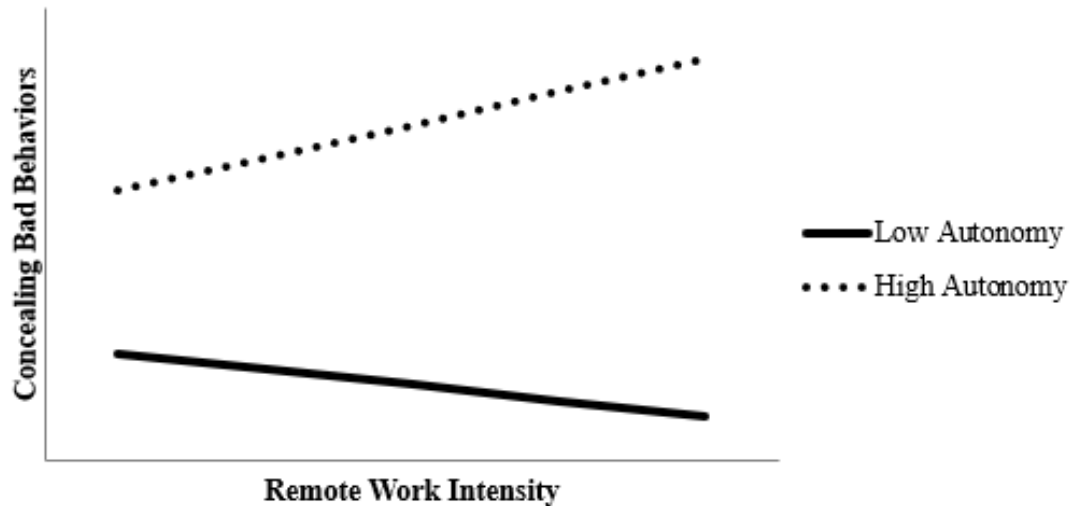
behaviors that steal or misuse company time regardless of how many hours they work remotely per week.

Additionally, Figure 3 illustrates a positive relationship between remote work intensity and concealing bad behaviors for participants who felt higher locational autonomy approval, but a negative relationship for participants who felt low locational autonomy approval. This indicates that those who did not need manager approval to determine their work location were more likely to conceal their bad behaviors the more they worked remotely.

Alternatively, those who needed manager approval to determine their work location were less likely to conceal their bad behaviors the more they worked remotely.

Figure 3

Moderating Effect of Locational Autonomy Approval on the Relationship Between Remote Work Intensity and Concealing Bad Behaviors



The analyses illustrated in Figures 1 to 3 show the relationships between remote work intensity and three CWB dimensions (sabotage, theft or misuse of time and concealing bad behavior) and how results differed between those who were low and high in locational autonomy approval. To summarize these analyses, those who reported high locational autonomy were more likely to engage in CWBs (sabotage, theft or misuse of time and concealing bad behavior) the more they worked remotely. Those who reported low locational autonomy approval were less likely to engage in sabotage and concealing bad behavior the more they worked remotely. Based on these findings, support for Hypothesis 2 was not found as the relationship between remote work intensity and CWBs was strengthened with high locational autonomy approval instead of low locational autonomy approval.

Discussion

The present study aimed to investigate whether working remotely from a traditional in-person office environment negatively influenced employee behaviors. More specifically, this study looked at whether remote work practiced at a higher frequency was related to an increase in CWBs. Additionally, this study also examined if employee autonomy in their remote work location moderated the relationship between remote work intensity and CWBs. A lack of locational autonomy, defined as discretion or autonomy in one's work location, was predicted to strengthen the relationship between high-intensity remote work and CWBs, such that being required to work remotely from home would add to the relationship of increased CWBs due to increased remote work.

There are several reasons why the variables of this study are significant and pertinent to our current workforce. Before the pandemic that started in 2020, remote work was already an increasingly popular trend but was mostly practiced by a small percentage of the workforce part-time (Abrams, 2019). The existing research on remote work was reflective of this reality, showing results based only from studying part-time remote workers (Bailey & Kurland, 2002; Wang, 2020). Because this research may not apply to a full-time remote work scenario, this study aimed to bridge that gap. Previous research also linked remote work to positive work outcomes such as job satisfaction, productivity, and engagement, but there has been little study of its effects on negative employee behaviors such as CWBs.

Lastly, the current global remote work situation is a result of the COVID-19 global pandemic, where mandated isolation and quarantine by government officials required employees to work remotely. Working remotely has traditionally been associated with

flexibility in work schedules and locations, but this flexibility was taken away and employees were forced to adapt to a new routine of working remotely from home. Research has shown a lack of autonomy has detrimental effects on employees. However, the specific effects of lack of autonomy in work location on other relationships had not been explored, and this study aimed to address that as well.

Summary of Findings

Hypothesis 1 stated that remote work intensity would be positively related to CWBs, such that the more hours one worked remotely, the more likely they would engage in CWBs. This hypothesis was not supported as there were no significant relationships between hours worked remotely and any of the six CWB dimensions, suggesting there were no direct effects of remote work intensity on CWBs.

Hypothesis 2 stated that locational autonomy would moderate the relationship between remote work intensity and CWBs, such that a lack of discretion over one's work location would strengthen the positive relationship between remote work intensity and CWBs. Analysis of the locational autonomy items used in this study revealed two unexpected dimensions, which were identified as choice and approval. Choice referred to the employee's ability to choose their location, and approval referred to a lack of management approval needed to determine one's work location.

The results showed that locational autonomy choice did not moderate the relationship between remote work intensity and CWBs, implying that the relationship between remote work intensity and CWBs was not influenced by an employee's ability to choose their location. Therefore, Hypothesis 2 was not supported when locational autonomy was

measured as the employee's ability to choose their location. It is also worth noting that locational autonomy choice had no significant relationships with any of the six CWB dimensions, which suggests there was no direct effects of choice on CWBs.

The results for locational autonomy approval, on the other hand, revealed results that greatly differed from locational autonomy choice. First, locational autonomy approval was significantly positively related to five of the six CWB dimensions (production deviance, sabotage, theft or misuse of time, concealing bad behavior and substance abuse) such that the less an employee needed to get approval on their remote work location, the more likely they would engage in CWBs. More importantly, locational autonomy approval significantly moderated the relationship between remote work intensity and three CWB dimensions: sabotage, theft or misuse of time, and concealing bad behavior.

The results of analyses conducted to explore the significant moderating effects of locational autonomy approval provided unexpected results. First, those who reported higher locational autonomy approval were *more* likely to engage in CWBs the more they worked remotely. This means that employees who did not need manager approval in determining their work location were more likely to engage in negative behaviors like sabotage, theft or misuse of time, and concealing bad behavior the more they worked remotely. However, those who reported lower locational autonomy approval were *less* likely to engage in CWBs the more they worked remotely, suggesting that employees who needed manager approval to determine their work location were less likely to engage in these negative behaviors. This implies that increased autonomy actually led to more CWBs when working remotely when it was hypothesized it would lead to fewer CWBs. These findings, that remote work intensity

was associated with more CWBs in employees with autonomy but fewer CWBs in employees without autonomy, are the opposite of what was predicted in Hypothesis 2.

It is important to evaluate why locational autonomy approval had moderating effects on the relationship between remote work intensity and CWBs, whereas locational autonomy choice did not. A possible explanation for this could be that not needing approval (i.e., having locational autonomy) could be a stressor the more one works remotely, which leads to job strain expressed through CWBs. Too much autonomy in the form of not needing to seek approval may be stressful and provides too much freedom, a lack of structure, job ambiguity, or role and task conflict. These feelings can be motives for CWBs according to the stress/emotion/CWB model, which indicates that certain events in the workplace trigger negative emotions and results in CWBs (Spector & Miles, 2011). CWBs may have also occurred as coping mechanisms to deal with these feelings and stress of too much autonomy (Krischer et al., 2010). If excess autonomy is a stressor and CWBs are exhibited to deal with the stress or as a coping mechanism, this may indicate that actions classified as theft or misuse of time and concealing bad behavior may not truly be deviant in nature, but rather rethought of as behaviors normalized for remote workers. These behaviors could alleviate pressure and stress from working remotely and allow remote workers to balance the various work and life demands.

Theoretical Implications

The present study found that remote work intensity had no significant relationships with CWBs. This finding is inconsistent with previous studies that suggested high-intensity remote workers would experience negative effects that low-intensity remote workers do not

(Fonner & Roloff, 2010). Some of these negative effects for high-intensity remote workers included stressors such as work-family conflict, professional isolation, negative emotions such as the inability to disconnect and disengage, and longer workdays (Charalampous et al., 2015; Golden et al., 2008; Konradt et al., 2003). Additionally, Allen et al. (2015) suggested remote workers may have a threshold in how much they can work remotely before negative effects are seen.

The findings of this study suggest that relationships between remote work intensity and CWBs were not found because these relationships are moderated by locational autonomy. In other words, whether the frequency one works remotely is associated with CWBs may depend on other variables or factors within the environment, in this case whether one's manager makes the decision regarding the employee's work location.

The present study also found an unexpected distinction within locational autonomy between how choice and approval are viewed. The construct of choice had no relationship with CWBs, whereas the construct of approval had significant relationships with five of six CWB dimensions. More importantly, there were no moderating effects of choice, but there were moderating effects of approval on three CWB dimensions.

In this study, the locational autonomy choice items were modified from an existing scale by Kaduk et al. (2019), who utilized two items from a schedule control scale by Thomas and Ganster (1995). Kaduk et al. (2019) modified these two items to target the study's constructs of variable schedule and substantial remote work. The locational autonomy approval items were created for this study by modifying the choice items to include items worded in the reverse direction to avoid response bias. It was assumed that all of the items were measuring

the same construct: whether one had autonomy in determining their work location. This study's initial assumption that locational autonomy is a unidimensional construct aligns with the research on job autonomy (e.g. De Spiegelaere et al., 2016, Gajendran et al., 2015; Hackman & Oldman, 1976). However, the findings suggest there was a clear difference in how choice and approval were interpreted.

To understand why there may be a difference between one's ability to make their own decisions (choice) and needing permission to make the decision (approval), a recent publication on consumer choice in marketing helps explain the complexity of autonomy (Wertenbroch et al., 2020). This publication looked at how autonomy is a critical aspect in consumer choice and how marketing strategies have been tailored based on the role of autonomy. They identified autonomy as consisting of two distinct dimensions: perceived autonomy and actual autonomy. Perceived autonomy was "the individual's subjective sense of being able to make and enact decisions of their own volition" (Wertenbroch et al., 2020, p. 3), whereas actual autonomy was "the extent to which a person can make and enact their own decisions" (Wertenbroch et al., 2020, p. 3).

The two concepts of perceived autonomy and actual autonomy employed by Wertenbroch et al. (2020) could explain the difference between this study's concepts of choice and approval. Perceived autonomy is one's belief they can make their own decisions; this relates to knowing one has choices in their decisions. Actual autonomy is the reality of whether one can make their own decisions, which relates to the concept of needing approval from a supervisor for one's choice of decisions.

The concepts of perceived and actual autonomy may be related to each other such that actual autonomy overshadows perceived autonomy. In other words, while one may feel they have high perceived autonomy (i.e., one has discretion over one's decisions), their actual autonomy may be low (i.e., one has to get approval for one's decision) and execution of their decision is dependent on the extent to which they can actually make and enact this decision. Actual autonomy is based on the reality of one's situation in making a decision, and can be subject to external constraints, such as needing manager approval (Wertenbroch et al., 2020). This may explain why approval, rather than choice, moderated the relationship between remote work intensity and CWBs. The outcomes of an employee's behavior, in this case working remotely, are perhaps influenced by those with authority over the employee's decisions regardless of whatever decision the employee makes.

The findings of this study also suggest we may need to rethink what is considered a CWB in a remote work environment. This study utilized several existing CWB dimensions from previous scales: abuse, production deviance, sabotage, and substance abuse (Bennett & Robinson, 2000; Gruys & Sackett, 2003; Holland et al., 2016; Spector et al., 2006). However, it was believed additional dimensions of CWBs, theft or misuse of time and concealing bad behavior, were pertinent to remote work because working remotely decreases contact with supervisors and coworkers and access to company property and others' personal items (Holland et al., 2016). Theft or misuse of time is the use of work time to complete non-work tasks, such as chores or personal emails, and concealing bad behavior is hiding poor performance or inappropriate behaviors. It is notable that it was the relationship between remote work intensity and these two added dimensions (plus sabotage) that were moderated

by approval, which may suggest these dimensions are more relevant to remote work than the traditional dimensions of CWBs.

Practical Implications

The findings of this study may be of value to organizations contemplating implementation of a remote work program. This study found that an excess amount of autonomy, in the form of not needing manager approval regarding one's work location, was related to CWBs that sabotaged, misused time, and concealed bad behaviors. This is opposite to what was hypothesized. It was thought that the removal of autonomy would have negative effects, but the findings suggest that it is too much autonomy that is problematic. There are a few practical implications for organizations that can be drawn from these findings.

Managers should establish working relationships with their employees, especially those who work remotely. This study found negative effects for those who felt they did not need approval from their manager the more they worked remotely. This adverse effect of autonomy aligns with three characteristics that differentiate remote work from in-person office work: decreased direct contact with supervisors and coworkers, greater schedule flexibility, and decreased oversight (Holland et al., 2016). Not having an established relationship between the manager and the remote employee can exacerbate the autonomy that comes with working remotely. With a more autonomous environment and lack of manager interaction, remote employees may feel like they are out of sight and out of mind, and that no-one is paying attention to their actions. This thought process could lead to the engagement of CWBs because employees may think their managers will not find out because of the lack of interaction.

Additionally, it is important that remote employees maintain a chain of command hierarchy. It should be made clear to employees that while autonomy is a celebrated aspect of remote work, there are still formal and informal processes that need to be followed. Maintaining a command hierarchy provides structure and balance, and ensures all employees are appropriately supervised. Too much autonomy threatens established processes and may invoke human nature to take advantage of situations without believing there are consequences.

Lastly, the findings of this study imply that lines of communication between remote workers and managers need to be consistently maintained. Remote work creates physical distance between workers and their colleagues where many might feel disconnected, and this may result in remote workers experiencing more professional isolation, which may negatively impact job performance (Golden et al., 2008). Recurring one-on-one meetings between managers and remote employees should be established to discuss important topics as well as foster casual conversation. This will allow the manager to understand employees' workload, potential issues they are facing, and to simply touch base on professional or personal topics. At the same time, the employee can receive insight on top priorities, organizational news, and feedback on their performance. In addition to these meetings, the employee and manager should both be proactive through other tools such as email or text messaging to maintain a standard of communication with one another. This will indicate that the manager is involved and current on the employee's workload without micromanaging every detail, thus allowing the employee an effective amount of autonomy.

Strengths of the Study

Some of the strengths of the present study are its contributions to the literature.

Locational autonomy is a newer dimension of job autonomy and is essentially absent from the literature because of its novelty. Most of the literature on autonomy focused on flexible work schedules and the ability to decide how to perform one's job (e.g. Breugh, 1985; B. Kim et al., 2019; Liu et al., 2005), but there was a gap in understanding locational autonomy and this study may help provide some insight. It was also very timely to use locational autonomy in this study given the state of the current workforce and the requirement to work from home rather than in the office.

This study also contributed to the literature on remote work and CWBs. Although this study did not find relationships between remote work intensity and CWBs, it did find that the effect of remote work intensity is moderated or influenced by additional factors. The sparse existing research on remote work and CWBs has only looked at aspects of CWBs such as cyberslacking (O'Neill et al., 2014). This study helped bridge the gap on CWBs in a remote work environment.

The way CWBs were measured in this study is another strength worth highlighting. The CWB-remote work items were developed by leveraging established traditional CWB dimensions as well as incorporating newer dimensions relevant to remote work (Holland et al., 2016). The modified scale for this study utilized consistent wording with past scales and were balanced in number of items per dimension. This is a strength to the study in that it utilized highly scrutinized and well-established items in the measurement of CWBs.

Limitations of the Study and Suggestions for Future Research

There are some limitations of this study that should be taken into account to assist with future research. The scale that measured locational autonomy was small and could be expanded to include more items to accurately measure the construct as intended.

Additionally, the reverse wording of two of the four items may have contributed to the separation of the construct into choice and approval. Future research should explore the various ways autonomy is conceived and modify items that measure locational autonomy accordingly based on the intended topic of study.

Another limitation of this study is how remote work intensity was measured. This variable was measured by self-report and used one item. The results may not have been an accurate representation of the hours worked remotely as the item asked for a subjective reflection of how many hours per week they work remotely. Future research could leverage an objective way of measuring hours worked remotely by monitoring log-on times or some other method that avoids subjective self-reporting.

It would be worthwhile for future research to focus on other factors in the environment that influence the relationship between remote work and CWBs. Locational autonomy is just one variable that contributes this relationship and there are likely other nuances critical to investigate, especially as people continue with remote work. For example, work-family conflict has been shown to be a significant problem for full-time remote workers because boundaries between work and family are more blurred (Eddleston & Mulki, 2017). With the current work situation, many employees also had their spouse or partner working remotely at home, as well as managing their children due to changes in daycare options and in-person

school availability. Assessing the impacts of work-family conflict on the relationship between remote work and CWBs may help provide useful data to better understand the remote work environment.

Remote work may continue to be adopted in some capacity or another by many companies due to demand for flexibility and work-life balance as well as maintaining high recruitment and retention rates amongst a competitive market. Understanding the triggers and downsides of various influences on remote work is just as important so that remote work can continue to be successful.

Conclusion

The goal of this study was to investigate the relationship between high-intensity remote work and counterproductive work behaviors (CWBs). This study also looked at whether locational autonomy would moderate this relationship. Although this study did not find a direct relationship between remote work intensity and CWBs, the results indicated that locational autonomy moderated the relationship with three dimensions of CWBs in that those who reported they did not need manager approval, or had excess autonomy, were more likely to engage in CWBs (sabotage, theft or misuse of time and concealing bad behavior) the more they worked remotely. Additional research is needed to understand how autonomy, specifically locational autonomy, can be conceptualized and its impacts to research. Finally, given the likelihood remote work will be implemented in various capacities for many organizations, it will be particularly important to evaluate what other external variables may affect the relationship between extensive remote work and negative behaviors.

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Appendix

Demographic Items

What is your age?
What is your gender?
Are you currently married or living with a partner?
How many children do you have?
How long have you been employed at your current company?
How many months have you been working remotely at your current hours per week?
Is this your first job where you have worked remotely?

Scale Items

Remote Work Intensity Scale Items

How many hours do you work remotely per week?

Locational Autonomy Scale Items

I have a choice whether to complete my job functions in the office or remotely.
I have a choice whether to work remotely at home or another location.
I need approval from my manager to work remotely at my home. * (R)
I need approval from my manager to work remotely from a location different from my home.
* (R)

Counterproductive Work Behaviors Scale Items

How often have you done each of the following things *while working remotely* in your current job?

Abuse Dimension

Started an argument with my supervisor or coworker.
Said something hurtful to my supervisor or coworker.
Cursed at my supervisor or coworker.

Production Deviance Dimension

Intentionally did my work badly or incorrectly.
Avoided work-related communications (e.g. phone calls, e-mails, or chat conversations).
Purposely worked slowly and put little effort into my work.

Sabotage Dimension

Withheld information from a supervisor or coworker, knowing it could hurt their job performance.
Intentionally mishandled private information, putting the company or employees at risk.
Told someone outside my company what a lousy place I work for.

Theft or Misuse of Time Dimension

Worked on household tasks (e.g. chores, paid bills).

Responded to personal e-mails.

Played video-computer games or watched media (e.g. TV, movies, video clips).

Engaged in non-work-related hobbies.

Concealing Bad Behaviors Dimension

Blamed technology for a missed deadline.

Blamed technology for being late or missing appointments, phone calls, or meetings.

Lied about being in a meeting or on a phone call when I took an additional break.

Pretended to be online when I wasn't.

Substance Abuse Dimension

Used recreational drugs, narcotics or consumed alcohol while working.

Had my performance affected due to a hangover from alcohol or drug use.

Worked fewer hours than expected due to alcohol or drug use.