



# Rethinking Work: The Influence of a Four-Day Workweek on Job Performance in the Construction Industry

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### **Abstract**

This study examines the four-day workweek (4DWW) and its effects on job performance in the German construction industry. The aim is to assess the impact of this innovative working schedule on employee performance in a sector known for its demanding working conditions. We used a qualitative methodology with semi-structured interviews based on a literature review. This allowed us to examine employee perceptions in the industry and provided insights into the impact of the 4DWW. The results showed that the 4DWW improves task and contextual performance, but the impact on adaptive performance remains uncertain. Notably, counterproductive behaviors are reduced, leading to an overall improvement in job performance. Although responses to work-related stress varied, they consistently showed positive effects on job performance. The impact of a 4DWW on work-life balance was mixed but generally positive for job performance. In addition, job satisfaction was significantly improved, and various implementation strategies and recruitment opportunities were identified. Overall, the 4DWW offers several benefits but also has complex effects on construction worker performance.

**Keywords:** Four-day workweek, Job Performance, Job Satisfaction, Job Stress, Work-life Balance, Implementation Strategies, Shortage of Skilled Labor, Construction Industry, Human Resource Management (HRM), Resource Based View (RBV)

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## Sumário

O presente estudo analisa a semana de trabalho de quatro dias e os seus efeitos no desempenho profissional no sector da construção alemão. O objetivo é avaliar o impacto deste horário de trabalho inovador no desempenho dos trabalhadores num sector conhecido pelas suas condições de trabalho exigentes. Utilizámos uma metodologia qualitativa com entrevistas semi-estruturadas baseadas numa revisão da literatura. Isto permitiu-nos examinar as percepções dos trabalhadores no sector e fornecer informações sobre o impacto da semana de trabalho de quatro dias. Os resultados mostraram que a semana de trabalho de quatro dias melhora o desempenho da tarefa e o desempenho contextual, mas o impacto no desempenho adaptativo permanece incerto. Nomeadamente, os comportamentos contraproducentes são reduzidos, o que conduz a uma melhoria global do desempenho profissional. Embora as respostas ao stress relacionado com o trabalho tenham variado, mostraram consistentemente efeitos positivos no desempenho profissional. O impacto de uma semana de trabalho de quatro dias no equilíbrio entre a vida profissional e a vida privada foi misto, mas geralmente positivo para o desempenho profissional. Além disso, a satisfação no trabalho foi significativamente melhorada, e foram identificadas várias estratégias de implementação e oportunidades de recrutamento. Globalmente, a semana de trabalho de quatro dias oferece vários benefícios, mas também tem efeitos complexos no desempenho dos trabalhadores da construção.

**Palavras-chave:** Semana de trabalho de quatro dias, Desempenho no trabalho, Satisfação no trabalho, Stress no trabalho, Equilíbrio entre a vida profissional e a vida pessoal, Estratégias de implementação, Escassez de mão de obra qualificada, Indústria da construção, Gestão de recursos humanos (GRH), Visão baseada em recursos (VBR)

**Título:** Repensar o trabalho: A influência de uma semana de trabalho de quatro dias no desempenho profissional no sector da construção

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### List of Abbreviations

CEO	Chief Executive Officer
Covid-19	Coronavirus disease 2019
DV	Dependent Variable
DC	Dynamic Capabilities
ESG	Environmental, Social, and Governance
GDP	Gross Domestic Product
Gen Z	Generation Z
HR	Human Resources
HRM	Human Resource Management
ID	Interview ID
IV	Independent Variable
MV	Moderator Variable
OCB	Organizational Citizenship Behavior
RBV	Resource-Based View
RQ	Research Question
UAE	United Arab Emirates
UK	United Kingdom
US	United States
4DWW	Four-Day Workweek

## 1. Introduction

The construction industry has a significant impact on economies and represents 9% of total world GDP (Hossain & Nadeem, 2019). Moreover, the industry possesses a substantial workforce that, in combination with the growth of the sector, impacts the progress of numerous other industries such as raw materials production. According to McKinsey & Company (2017), global construction spending was \$10 trillion in 2017 and is expected to increase to \$14 trillion by 2025. Nevertheless, there is potential for improvement in the industry's productivity and output. Given trends such as population growth in emerging markets, the need to upgrade infrastructure in developed countries, and investment in sustainable buildings and renewable energy, the construction industry as a whole has a positive long-term outlook (Deloitte, 2018).

The industry is also transforming due to fundamental changes in technology, the economy, and society (Pfnür & Wagner, 2020). Megatrends such as digitalization, globalization, and sustainability are having a powerful impact. The need for change in this traditional industry challenges organizations, pressures business models to adapt, and requires adoption of new technologies. With the help of digitalization, companies can operate more efficiently. However, the most important resource for construction companies is still human resources, even though the industry faces shortages of skilled labor (Smith & Diaz, 2007). Due to an aging workforce with few new entrants and negative characteristics like undesirable working conditions, the industry is unattractive to young talent (Akomah et al., 2020).

One solution to the labor shortage is making the working life of construction workers more attractive by allowing individuals to manage time more innovatively (Smith & Diaz, 2007). The Covid-19 pandemic sparked the working from home phenomenon, which has continued post-pandemic (Adekoya et al., 2022). Additionally, there has been another trend toward changing work schedules, with a noticeable increase in the use of the four-day workweek (4DWW) from around 2019 (Campbell, 2023). Ernst and Young's annual EY Future Workplace Index survey found growing interest in new work models such as hybrid work, flexible work options, and a 4DWW. It found that 40% of companies surveyed have adopted or plan to adopt a 4DWW, and 70% already have hybrid work in place (Acoba, 2022). One reason for the change in working patterns is a reaction by companies to improve the quality of life of employees after numerous redundancies during the pandemic and the need to retain staff (Acoba, 2022).

The innovative 4DWW concept represents a radical departure from the traditional five-day, eight-hour model. With the 4DWW, the standard 40-hour workweek is either compressed into four longer workdays or reduced to four eight-hour days, with an additional day of leisure. One reason for the emergence of this is changing expectations of employees. There is also increasing attention to the Environmental, Social, and Governance (ESG) principles in the construction industry and a relationship between ESG and the 4DWW is evident (Henisz, Koller & Nuttall, 2019). The “Social” includes the employee workforce as a stakeholder and employee well-being is part of corporate social responsibility. By extending leisure time by one day, a 4DWW improves work-life balance and frees up time for families and relaxing. Furthermore, if companies foster social activities inside and outside of the work time, a supportive work environment can be created, improving collaboration and workplace culture. Finally, committing to employee well-being and work-life balance by offering a four-day schedule boosts employee motivation.

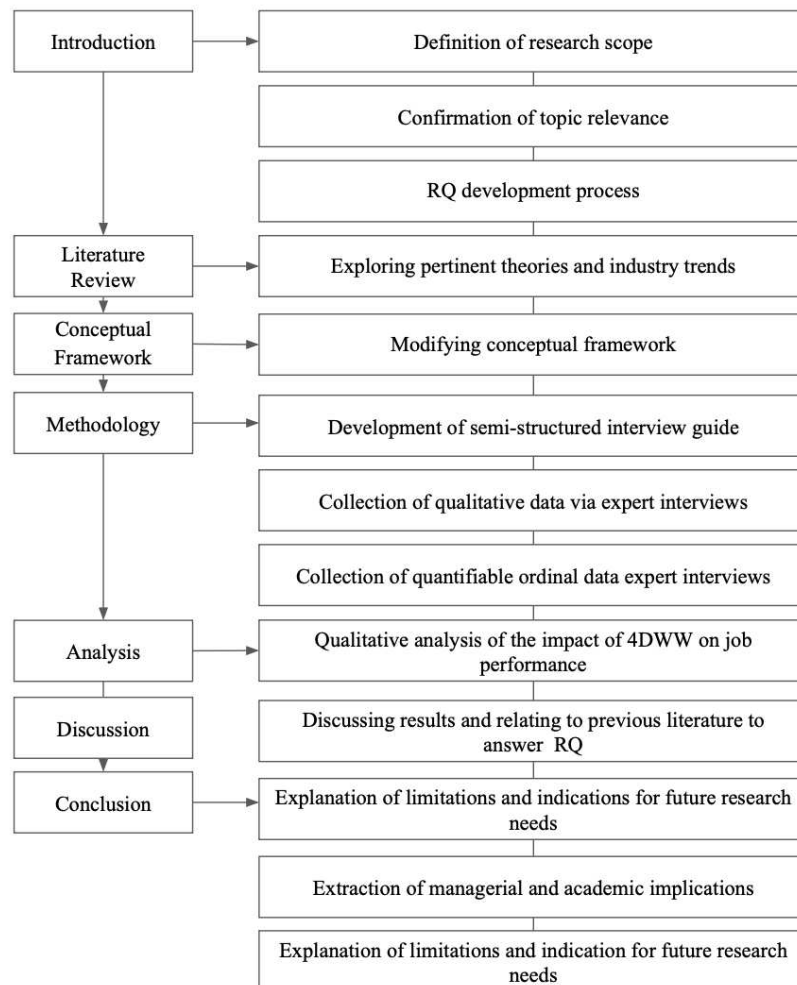
This study examines the adoption, impact, and potential consequences of the 4DWW in the construction industry, particularly the effect on employee job performance. The 4DWW represents a new approach to work schedule management that is of particular interest in an industry known for its demanding schedules, labor-intensive tasks, and tight project deadlines. With its unique challenges and opportunities, the construction sector provides an insightful case study for understanding the implications of 4DWW.

By interrogating the motivations, outcomes, and potential advantages and disadvantages of 4DWW in the construction industry, this study aims to provide valuable industry-specific insights not addressed in previous literature. We seek to bridge the gap between theory and practice and provide the basis for informed decision-making in the industry. Fottler (1977) suggests that future research should focus on the impact of innovative scheduling on employee productivity, turnover, and absenteeism. Campbell (2023) indicates that most of the academic research is from the 1970s and that there needs to be more current research. Therefore, this case study will address this literature gap by investigating the following Research Question:

***How does the implementation of the four-day workweek affect dimensions of job performance in the German construction industry?***

We investigate how individuals perceive the 4DWW and its effects on employee performance by investigating the phenomenon in a real context in the construction industry. Beginning with

a thorough literature review, followed by an exploration of the methodology using semi-structured interviews derived from the literature. The results are analyzed and discussed in relation to the existing body of literature, and finally, conclusions are derived. The final chapter presents the implications for management, proposes potential areas for future research, and explicitly acknowledges the limitations of the research. The research design is presented in Figure 1:



*Figure 1: Research Design*

## 2. Literature Review

This chapter reviews the relevant literature on the 4DWW and its relationship to job performance, particularly the individual dimensions of job performance and the implementation

of the four-day workweek in the construction industry. It also discusses existing research on the challenges facing the construction industry and the new generations entering the workforce. In addition, the variables of job stress, job satisfaction, and work-life balance are examined, as well as how they relate to job performance and are affected by the four-day workweek. Finally, various strategies for successfully implementing the four-day workweek model are examined.

## **2.1 Four-Day Workweek**

In recent years, the 4DWW concept has gained attention across industries and countries (Campbell, 2023). The 4DWW model is executed in two different variants, different from the traditional five-workday concept. The first is the 4DWW with reduced weekly hours, from the usual 40-hour week to 32 hours over four working days. The second concept of the 4DWW is the compressed workweek, which does not involve a reduction in total working hours; instead, the 40-hour workweek is compressed into four working days, resulting in workers having longer workdays while gaining one day of leisure time. The principle of a 4DWW is not a recent innovation; the concept has been around for over 50 years, with many scientists and labor advocates working on the topic since the 1950s (Campbell, 2023). However, the peak of attention in the popular press and scholarly world was in the 1970s, when most academic institutions were discussing the feasibility of the concept, although the trend on the subject declined in the late 1970s. The fading enthusiasm for the concept can be attributed to various sources (Calvasina & Boxx, 1975). Initially, the absence of reliable empirical evidence has prompted uncertainty over the legitimacy of the effects. Overall, the waning interest can be attributed to the lack of long-term research and apprehensions about declining enthusiasm and inconsistencies around productivity.

More than half a century later, due to changes in working perspectives, more countries, including Japan, the UAE, New Zealand, and Germany, have implemented, are piloting, or are seriously considering a 4DWW system (Bird, 2009; Mellor, 2022; Barnes, 2021). Today, the topic is receiving more attention than ever, with 61 UK companies participating in a 4DWW trial in 2022 and Germany launching its largest-ever trial of a 4DWW in 2023 (Stewart, 2023; Logan, 2023).

### ***2.1.1 Motives for Implementing a Four-Day Workweek***

Several reasons led to an interest in the 4DWW, including improved efficiency, greater job satisfaction, lower labor costs, higher productivity, and lower turnover (Allen & Hawes, 1979; Newman & Frost, 1975). In addition, the concept allows companies to meet today's labor market challenges by making it easier to hire new qualified employees and improving the quality of work life (Allen & Hawes, 1979; Hammer & Barbera, 1997). The additional day off provided in the 4DWW can be utilized as a strategic asset throughout the recruitment process. Generation X and Millennials have different values than the previous generations, who are retiring and leaving the workforce (Moore & Taylor, 2004).

For workers, the main benefit is better use of leisure time by switching to a 4DWW because of the 50% weekend extension. Allen and Hawes (1979) suggest that it is essential to understand workers' motives for the 4DWW. A compressed workweek may be beneficial for an extended weekend, but a day off during the week may be better for monotonous activities like manufacturing.

### ***2.1.2 Four-Day Workweek and Job Performance***

Research has shown that the concept of 4DWW affects employees job performance due to factors such as increased morale, improved productivity, better job satisfaction, and lower turnover and absenteeism (Hartman & Weaver, 1977; Calvasina & Boxx, 1975; Hodge & Tellier 1975). A 4DWW improves workers' well-being and satisfaction and provides them with time to refresh to work more enthusiastically. Feeling better and recovering after their time off motivates employees to return to work (Chakraborty & Biswas, 2019; Štreimikienė & Grundey, 2009).

Following implementation of the 4DWW, over two-thirds of executives stated that employee productivity and quality of work increased due to fewer sick days and an overall improvement in satisfaction. Fewer commutes to and from work make a four-day commute easier to endure (Laker & Roulet, 2019). Thus, the 4DWW approach increases engagement, performance, and retention. Managers enhancing employee autonomy promote accountability and communication (Facer et al., 2009).

Paje et al. (2020) found that work stress was reduced, resulting in more productive job performance. The research shows that excessive workload increases employee anxiety and pressure; thus, it is essential that management closely monitors stress levels after the transition to a 4DWW to ensure that productivity, health, and performance are not compromised. Another study found positive outcomes for workers' performance and well-being, but to accomplish this, performance and productivity management must be intensified by management (Delaney & Casey, 2022).

Calvasina and Boxx (1975) point out that when workers are not engaged in heavy physical tasks, 4DWW does not worsen and can even improve productivity. In contrast, research has found that problems encountered after the switch to the 4-day workweek include worker exhaustion due to intensification, scheduling problems, and increased workload (Allen & Hawes, 1979). Another issue companies note is the interface with other firms' five-day schedules (Hodge & Tellier, 1975). Calvasina and Boxx (1975) found that switching from a 5-day to a 4-day workweek did not decrease work output, although if the work requires start-up and shut-down activities, it may reduce productivity. Employee efficiency remained consistent.

### ***2.1.3 Long-Term Effects and Sustainability***

When analyzing the long-term effects of the 4DWW, it becomes evident that this approach to work scheduling receives different results over time (Fottler, 1977). Studies have found that the positive response to the 4DWW can diminish over time. In one study examining the 4DWW in a hospital department with four days of 10 hours, only 56% of workers favored continuing 4DWW after a six-month trial. Reasons for rejecting the compressed workweek included fatigue, disorganized scheduling of workdays, and negative attitudes toward the management that proposed the change. Ivancevich & Lyon (1977) found that after 13 months of the 4DWW implementation, employees' opinions were much better than those who kept the 5-day week. Workers are happier with their autonomy, perceived personal value, workplace security, and income, have less anxiety and stress, and work more effectively; however, after 25 months, the advantages fade.

In contrast, Nord and Costigan (1973) observed only favorable opinions about the 4DWW over time. However, the authors believe that favorable outcomes vary substantially over time.

### ***2.1.4 Four-Day Workweek in the Construction Industry***

Hertzog-Young (2021) explored the potential of the 4DWW in the UK construction industry and highlighted the importance of new scheduling models outside of office-based occupations. Overwork and poor physical and mental health conditions in the construction industry may lead to work accidents and mental health issues. The injury rate in this industry is about 60% higher than in other industries due to overwork, which is linked to lack of sleep and fatigue. Enhanced productivity, fewer errors, and greater quality can be achieved by allowing workers more rest.

Within the construction industry, the most valuable asset is the workforce (Smith & Diaz, 2007). Therefore, implementing initiatives that enhance employees' productivity throughout their working hours might be a strategy to get a competitive advantage.

Overall, the 4DWW in the construction industry has led to more free time with friends and family, greater relaxation and recovery, extended weekends, and less commuting (Lavin & Spillane, 2019). In addition, health and well-being improved. However, fatigue in heavy-duty jobs, insufficient nutrition, and winter darkness can harm health. Younger construction workers preferred the four-day week over older workers, and physically demanding workers were less likely to adopt it.

### ***2.1.5 Shortage of Skilled Workers in the Construction Industry***

Shortage of skilled labor has become a global challenge in the construction industry (Zaki, Mohamed, Yusof, 2012). In Germany, a personnel crisis has spread with a so-called "shortage of skilled labor", which occurs mainly in the health and care sector, technical professions, and construction industry (Bonin, 2019).

One of the main reasons is a change in job aspirations and expectations (Vyas, 2022). The COVID-19 pandemic was a trigger given experiments in flexible work arrangements such as remote working associated with the pandemic. These have influenced work schedules, perceptions of work-life balance, and the employer-employee relationship. While certain industrial reforms may have already been in progress, the coronavirus clearly catalyzed change, notably emphasizing achieving a work-life balance. Both white- and blue-collar workers were affected by the pandemic, with blue-collar workers not having the option to work from home, but the pandemic also led to a general shift in attitudes toward the workplace. Therefore,

corporate strategies and human resources policies must support the changes and restructure companies (Vyas, 2022).

A survey by ManpowerGroup (2018) shows that German organizations face the challenge of recruiting skilled workers for vacant positions at higher average rates than in other countries. According to analyses by the Federal Agency, a shortage of skilled workers has become apparent in several construction occupations (Bonin, 2019). As a result of vigorous construction activity, the labor market in this sector has recently intensified further, and new shortage occupations have been added. Those vacant jobs are vital to the construction industry and the economy. A lack of skilled workers prevents economic opportunities from being fully exploited (Kappler et al., 2011; Sauer & Wollmershäuser, 2021). The scarcity of proficient labor continues to pose a substantial challenge for the German economy. In the main construction industry, 35.3% of companies are constrained by the shortage of skilled workers, and this proportion is currently higher than ever before.

### ***2.1.6 Adapting to Next Generations***

As Generation Z (Gen Z) joins the workforce, managers must adapt and manage generational differences (Iorgulescu, 2016). Gen Z prioritizes career opportunities for development, professional growth, and the potential for a lucrative salary and job stability. Furthermore, Gen Z desires to build strong connections with supervisors from whom they can gain skills and guidance. Teamwork holds greater significance than individual effort when it comes to Gen Z.

Managers can increase motivation and reduce turnover by giving new employees a realistic job preview, which should outline tasks, expected work hours, working conditions, and career opportunities (Schroth, 2019).

Another matter managers should consider is that Gen Z is more likely to report mental health issues. For example, 85% worldwide say increased stress prevents them from performing leadership duties. Companies should consider introducing mental health and well-being programs to increase overall well-being (Reblin & Uchino, 2008).

Moreover, Millennials, along with Gen Z, are now the most essential generation when hiring new employees (Pînzaru et al., 2017). Given the evolving perspectives on work, companies

need to understand the opinions and interests of their employees. Millennials prioritize life balance, a clear vision, job security, rapid advancement opportunities, and ongoing feedback from their employer (Alferjany & Alias, 2020).

Flexible work schedules and a 4DWW may appeal to Millennials and Gen Z as they seek flexibility and a work-life balance. Given the demographic shift in the workforce, workers are questioning the purpose and nature of their jobs and work schedules (Burke & Ng, 2006). Two-thirds of Gen Z stated that a 4DWW influences their choice of employer (Laker & Roulet, 2019)

## **2.2 Job Performance**

Motowidlo and Harrison (2003) define job performance as “the total expected value to the organization of the discrete behavioral episodes that an individual carries out over a standard period of time” (p. 92).

Job performance must be recognized as a concept with multiple dimensions (Sonntag et al., 2008). It can be divided into two parts: Behavioral aspects and outcome aspects. Behavior aspects are related to the employee’s actions and behaviors while at work; these aspects can be observed and are specific actions, behaviors, and activities oriented to an overall organizational goal. Outcome aspects are focused on the results or outcomes of an employee’s behavior; tangible and measurable outcomes or products. Sonntag et al. (2008) further divide job performance into task performance, contextual performance, and adaptive performance. Finally, they note that it is essential to distinguish performance from effectiveness and productivity. Effectiveness refers to the quality and impact of performance outcomes, and productivity measures the relationship between cost or work effort and outcome.

Rotundo and Sackett (2002) found that job performance has three dimensions: organizational citizenship behavior (OCB), which includes effort, supporting the onboarding of colleagues, and teamwork (Campbell, 1990), or altruism behaviors. The second dimension is task performance, which relates to the activities formally recognized in the employees’ job description and contributing to the firm’s overall goal (Motowidlo, 1993). Thirdly, counterproductive behavior concerns behavior by individuals that is harmful to the corporation’s purposes. Koopmans et al. (2011) added a fourth dimension to their model of job performance, adaptive performance, which refers to the adaptability of workers concerning changes in their job roles. This literature review analyzes the four taxonomies of job

performance: Task performance, contextual performance, counterproductive behavior, and adaptive performance.

### ***2.2.1 Task Performance***

Task performance refers to effectively completing duties and responsibilities associated with a particular work-related objective and task (Murphy, 1989). Task performance describes an employee's job knowledge and the quality and quantity of work (Viswesvaran & Ones, 2000). The task entails adhering to deadlines, achieving goals, generating work of high quality, providing customer support, and completing projects (Jankingthong & Rurkkhum, 2012).

### ***2.2.2 Contextual Performance***

Contextual performance behavior encompasses a broader range of factors, including the social and psychological context, that support the functioning of an organization beyond just task completion (Motowidlo & Van Scotter, 1994). Contextual performance is positive work behavior that indirectly contributes to organizational goals (Koopmans et al., 2011). Various terms are commonly used for this behavior, such as OCB or extra-role behavior. Illustrative instances encompass cultivating interpersonal connections with colleagues and developing communication abilities (Viswesvaran & Ones, 2000). In addition, possessing psychological awareness which enables effective collaboration with diverse individuals, managing the emotions of upset colleagues, and projecting a positive image of the company to external stakeholders (Borman & Motowidlo 1997).

### ***2.2.3 Counterproductive Behavior***

Counterproductive behaviors can be defined as “voluntary behavior that harms the well-being of the organization” (Rotundo & Sackett, 2000, p. 69). These behaviors are detrimental to the organization's goal, for example, downtime, off-task behavior, substance abuse or lack of self-discipline, incorrect task executions, theft of company property, or destruction of equipment, and excessive or prolonged breaks (Murphy, 1989; Koopmans et al., 2011)

### ***2.2.4 Adaptive Performance***

Adaptive performance is another aspect that contributes to overall job performance. It refers to “the ability of an individual to change his or her behavior to meet the demands of a new environment” (Charbonnier-Voirin & Roussel, 2012, p.1). This type of performance is particularly relevant for companies with complex and volatile operating conditions, where employees must adapt to rapidly changing conditions. Behaviors include developing new innovative ideas, adjusting objectives in response to changing circumstances, understanding diverse groups and cultures, and possession of agility, open-mindedness, and resilience (Koopmans et al., 2011; Hesketh & Neal, 1999). It enables employees to accomplish tasks effectively regardless of unfamiliar environments and situations (Johnson, 2001).

## **2.3 Job Satisfaction**

Hoppock (1935) defines job satisfaction as “any combination of psychological, physiological and environmental circumstances that cause a person truthfully to say I am satisfied with my job” (Hoppock, 1935, p. 77). Job satisfaction is a composite of employees’ positive and negative feelings about their work (Aziri, 2011). It is a complex but necessary behavior regarding managing employees in today’s management world. Job satisfaction is strongly correlated with motivation, which affects productivity and the organization’s performance. High job satisfaction leads to recognition, raises, and promotions, giving employees a sense of accomplishment from enjoying the work (Kaliski, 2007).

Worker job satisfaction is expected to increase with alternative work schedules (Baltes et al., 1999). Workers benefit from autonomy and reduced commute times. The implementation of the 4DWW has resulted in increased employee satisfaction, reduced absenteeism, and annual cost savings equivalent to approximately 2% of the company’s revenue (Laker & Roulet, 2019). Better leisure time management, which results in increased job satisfaction, is the primary driver behind adopting the 4DWW time model (Allen & Hawes, 1979; Mahoney, 1978; Hartman & Weaver, 1977; Mahoney et al., 1975; Judge et al., 2001).

However, adverse effects on job satisfaction can be seen when management allows different employees to have different work schedules, which leads to jealousy, misunderstanding, and a decrease in morale (Arbon et al., 2009). Other negative consequences of the 4DWW include

increased stress, tiredness, and reduced productivity, resulting in dissatisfaction (Monk & Folkard, 1988).

## **2.4 Job Stress**

Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) characterize work stress as the individual response to the attributes of a threatening work setting. Job stress arises when there is a lack of balance between the worker's abilities and the work environment's conditions, such as overwhelming demands or inadequate tools to perform the workload (French, 1963). Increased stress levels can lead to mental and physical health issues (Cobb, 1976; Kornhauser, 1965; Kelloway & Barling, 1991). Furthermore, it can lead to absenteeism, turnover, and overall job dissatisfaction (Gupta & Beehr, 1979).

Job Stress can also be linked to job performance; Yerkes-Dodson (1908) found a U-shaped correlation between stress and performance. Employees' job performance does not improve when stress levels are low, reflecting a lack of engagement during work (Welford, 1973). Nevertheless, elevated stress levels lead to employees maintaining stress for a longer duration and experiencing a decline in performance. Therefore, moderate levels of stress result in increased energy and motivation for achieving maximum performance.

There is a negative correlation between work stress and the implementation of a 4DWW (Paje et al., 2020). Furthermore, the fundamental aspects of work stress, such as work-induced anxiety and time constraints, are minimized. Consequently, implementing the 4-day workweek leads to a decrease in stress levels.

## **2.5 Work-Life Balance**

Kirchmeyer (2000) defines work-life balance as "achieving satisfying experiences in all life domains and to do so requires personal resources such as energy, time, and commitment to be well distributed across domains" (Kirchmeyer, 2000, p. 80). Work-life balance describes the satisfaction and functioning of work and life outside of work (Clark, 2000). It is observed that work-life balance is an individual feeling, and the satisfaction of this feeling can change throughout life (Brough & Kalliath, 2008). Work-life balance can also be understood as autonomy for employees, allowing them to choose when and where they work (Fleetwood, 2007).

The correlation between work-life balance and job performance suggests that employees who achieve a work-life balance are more inclined to demonstrate greater performance (Tamunomiebi & Oyibo, 2020). Consequently, it is necessary for employers to actively endorse policies and establish structures that promote the work-life balance of their workforce. Barriers such as overwhelming workloads, extended workdays, absence of organizational culture, and supervisors who resist implemented regulations hinder the successful implementation of work-life balance policies.

Implementation of the 4DWW shows overall positive effects on work-life balance and job performance (Spicer & Lyons, 2023). However, the longer working hours on the four days can pose challenges in coordinating childcare and managing personal activities outside of work.

## **2.6 Key Strategies for Successful Implementation of the Four-Day Workweek**

This part of the Literature Review analyses strategies that can lead to a 4DWW enhancing performance. When companies adopt the 4DWW concept, it is necessary that management understands the key dimensions required for successful implementation. Among other things, this ensures that employee well-being and work performance are not negatively impacted. Chakraborty et al., (2022) find that factors such as “strategic planning at work, viewing the company as a brand, continuous connection, and inspiring joy at work” (p.1) have a significant impact on workers’ performance when they work four days a week. There needs to be a shift in employers’ thinking to enable employees to work smarter, not longer (Brynjolfsson et al., 2020). Companies must strive to reduce fatigue, stress, and feelings of discomfort among employees in the workplace (Caruso, 2006; Chakraborty & Biswas, 2020). Furthermore, it is essential not only to reduce the number of hours spent working but also to enhance the productivity, value, and quality of work for the existing hours (Chakraborty et al., 2022). The next generation of employees prioritizes fulfilling their full potential, efficient work effectiveness, cultivating resilience, and receiving employer support to manage daily stress effectively. Hence, the proper guidance during the implementation of the 4DWW can lead to a synergistic improvement in honesty, dedication, and adaptability.

### ***2.6.1 Strategic Planning at Work***

Having workload planning in systematic and strategic cycles allows companies to stay organized over a long time and enables access to better information and quicker processes

(Ferreira & Proença, 2015). This is a crucial strategy that promotes enhanced job performance when implementing the 4DWW (Chakraborty et al., 2022). Strategic planning facilitates decision-making, which can lead to a competitive advantage (Nielsen et al., 2010). It also enables more accessible organization of data, coordination of human resources, and minimization of risks, as well as improved team productivity (Chimuka & Mashumba-Paki, 2016). Delaney and Casey (2022) found that employees participating in job planning with the four-day workweek fostered cooperation. Employees collaborated to develop an optimal work schedule and manage their time off, which fostered goodwill. An effective plan is vital for resource allocation, issue resolution, and promoting employee focus and engagement during a shorter work week.

### ***2.6.2 Viewing the Company as a Brand***

When employees see their company as a brand that stands by its values and shows leadership, a psychological bond is formed, which boosts employee performance (Chakraborty et al., 2022). When applying for jobs, employees tend to look for firms that match their values. Companies must clarify their mission and values and help employees grow (Erkmen, 2018). Communicating the company's culture and vision improves workplace attitudes and satisfaction (Chakraborty et al., 2022). Employees who see that the company offers them opportunities for further development and is organized around core principles to which they also subscribe, are more motivated to achieve the firm's goals (Burmam et al., 2009).

### ***2.6.3 Continuous Connection***

Clear communication and a personal connection between employer and employee lead to higher motivation (Sawithri et al., 2017). Bonding with employees also involves giving them autonomy and involving them in decision-making processes, which leads to a stronger sense of responsibility. Employees fully unfold their cognitive and practical abilities as they feel responsible for their decisions (Farndale & Murrer, 2015). Through one-on-one meetings in which the manager shows employees their strengths and expertise, they realize their capabilities and impact on the company (Allen et al., 2016).

Organizations should foster employee connectedness through social activities, celebrations, and appreciation, which leads to higher employee performance and a sense of belonging (Amoatema & Kyeremeh, 2016).

#### ***2.6.4 Inspiring Joy at Work***

Employee performance improves when companies care about them, help them build relationships with coworkers, and meet their needs (Abualoush et al., 2018). One way for management to improve the well-being of their employees is to introduce work-life balance initiatives (Roy & Konwar, 2020). Companies encouraging workplace socialization improve work practices and motivate employees to grow and be satisfied (Bauer & Gruber, 2007).

#### ***2.6.5 Key Stakeholder Analysis***

Leadership should identify key stakeholders (Freeman, 1984) like employees, unions, and customers to implement the 4DWW (Arbon et al., 2012). It is essential to understand stakeholder perspectives to ascertain if implementation is feasible for the company. Similarly, firms must internally analyze if the implementation is valuable and possible for each position.

The reason for the work schedule change should be explained. There are many reasons to introduce the 4DWW, including company benefits such as increasing productivity, reducing costs, and retaining employees, or employee benefits including more family time and job satisfaction.

#### ***2.6.6 Involving Employees in Decision-Making***

Management should include workers' opinions in the decision-making process regarding implementing the new scheduling model. Latack and Foster (1985) found that attitudes toward the 4DWW were more positive when employees were involved in decision-making. This can also be used as a basis for making decisions about time management, either with a top-down approach or by allowing employees autonomy to be flexible about their working hours. Transparent and fair guidelines should justify differing decisions about whether or not an employee works four days to ensure that each employee understands the decisions made (Latack and Foster, 1985).

## 2.7 Management Theory

Human Resource Management (HRM) focuses on effectively developing an organization's most valuable asset, human capital (Torrington et al., 2008). It involves various activities and strategies to maximize employee performance, satisfaction, and overall contribution to the company's goals. Effectively managing competent individuals necessitates finding an equilibrium between fulfilling individuals' ambitions and addressing the organization's strategic and financial objectives. Occasionally, there can be an excessive movement in one direction, necessitating organizations to adjust accordingly (Torrington et al., 2008).

Following the Resource-Based View (RBV) coupled with Dynamic Capabilities (DC) (Teece et al., 1997; Helfat et al., 2007; Barreto, 2010), firms seeking sustainable competitive advantages over peers need to possess resources that are valuable, rare, imperfectly imitable, and non-substitutable (Barney, 1991), and manage those resources in light of fast-paced changing external conditions. Notwithstanding critiques of the RBV that include notions that it is tautological and not predictive (Lockett et al., 2009; Priem & Butler, 2001), the RBV is relevant to HRM strategy (Delery & Roumpi, 2017). The author also takes note of critiques of the concept of competitive advantage, such as Lieberman (2021) who argues that the term is ambiguous and imprecise. Nevertheless, both the RBV/DC and CA are useful heuristics for the purposes of this study.

Firms can leverage resources, including workforce practices. Human resource management is a significant strategic asset since a firm's human capital is an essential resource under the RBV framework (Wright et al., 1994). Firms can implement the 4DWW as a talent acquisition tool to obtain and recruit the best human capital (Hertzog-Young, 2021). In addition, human capital leads to better firm performance (Crook et al., 2011). The work-life balance offered to employees resonates with the values of new generations and employees in general (Burke & Ng, 2006).

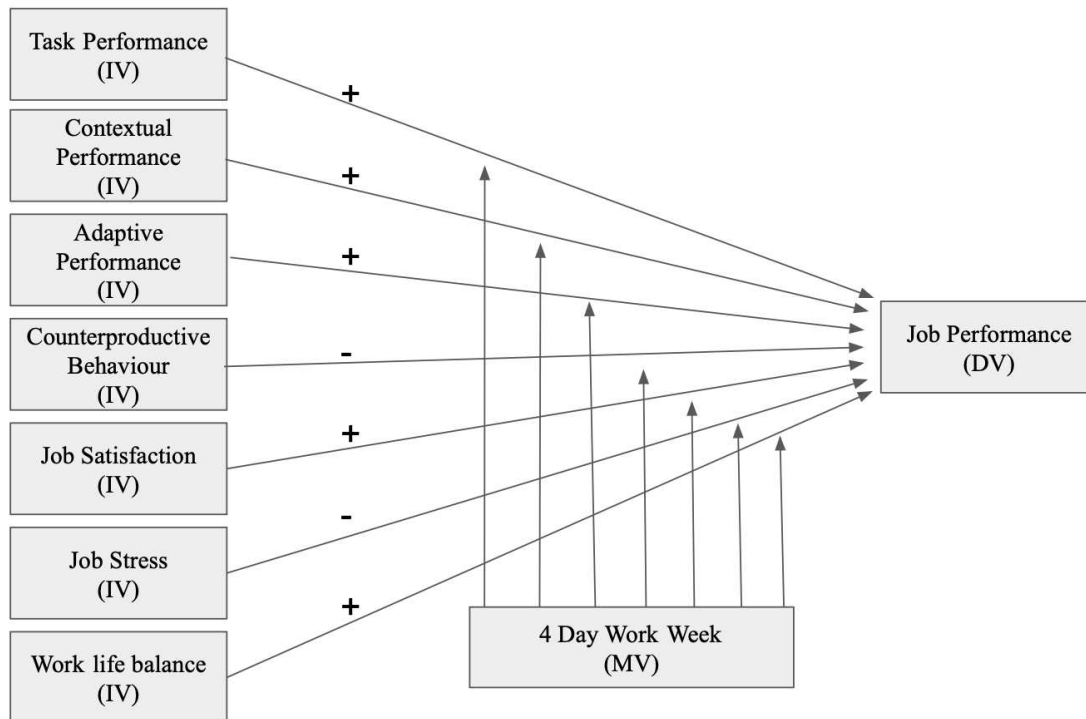
Another relevant concept in the field of HR management is Expectancy Theory developed by Victor Vroom (Vroom et al., 2015). According to this, people are prompted to behave in certain ways because they prefer specific outcomes and assess the likelihood that their actions will lead to these outcomes. They also consider how these outcomes would help them achieve other desired outcomes. This concept is valuable since the 4DWW can be applied to understand how employees perceive the relationship between introducing a new schedule and job performance,

satisfaction, and overall well-being. Employees will be more motivated to adopt the 4DWW if they expect it to lead to positive outcomes, such as a better work-life balance, less stress, or increased job satisfaction.

The relationship between HRM and performance has been a topic of substantial interest for firm-level strategy. MacDuffie (1995) asserts that innovative HRM methods enhance a firm's economic success in three specific circumstances: first, employees possess knowledge and skills managers lack. Next, employees are motivated to apply this knowledge through discrete effort. Lastly, the firm strategy necessitates significant effort. Furthermore, HRM practices such as careful employee selection, high investment in training, and performance-related pay can enhance individual performance. MacDuffie's (1995) approach is closely related to Expectancy Theory and explains the link between HRM and performance.

### **3. Conceptual Framework**

This study analyzes the relationship between the 4DWW and job performance. The concept of job performance has several dimensions that contribute to the overall performance of employees. This study used a modified version of the model of Koopman et al. (2011) (see Appendix A). The model showed a relationship between the independent variables (IV) of task performance, contextual performance, adaptive performance, and counterproductive behavior and the dependent variable (DV) of job performance. This model was further extended by examining the relationship between other independent variables such as job satisfaction, job stress, and work-life balance, and all independent variables were moderated by the four-day workweek. The arrows in the model display the relationship between the variables, and the plus and minus signs display whether the impact positively or negatively affects job performance. The moderator variable (MV) affects the relationship between the IVs and the DV.



*Figure 2 Conceptual Framework Model*

## 4. Methodology

This chapter outlines the methodology used to assess the effects of implementing a 4DWW in the construction industry. An analysis was conducted on dimensions of job performance, job stress, job satisfaction, and employees' work-life balance on overall job performance. This section outlines the research design, sample selection, data collection method, and analysis technique.

### 4.1 Research Design

A qualitative study was conducted in the German construction industry to examine the correlation between implementing a 4DWW and job performance. A qualitative approach was employed to investigate the phenomenon and the underlying variables that contribute to change in job performance, as well as emotional responses of workers relative to the transition to a 4DWW (Rowley, 2012). Interviews were selected to collect data and understand participants' opinions, experiences, processes, and behaviors. A holistic approach encompasses a multifaceted real-life scenario and considers the broader context by examining multiple relevant

factors and circumstances (Colley & Diment, 2001). The project combined essential components, such as the research problem, research questions, data collection method, sample, and appropriate analysis (Boeije, 2010).

## 4.2 Data Collection

Semi-structured expert interviews were employed as the data collection technique for this study. This type of interview provides the flexibility to explore the topic of interest in depth and enables follow-up questions as the conversation evolves (Boeije, 2010).

A pre-established interview guide was developed based on prior knowledge of the topic (Rowley, 2012). During the interview process, a selection of six to twelve questions were typically chosen (Bryman, 2016). There were subsidiary questions associated with each of the main questions. Furthermore, open-ended questions were designed to enable participants to provide unrestricted responses, thoroughly comprehend the research subject, and disclose their emotions and opinions (Busetto et al., 2020). Alongside open-ended questions, a set of closed questions were also posed using a Likert scale. This sought to gather ordinal data and quantify the experts' impressions of topics addressed in the interviews (Joshi et al., 2015). The interview script was translated into German to enable participants to answer in their native language, enhancing confidence and creating a more direct environment. They were recorded with the interviewees' consent for transcription and analysis. Given the disparities in location, the interviews were carried out via telephone or video conference. The first questions were simple to build rapport between the interviewer and interviewee, including general demographic questions (Adams, 2015). The interview script was created based on the literature review and the research question (Boeije, 2010). The interview script and structure can be found in Table 1 in Appendix B, a modified interview guide for participants who have not yet implemented the 4DWW can be found in Table 2 in Appendix B.

Participants were informed of the interview's purpose before data collection. Respondents were also assured of confidentiality and were informed they could decline questions and end the interview at will (Boeije, 2010). When interview responses were unclear, unrelated, or incomplete, probing was used.

### 4.3 Sample Selection

The sample was selected from the vast pool of construction firms in Germany. The study aimed to develop a comprehensive understanding of the advantages and challenges associated with adopting a 4DWW. Hence, a diverse range of roles, including executive directors, project managers, site managers, and site workers were chosen for the interviews. Furthermore, interviews were conducted with both companies that have implemented a 4DWW and companies contemplating its implementation. The participants were chosen for the study using a purposive sample, meaning they were specifically selected from the research population of the construction industry in Germany (Coyne, 1997; Boeije, 2010). Purposive selection ensured that they had experience with the 4DWW or considered its implementation and allowed for a more diverse sample of experts in various roles and with distinct responsibilities. The list of interview participants in October and November 2023, including the job description and reason for selection can be found in Table 2 in Appendix C.

### 4.4 Data Analysis

During the analysis phase of this research project, the data was sorted, named, grouped, and correlated, all of which involved interpretation (Boeije, 2010). A combination of a thematic analysis and grounded theory was carried out to analyze the transcribed interviews (Krippendorff, 2018). By using the qualitative research program *Taguette*, the interview transcripts were broken down into themes. The coding process was divided into three distinct stages: initial open coding, followed by axial coding, and finally, selective coding. These stages were employed to discuss interconnections derived from the data. In the initial phase, concise and relevant descriptive codes were assigned to the data. Following this stage, similar codes were grouped into potential themes of the primary recurring patterns found within the data. A framework that illustrated the relationship of the themes found was created. This framework demonstrated relationships and guided the structure of the analysis. Since the interviews were modified to fit the conceptual model, subjects were chosen to align with the model's primary themes, objectives, and the Research Question. Further key themes that emerged from the data collected were added to the model, as well as their relationships with the existing themes. Finally, the themes drawn from the data were analyzed in relation to the Research Question and objectives.

## **5. Results and Analysis**

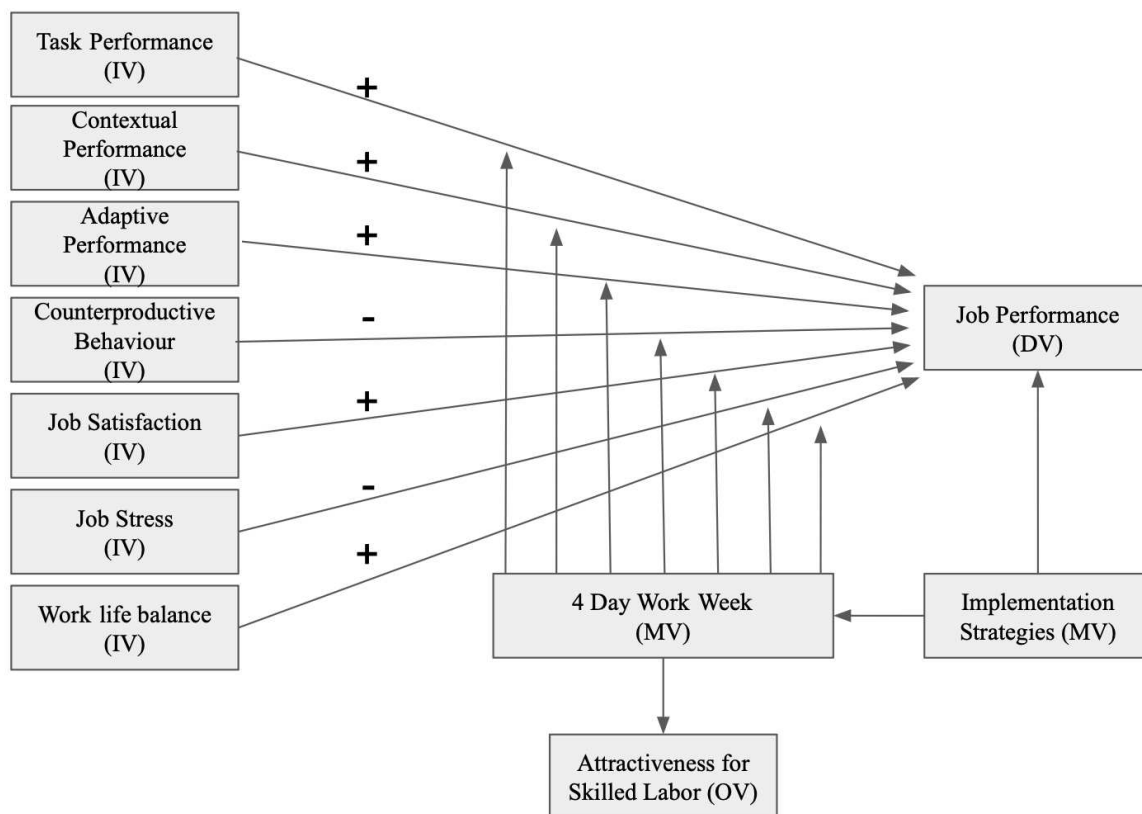
This chapter provides an overview of the most essential themes and findings from the expert interviews and the subsequent data analysis. It begins with description of the interview participants. Next, the findings are briefly presented, followed by key results of the data analysis on each theme.

### **5.1 Participants**

The participants were from various construction companies with different trades. The interviewees ranged in age from 24 to 55. They work in various positions, from construction workers to project managers who manage on-site HR to CEOs and technical managers of large construction companies who make strategic decisions. The participants' varied roles brought a diverse range of opinions and knowledge. Furthermore, some interviewees were already familiar with the daily routine of a 4DWW and were able to share their direct experiences. The other part had not yet implemented the 4DWW but is planning implementation. This cohort spoke about integration challenges. Most of the participants have a compressed work week with four days of 10 hours each or a reduction of a few hours per week, but none of the respondents work four days of 8 hours each.

### **5.2 Main Findings**

The interviews were transcribed and categorized resulting in 9 high-level themes. These themes and their relationships are illustrated in Figure 3. These variables were the foundation for constructing a grounded framework which could then be tested. Key themes of this conceptual framework were examined through various coding techniques, whereby smaller categories were combined with others to facilitate simplicity. The interviews yielded central themes of interest, such as Strategies for Successful Implementation and Attractiveness for Skilled Labor, which were included in the conceptual framework and have value for this study and the RQ. Figure 4 illustrates the high-level categories and subcategories resulting from the coding process.



*Figure 3 Main Findings*



Figure 4 The Top-2 Levels of the Code Structure

### 5.3 Determinants Influencing Task Performance

From the coding process, multiple axial codes were interrelated to the selective code Determinants influencing Task performance. Codes such as “Productivity and Performance” or “Quality and Quantity” indicate that implementing the 4DWW has led to increased task performance among employees, attributed to a heightened level of motivation. As stated by participant 5:

*“I actually think that the four-day week is positive for the company, in terms of the quality of the work and also the quantity of work that people perform because they are more motivated.”*

(Interviewee E)

However, the codes “Exhaustion” and “Type of task” were mentioned several times in connection with task performance, indicating increased exhaustion due to longer working hours and heavy tasks on the construction site. Nevertheless, the respondent states that the strain on the body caused by the same number of working hours is the same, just distributed differently.

*“So, you can definitely feel the physical strain when you work four times ten hours.”*

(Interviewee A)

Interviewee 1 also stated:

*“But physically, I would say it does not matter whether you work four or five days. It is just that the body wears out somehow, and that sometimes worries you.”*

(Interviewee A)

Another code related to task performance is “Commute” and “Short Friday”: employees who only commute four times a week are more efficient. Due to the longer working hours, they can also complete more tasks in one day, while in the five-day week, they usually have a short Friday, which seems less productive due to preparation and wrap-up times.

*“The extra hour you work during the week is definitely more effective than the short half Friday.”*

(Interviewee B)

To summarize the findings, participants indicate that the task performance has increased due to the 4DWW, with increased quality due to higher motivation, less commute time, and more time to finish projects per day rather than starting half a project on a shorter Friday. However, the longer working hours on the four working days lead to greater physical strain at the end of the day and increased exhaustion.

#### **5.4 Determinants Influencing Contextual Performance**

A key axial code related to contextual performance was “Motivation”. Due to the shorter week and the excitement and anticipation associated with an extended weekend, participants described being more motivated during their working hours, leading to better engagement and overall increased job performance.

*“My motivation is higher. By Tuesday, you know there are only two days until the weekend, and you have a clearer goal.”*

(Interviewee F)

Another frequently mentioned code item was “Communication with customers and other trades”. If companies only work from Monday to Thursday and other trades and customers work five days a week, this can lead to difficulties with coordination. The transition to the 4DWW leads to increased organizational effort and the need for better communication. However, not being on-site with other trades can also be an advantage for the other party to work undisturbed. A solution was also suggested to divide the team into two work shifts to ensure that there is always a contact person on site.

*“I think that is sometimes a bit difficult for customers or sometimes a bit difficult with other trades.”*

(Interviewee C)

Other codes related to contextual performance included “Team” and “Company culture”. One participant, who manages a large construction company, stated that since Fridays are off, the team often stays after work on Thursday afternoons to celebrate the start of the weekend together, thus strengthening interpersonal relationships even during off-hours. Multiple

participants also mentioned that with the 4DWW, the support of other colleagues has remained strong and that communication within the team has remained the same or improved.

*“We have always had good motivation, but now our employees sit together even longer on Thursday evenings over a glass of wine or a beer, which strengthens the corporate culture.”*

(Interviewee G)

In short, the introduction of the 4DWW has led to increased employee motivation and commitment, as the extended weekend is an incentive for employees. In addition, the 4DWW requires companies to plan and communicate more effectively with customers and other trades or plan their working hours accordingly to be on-site five days a week. Finally, the introduction has improved the corporate culture, as more time is spent outside working hours due to the Friday off, and the willingness to help colleagues has remained the same or even increased.

### **5.5 Determinants Influencing Adaptive Performance**

The data showed little evidence of an increase or decrease in adaptive performance regarding changes in the work environment after the implementation.

*“Adaptive performance is the same, but not better or worse.”*

(Interviewee J)

However, it was shown that the younger generations are more willing to adapt to the 4DWW model, while the older generations, familiar with the 5-day model for most of their careers, are less willing to adapt.

*“We have employees who have been working for 40 years, so they will not really make any major changes to their working time models.”*

(Interviewee C)

### **5.6 Determinants Influencing Counterproductive Behavior**

During the data analyses, numerous codes related to counterproductive behavior were identified. The data indicates that introducing the 4DWW has a beneficial impact on reducing employees' counterproductive behavior. Multiple interviewees have mentioned codes such as “Reduced absenteeism,” “Tardiness,” and “Fewer conflicts with coworkers” due to implementing the 4DWW. One participant stated:

*“The main advantage is that the overtime rate has naturally fallen. Sickness rates have also fallen, and absences have decreased. Extremely so.”*

(Interviewee H)

Another participant, who is a manager of a company, commented on his employees:

*“That (tardiness) has changed much more for the better. They are more punctual and more committed.”*

(Interviewee B)

Another outcome of the interviews was that doctors' appointments, which would have originally been scheduled during working hours, are arranged on Fridays when employees are off work. This ensures that there are no disruptions to the workweek. In addition, employers believe that having a “Half Friday” in the industry significantly reduces the barrier to employees calling in sick, as they perceive it as not worthwhile to come in for such a short period. In contrast, the hurdle is greater in the four-day week, as employees already enjoy an extended weekend.

Overall, the 4DWW has reduced absenteeism, delays, and conflicts with coworkers and superiors. Shorter work weeks and longer weekends reduce the desire to stay home. Motivation has increased, and people have more time to recover from stressful situations, reducing team conflicts. Due to fewer private appointments during work hours, efficiency has improved.

### **5.7 Determinants Influencing Job Satisfaction**

Another theme derived from the interviews, which accords with the conceptual framework model, was Job Satisfaction. Most of the participants mentioned a positive effect on their job satisfaction since the implementation of the 4DWW. One participant, the CEO of a large company, described how he measured a job satisfaction increase of 95%.

*“Only positive. Customers have found this to be very positive, as have our employees. We have a satisfaction rate of 95% on this topic, and we certainly will not change it.”*

(Participant G)

Another participant mentioned that his work morale and working culture have increased due to the change:

*“I would say that the working atmosphere and morale in general is definitely higher. And I think the fact that we have a four-day week positively affects me at least.”*

(Participant F)

Nevertheless, there were dissenting opinions, as the outcome depended on the attitude of each employee towards the matter, and this may have generated adverse results if employees preferred a five-day workweek.

*“With the job satisfaction, I think it depends on the person, how they prefer it.”*

(Interviewee K)

In conclusion, employee satisfaction increased. Participants reported that morale and culture improved, and managers observe increased satisfaction rates. However, the company must closely monitor individual attitudes to the changes and react accordingly.

## **5.8 Determinants Influencing Job Stress**

Several codes were used in connection with stress at work, such as “Exhaustion” or “Recovery,” which showed that, on the one hand, the body is exhausted due to the longer working hours, but on the other hand, there is one more day to recover. The results also show that stress levels are either not affected as they work the same number of hours on fewer days and have more days to recover or that they are more stressed due to the pressure to complete all tasks by Thursday. However, the increased stress does not lead to a worsening of job performance but to more efficient and more goal-oriented work.

One participant mentioned the connection between stress and recovery:

*“So, nothing changes in terms of stress, rather the opposite, if you have one more day of recovery, it might be less stressful.”*

(Interviewee E)

Another interviewee stated:

*“So, 10 hours is a long time, and sometimes it puts a strain on your bones, but I am not feeling stressed.”*

(Interviewee F)

Regarding increased stress, an expert said:

*“The four-day system is a great system, but it is stressful. You are definitely more effective and you have to learn to deal with the stress and use your working time as working time and not as break time. Then it works by being more effective and goal-orientated.”*

(Interviewee H)

Overall, the change in working hours has an impact on stress-related characteristics such as exhaustion due to long working hours and strenuous tasks. However, the additional day off improves recovery for the coming week. Furthermore, increased stress leads to more effective and goal-orientated work due to reduced break times.

## **5.9 Determinants Influencing Work-life Balance**

The topic of work-life balance provided the most comprehensive data and axial codes on this theme. Firstly, the code “Leisure planning” was mentioned several times. Participants indicated that due to the increase in working hours during the working week, there is an increased need to plan their time after work with family, friends, and hobbies, as well as for meal planning. The “Family time” code also relates to work-life balance and a similar issue regarding childcare conflicts with extended working hours. However, this code included situations in which a possibility for partners to work on Friday is established due to the change in working days. As for leisure time, one employee pointed out:

*“It just affects my free time after work a bit more. So, I have to make some decisions about what I do and how I plan my time.”*

(Interviewee A)

Another respondent mentioned:

*“One employee told me that he can now look after the children on Fridays and play house dad, so to speak. And his wife can finally go back to work. She gave up her job, and she says she now goes back to work on Fridays, and it gives her a completely*

*different feeling to go back to work and have a different purpose than just looking after the household.”*

(Interviewee B)

Other codes that related to work-life balance are “Extended weekend,” “Friends and family,” and “Quality of life”, all of which relate to participants enjoying the extended weekend and more time with friends and family. Participants stated that they have more time to do personal matters and that the extended weekend allows them to plan exciting activities and makes them feel like they are taking a little vacation.

*“I have definitely noticed that I have a lot more time for friends and family on the weekend, and you can definitely feel that you have more time and can do more things on the weekend.”*

(Interviewee D)

In conclusion, participants must make more decisions after long working hours because they have less leisure time. Working longer hours also causes family conflicts over childcare. However, the extra day off can help resolve family conflicts, increase weekend leisure time, and improve quality of life. Finally, to make 4DWW successful, companies and employees must plan after-work activities carefully.

### **5.10 Strategies for Successful Implementation**

The data revealed that different strategies can support the successful implementation of the 4DWW. The first strategy mentioned by almost all participants, regardless of their position, is that it is important to communicate with employees before implementation. Depending on the company’s size, this can be done through surveys or one-on-one meetings.

As one interviewee expressed:

*“I believe that you should definitely talk to everyone first.”*

(interviewee I)

He further advised:

*“You should definitely do a survey first.”*

(Interviewee I)

Another strategy was to explain the reasons for the launch and the roadmap. One participant suggested announcing the idea of the change during a celebration, such as Christmas or a summer party, and presenting it to employees as a gift. Another critical strategy mentioned by several participants was a well-planned roll-out process. All participants believed that a trial period should be implemented to test the model in the team. This could be done by starting with a small team or a project. At the end of the trial period, a survey strategy could also be implemented to gain insights into the employees' opinions.

*“We had a trial period of a quarter of a year, during which we said we wanted everyone to try it out to see if it worked for them. And then we sat down together and asked: who wants to keep it and who does not?”*

(Interviewee B)

If only some employees prefer the four-day week, a different strategy could be implemented, with some employees retaining the five-day model. This may, however, lead to increased need for planning.

*“You have to ask every employee what they want in the future. And the person who wanted to stay with the old version was allowed to do so.”*

(Interviewee B)

Furthermore, informing the supervisory board and discussing the possibilities is essential, considering health and safety guidelines and labor law. It is also necessary to precisely plan the employees' days off to prevent jealousy within the team if the company continues to work on all days of the week. In addition, companies should prevent emerging family issues, such as childcare challenges, by looking for solutions and offering support to employees before implementation.

*“That was a change for some, especially in childcare. But we then also started working internally with a daycare center, etc. or cooperating with kindergartens.”*

(Interviewee G)

Finally, it is strategically essential to consider the client and other trades during the introduction and to seek their opinions to avoid conflicts.

In sum, strategy development is essential for implementation. Effective team communication and rationale will help the change to be accepted. All stakeholders' perspectives should be included in decision-making. Considering labor policies, work safety, and private challenges posed by longer working days and proposing solutions is vital.

### **5.11 Attractiveness for Skilled Labor**

Another data theme, "Attractiveness for skilled labor", was relevant to company success and this study, yet unrelated to the conceptual framework. Several participants, both on-site employees and company executives, mentioned that the 4DWW is an attractive feature to attract skilled labor. Four-day week employees said they no longer wanted a five-day week and would look for employers who have adopted it when looking for another position. As one construction site employee submitted:

*"If I could find an employer who also offers four-day working, then I think I would prefer to go there."*

(Interviewee A)

On the other end of the spectrum, managers said that the number of applications has increased significantly since the introduction of the 4DWW. Above all, the quality of applicants improved after the changeover.

*"So, this has definitely helped with the shortage of skilled workers. We have noticed that our application rate has risen by 75%. Oh, and what is best, we are getting good applications, which was not the case before the changeover."*

(Interviewee G)

Other participants mentioned that if applicants chose between two companies, the one with the 4DWW would be chosen. One participant cited the shortage of skilled workers as the reason for introducing the 4DWW, stating it would help retain and attract qualified workers.

*“We did this primarily to retain existing employees and also to offer an incentive for new employees.”*

(Interviewee G)

To conclude, the 4DWW can be used as a Human Resource tool to attract and retain skilled employees.

### **5.12 Likert-Scale Question Analysis**

In addition to the open questions, the participants in the expert interviews were also asked several closed questions, which were answered on a 5-point Likert scale. The complete questions, scales, and answers can be found in Appendix E.

The first question indicated that respondents are currently satisfied with their work schedule. Five respondents, most of whom work in a 4-day schedule, answered Very Satisfied, while the rest answered Satisfied. The second question about employee engagement and motivation was consistent with the statements from the open-ended question, where most respondents believe their motivation and engagement have increased due to the 4DWW. The Likert scale question on the changes in employees' counterproductive behaviors was also consistent with the answers to the open-ended questions. Three participants believed that punctuality and absenteeism have changed significantly, six believed that punctuality and absenteeism have improved, and two held that there has been no change. The open-ended questions yielded similar results, with most participants believing in a decrease in counterproductive behavior and some maintaining that behavior is personality-dependent and that the four-day week has no impact.

Finally, the two open-ended questions about construction companies adopting the new schedule to address labor shortages and the expectation that competitors will adopt similar schedules show precise results. All respondents indicated that they fully agree with the strategy and use of the 4DWW to attract skilled labor.

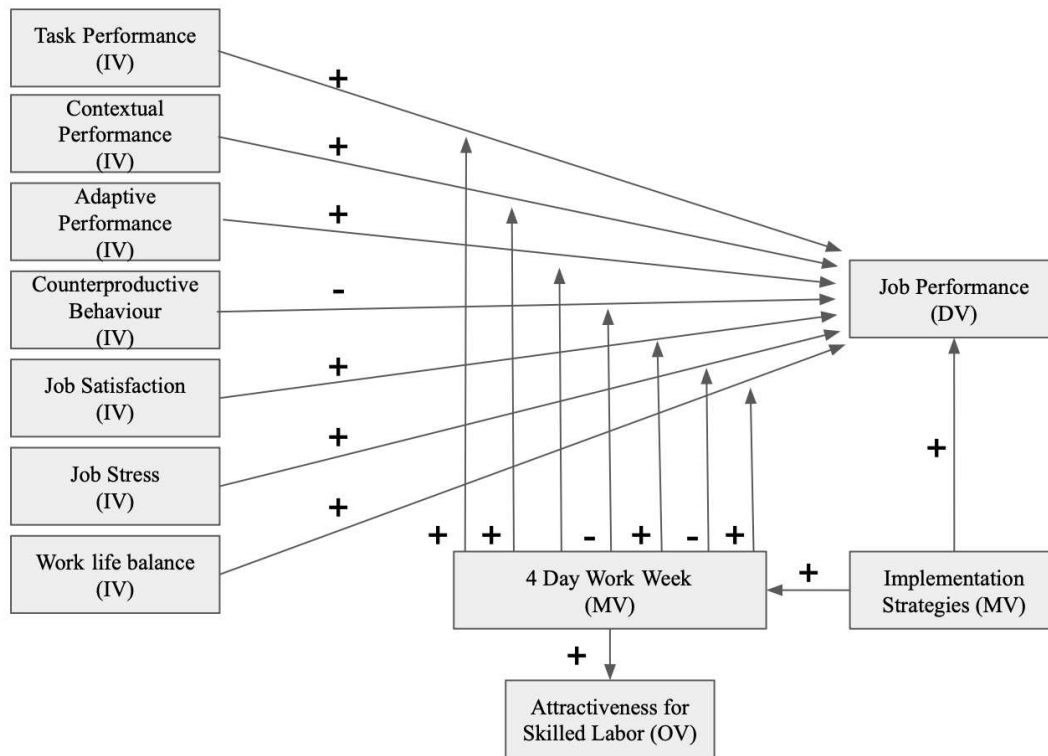
## 6. Discussion

As stated in the Research Question, the main objective of this study was to investigate the effects of the introduction of the four-day week and its impact on job performance in the German construction industry. The study included various dimensions of job performance, satisfaction, stress, and work-life balance. This chapter summarizes the factors identified from the case study in the German construction industry, interprets the results, and establishes links to the existing literature.

### 6.1 Connecting Findings to Research Questions and Theoretical Framework

The results were grouped into different themes: firstly, themes related to the variables of the conceptual framework, and secondly, additional themes identified during the analysis and added to the conceptual framework model. The results show that introducing a 4DWW positively influenced task and contextual performance. There is no clear evidence of a positive or negative impact on adaptive performance. However, the results show a negative correlation between 4DWW and counterproductive behavior, improving job performance. Additionally, the results show a positive relationship between the 4DWW and job satisfaction. The connection between stress at work and the impact of the 4DWW was not clearly established, with results varying between respondents; however, only positive effects on job performance have been found. The results on work-life balance and the 4DWW were mixed: extended weekends improved work-life balance while after-work balance reduced. Participants valued extended weekend rest more than after-work rest and reported positive job performance effects.

Finally, the results suggest that implementation strategies improve 4DWW adoption and organizational performance. The 4DWW improves professional attractiveness and organization recruiting. Figure 5 shows the main findings and their relationships.



*Figure 5 Findings and Relationships*

## 6.2. Dimensions of Job Performance

### 6.2.1 Task Performance

The results show a positive correlation between introducing the 4DWW and task performance. The data from the interviews and the literature suggest that productivity and quality of work have increased due to improved efficiency and motivation (Allen & Hawes, 1979; Newman & Frost, 1975; Hertzog-Young, 2021). The literature suggests that efficiency and productivity have increased due to an overall higher level of satisfaction (Laker & Roulet, 2019). Similar findings were explored in the interviews of construction company directors and managers, who indicated that the additional working time is more valuable than a half working day on Friday or that the quality and quantity of tasks have improved due to the higher motivation. Notably, participants reported higher motivation, retention, and engagement, consistent with findings by Facer et al. (2009). The literature and interviews jointly underscored that reduced commuting time positively impacts overall work efficiency (Laker & Roulet, 2019). Finally, the adverse effects of the additional working hours mentioned by the interviewees, which lead to greater

exhaustion and physical strain, are consistent with the earlier literature by Allen and Hawes (1979).

### ***6.2.2 Contextual Performance***

Positive correlations between the impact of the 4DWW and contextual performance were evident. Participants highlighted increased morale, motivation, and commitment, which resonated with prior studies (Hartman & Weaver, 1977). Increased motivation is due to the incentives of an extended weekend, which allows for better recovery. Similarly, the literature shows that extra leisure time allows employees to feel refreshed and work more enthusiastically (Chakraborty & Biswas, 2019; Štreimikienė & Grundey, 2009). In addition, both the literature and the results indicated that the 4DWW can pose a challenge in terms of communication and interfaces with other organizations (Hodge & Tellier, 1975). One finding not previously present in the literature is that the 4DWW increases organizational culture and interpersonal relationships as more time is spent on this after work hours.

### ***6.2.3 Counterproductive Behavior***

The outcomes indicated a negative relationship between the 4DWW and counterproductive behavior, confirming previous literature suggesting decreased turnover and absenteeism (Hartman & Weaver, 1977; Calvasina & Boxx, 1975; Hodge & Tellier, 1975). The interviewees pointed to reduced sickness rates and absenteeism, improved tardiness, and enhanced employee commitment. In addition, an intriguing finding not previously observed in the literature was the reduced conflict with colleagues and superiors due to fewer points of contact and more time to recover from stressful situations leading to better team and job performance.

### ***6.2.4 Adaptive Performance***

The results showed little evidence of a change in adaptive performance due to the introduction of a 4DWW. Most participants stated that their ability to adapt to new types of tasks or new circumstances does not change when working only four days.

### **6.3 Job Satisfaction**

The results demonstrated a positive correlation between the 4DWW and job satisfaction, which aligns with previous research (Baltes et al., 1999). Shorter commute times and better leisure lead to an increase in overall job satisfaction. Despite some negative effects, such as increased exhaustion and stress, overall satisfaction levels were elevated, consistent with Monk and Folkard (1988). Anticipation of a longer weekend yielding higher job satisfaction is also consonant with Vroom's Expectancy Theory (Vroom et al., 2015).

### **6.4 Job Stress**

The results on the relationship between the 4DWW and stress exhibited mixed results. Some participants stated there was no change or decreased stress due to the longer recovery time. Other participants stated that there is an increase in stress, highlighting a positive impact on efficiency and no negative impact on job performance. These results contradict the literature, suggesting stress reduction (Paje et al., 2020). However, the U-shaped correlation between job stress and performance identified by Yerkes-Dodson (1908) was confirmed.

### **6.5 Work-Life Balance**

A positive correlation was found between work-life balance and the 4DWW. The extended weekend leads to more free time with friends and family, relaxation, and less commuting (Lavin & Spillane, 2019). The interviewees confirmed all of this. However, respondents also stated that physically demanding work leads to fatigue and that little time after work leads to childcare challenges, increased leisure planning, and inadequate nutrition. This is also consistent with the literature by Spicer and Lyons (2023).

### **6.6 Attractiveness for Skilled Labor**

The 4DWW was found to influence the attractiveness of skilled labor positively. This aligns with literature, which states that implementation can help tackle today's labor market challenges (Allen & Hawes, 1979; Hammer & Barbera, 1997). Increased application rates and improved application quality were reported, supporting the notion that altering working hours enhances the workplace environment and aids in talent retention Hertzog-Young (2021).

## **6.7 Implementation Strategies**

Finally, the results showed that implementation strategies contribute to the successful introduction of the 4DWW and lead to better job performance and overall company performance, supporting prior research by Chakraborty et al. (2022). Strategic workplace planning is essential, leading to better resource allocation, such as human resource management and problem-solving, leading to better performance (Delaney & Casey, 2022). The data suggested that work policies, safety, and private challenges should be planned well to avoid emerging issues. In addition, the “continuous connection” strategy described in the literature by Chakraborty et al. (2022) was mentioned by all participants, emphasizing that clear communication is essential for understanding team perspectives. “Inspiring joy at work” was also mentioned to some extent, as effective team communication and good interpersonal relationships lead to higher employee motivation and better performance. One strategy not found in the data but mentioned in the literature is “viewing the company as a brand”. However, interviewees highlighted identifying key stakeholders is essential to successfully implementing the 4DWW, leading to better performance. This was also mentioned in previous literature, as understanding all stakeholder perspectives is crucial (Arbon et al., 2012). In addition, involving employees in the decision-making process was a strategy in the literature that accorded with our primary data. All employees’ opinions are vital and impact their job satisfaction and performance (Latack & Foster, 1985). Overall, we can appropriately consider the 4DWW as a firm resource that needs to be actively managed as a DC of the firm conducive of CA (Porter, 1985; Barney, 1991; Teece et al., 1997; Barreto, 2010).

## **7. Limitations, Recommendation, and Conclusion**

### **7.1 Limitations**

This study has limitations. The sample was selected to provide a rich spectrum of perspectives, including a diverse cohort of workers who have experienced the 4DWW and those addressing its implementation challenges. The mix of on-site workers and managers added depth to the study’s findings. However, demographic factors and family relationships should have been considered more in this study, which could have improved the results. Including employees and managers from different generations was possible, thus mitigating this limitation. Still, it would be interesting to hear opinions from different generations in the same positions. A limitation,

however, is the small size of the sample, which hinders generalizability of the results. As the participants are pioneers of the 4DWW model in the industry, there is a risk of selection bias. However, this was partially addressed by including opinions of those who had yet to participate in a four-day program. As the study is also sector-specific, generalization of the results to other sectors or regions is limited due to sector-specific characteristics. The short timeframe of the study and the fact that it was based on qualitative data present additional limitations. While the study attempted to collect findings pertaining to the long term implications of the 4DWW, a broader study period could provide a more comprehensive understanding of the long-term effects.

Furthermore, the lack of quantitative data, even when supplemented by Likert scale questions, limits a understanding. Future research should address these limitations and include larger and more diverse samples across all positions to improve generalizability. A mixed-method approach should be considered to gain more refined insights.

## **7.2 Recommendations**

This study contributes to extant knowledge about the impact of the 4DWW on job performance in the German construction industry. Nevertheless, there are opportunities for further research that could deepen understanding and fill specific gaps. First, future studies should explore the complex interplay between the 4DWW and family situations, considering workers' challenges in balancing schedules with family commitments. Given the nature of construction work, including its physical and mental demands, there is a significant need to investigate the feasibility and implementation of flexible working hours in the industry. Participants emphasized the challenges of implementing flexible working hours due to teamwork and morning task allocation by site managers. Therefore, exploring innovative strategies to integrate flexibility without compromising teamwork could be an area for future research. This could include exploring technological solutions or alternative team coordination approaches that allow for greater flexibility in working hours while maintaining efficiency and task delegation processes. Overall, these recommendations aim to broaden the scope of research on alternative working hours and provide practical insights that address the complexities of both the workplace and private life.

## **7.3 Implications**

### ***7.3.1 Practical Implication***

The positive impact of the 4DWW on the quality and quantity of tasks performed, motivation and morale, and improvement in counterproductive behavior all demonstrate the overall positive effect of the 4DWW on job performance. This is of value to practitioners within the industry. In addition, managers can focus on aspects proven to compromise performance, such as fatigue and physical stress. The strategies developed in this study can be used to plan the introduction of 4DWW and thus positively influence the communication and culture of the company. The HR department can also use the identified effects on staffing to retain or recruit highly qualified employees.

### ***7.3.2 Theoretical Implications***

This study contributes to existing theory by providing empirical evidence of the effects of the 4DWW on individual dimensions of job performance. In addition, many of the relationships are consistent with the literature. The study challenges previous assumptions, identifies potential drawbacks, and explores possible strategies to mitigate weaknesses and achieve effective implementation. It is also part of a larger ongoing discussion about the nature of work, employee dissatisfaction, and the “S” component of ESG which implicates workplace conditions for employee stakeholders.

## **7.4 Conclusion**

This research aimed to assess the effects of implementing the 4DWW on job performance within the German construction industry. Insights obtained shed light on the interaction of workplace factors, providing greater clarity about complex relationships related to rearranging work hours and effects on individual and organizational performance.

The Research Question, which sought to determine the impact of the 4DWW, was addressed by examining various dimensions of job performance and aspects of employee well-being. The study found a positive correlation between 4DWW implementation and increased task and contextual performance, indicating improved employee efficiency, motivation, and

engagement. In line with the existing literature which associates the 4DWW with lower staff turnover and absenteeism, there was a reduction in counterproductive behaviors.

The methodology was effective for capturing experiences and perceptions. Our qualitative approach unpacked subjective aspects of 4DWW implementation and provided data that enabled meaningful analysis. While the study confirmed most expectations in line with previous research, it also revealed new dimensions, such as positive impacts on organizational culture and interpersonal relationships.

The results of this study are significant in two respects. For practitioners in the German construction industry, the results demonstrate potential benefits of moving to a 4DWW. The latter positively impacts job performance, satisfaction, and work-life balance and can attract and retain skilled labor. Recommendations for future research include exploring the family dynamics of employees. In addition, further studies of flexible work schedules in the construction industry would build upon this work.

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## 9. Appendices

### Appendix A: Koopman et al. (2011) Conceptual Framework Model

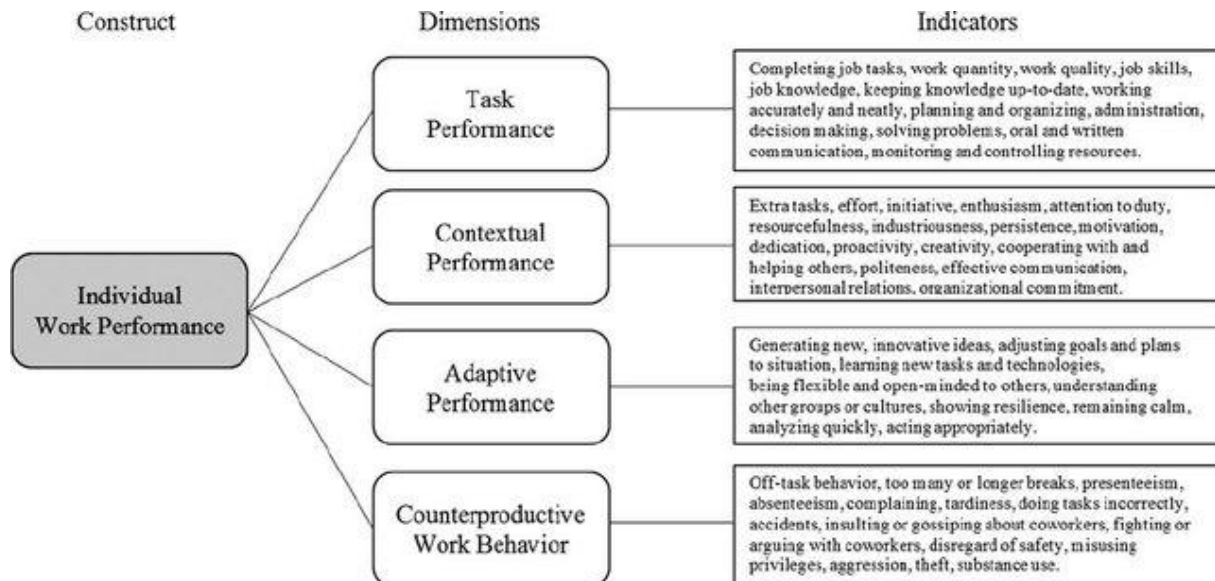


Figure 6 Koopman et al. (2011) Conceptual Framework Model

### Appendix B: Interview Guide

Table 1 Interview Guide already implemented a four-day workweek

Topic	Questions
General	Can you tell me a bit about yourself, such as your age, current position, and how long you've been working with the company?
General Motivation of working in the 4DWW	What is your usual working schedule?
	Why did you decide to work for a company that offers the possibility of 4DWW?
	What are the advantages and disadvantages of working in a 4DWW?
Task Performance	How does working in a 4DWW affect your task performance, including everything in your job description?

	Can you describe how your quality and quantity have changed when working four days per week compared to working five days per week?
Contextual Performance	How about communication with coworkers and customers?
	Are you more dedicated and motivated working in a 4DWW?
	Are you able to help others, and how effective is communication when working in a 4DWW?
Adaptive Performance	Have you had to adapt to new systems, tools, or processes during the 4DWW? How was the adjustment process
	Are there any challenges you've faced in adapting to changes during the implementation of the 4DWW?
Counterproductive Behaviour	Can you describe changes in punctuality and absenteeism?
	Is it easier to get into an argument with coworkers and managers?
	Since the implementation of the 4DWW, can you describe any counterproductive behaviors?
Job Satisfaction	Are there specific aspects of your job that contribute to your overall job satisfaction?
	How do you perceive the influence of the 4DWW on your job satisfaction?
	Do you feel more motivated and engaged with your work due to the 4DWW?
Job Stress	Can you identify specific stressors related to your work in the construction industry?
	How has the 4DWWk affected your ability to manage stress?
	Do you find the 4DWW helps you achieve a better work-life balance, reducing work-related stress?
Work-Life Balance	How do you perceive your work-life balance in the construction industry, both with and without the 4DWW?
	Have there been changes in your personal life or family commitments due to the 4DWW, and if so, how have you adjusted?
	Can you share any strategies or practices that have helped you maintain a healthy work-life balance within the 4DWW structure?

Implementation Strategies	Based on your experience, do you have any suggestions for successfully implementing the 4DWW?
	In your opinion, what strategies or support mechanisms from the management have facilitated the smooth implementation of the 4DWW?

**Table 2 Interview Guide not yet implemented a four-day workweek**

Topic	Questions
General	Can you tell me a bit about yourself, such as your age, current position, and how long you have worked with the company?
	How would you describe the current working schedule at your company?
General Motivation of working in the 4DWW	What are your thoughts on the concept of a four-day workweek?
	Have you considered or discussed implementing a four-day workweek in your organization?
	What factors would influence your decision to adopt a four-day work week in your company?
Task Performance	How do you anticipate a four-day workweek might affect task performance, considering all aspects of your job description?
	What potential advantages and disadvantages do you foresee in terms of task performance when transitioning to a four-day workweek?
Contextual Performance	How do you think communication with coworkers and customers might be impacted by a four-day workweek?
	In your opinion, would employees be more or less dedicated and motivated in a four-day workweek scenario?
	How effective do you believe communication and collaboration would be in a four-day workweek structure?
Adaptive Performance	If the company implements a four-day workweek, how must employees adapt to new systems, tools, or processes?
	What challenges do you anticipate employees facing when adjusting to a four-day workweek?
Counterproductive Behaviour	How do you think changes in punctuality and absenteeism might occur with a four-day workweek?

	In your opinion, could a four-day workweek influence workplace conflicts or arguments among coworkers and managers?
	Are there potential counterproductive behaviors that you think might arise with implementing a four-day workweek?
Job Satisfaction	What aspects of your job contribute most to your overall job satisfaction?
	How do you think the implementation of a four-day workweek might influence job satisfaction among employees?
	In your opinion, would a four-day workweek contribute to increased motivation and engagement among employees?
Job Stress	Can you identify specific stressors related to your work in the construction industry?
	How do you think a four-day workweek could affect employees' ability to manage stress?
	Do you believe a four-day workweek could improve work-life balance and reduce work-related stress?
Work-Life Balance	How do you currently perceive the work-life balance in the construction industry at your company?
	If the company adopted a four-day workweek, how might it impact employees' personal lives and family commitments?
	What strategies or practices do you think would help employees maintain a healthy work-life balance within a four-day workweek?
Implementation Strategies	From your perspective, what challenges do you foresee in implementing a four-day workweek in your organization?
	Are there specific strategies or support mechanisms that you believe would facilitate a smooth implementation of a four-day workweek?

## Appendix C: Description of Participants

**Table 3 Interviewees for semi-structured interviews**

Interview ID	Position	Reason for interview
Interview 1	Journeyman carpenter in a construction company building the tallest wooden skyscraper in Germany	The expert's company has successfully implemented a 4DWW for more than a year. The skilled employee actively engages in construction activities and belongs to Generation Z.

Interview 2	Managing director and owner of a gas water engineering company in Berlin, Germany	Recently adopted a 4DWW and provides valuable insights for direct comparison and subsequent changes.
Interview 3	Technical director of a large construction company in Hamburg	Experienced and influential in construction site HR for 30 years. Discusses challenges in implementing 4DWW and flexible working hours on construction sites.
Interview 4	Construction worker of a large construction company on site	The expert has worked a four-day week for over a year and discusses work-life balance and Gen Z construction worker scheduling.
Interview 5	Project Manager of a large construction company	Responsible for scheduling employees on large company projects. Explains the pros and cons of flexible work schedules and the four-day week.
Interview 6	CEO of large Corporate construction company	Manages a company with hundreds of employees that has implemented flexible hours and is considering a four-day week. Explains implementation, financial benefits, and challenges.
Interview 7	CEO of a General contractor with 9 trades	Makes strategic decisions for a four-day workweek pioneer. Provides compelling reasons and data on the skilled labor shortage.
Interview 8	Project and construction management for a General contractor with 9 trades	Working for one of the first companies to adopt the four-day workweek. Provides valuable and longterm information.
Interview 9	Construction site manager	Oversees multiple large construction sites and manages personnel deployment. Presents a comprehensive understanding of the challenges associated with implementing a 4DWW..
Interview 10	Journeyman carpenter	Information about the Monday-Thursday 10-hour workday schedule provides insight into the physical strain and long hours. On-site construction of Germany's largest wooden tower.

Interview 11	CEO of a large company building hotels, etc.	Has relationships with several major construction firms and is considering four-day workweeks. Gives valuable insight into company profitability and financial status depending on working hours.
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## Appendix D: Interview Summaries

**Table 4 Interview A**

Question 1
I work from seven to 17:30 every day, with Fridays off. We have breaks, including a 15-minute breakfast break in the morning and a half-hour lunch break. The total daily working hours are nine hours and 45 minutes.
Question 2
It does affect my leisure life a bit after work. So, I have to decide what to do. But it is already late, and I am already tired. If I go to sports afterward, I usually can not manage to cook. Or if I cook, I usually not make it to sports. So, it is challenging, definitely. Can I handle it? I think, in any case. Whether I finish at 4:30 or work on Fridays at 4:30, I still have to motivate myself to go to sports or go grocery shopping or cook. But having Fridays off definitely increases the quality of life. No, I prefer working four days. I would also work five days, but if I found an employer who works four days, then I think I would prefer to go there. Yes.
Question 3
In general, one is more motivated and enters the job on Mondays more refreshed. But it's not the weekend. However, it lasts much longer, and there's simply much more time. You can do a lot more on the free days. That's why you have less work in the four days. So, I feel more motivated than in five days. In five days, it's always like you have five days of work and two days of the weekend that feel like they pass within one day. Then you somehow have less motivation, I feel more motivated, more refreshed. And yes. And I think you also achieve more when, in a regular company, you work until 1:00 or 2:00 on Fridays, usually you have a shorter day. And on Fridays, you actually achieve nothing. That's why Friday is wasted, essentially.
Question 4
Yes, a bit. It's just that, as I said at the beginning, being until 5:30 is quite long. So, for the next day, if you plan something and don't go straight home, and only make something to eat once and relax. If you then go to sports or shopping or meet someone, it's always very tight, and you don't really get to rest. You have a small time window afterward and have to hurry. But I think the Friday compensates for that. So, it's not really negative, but it's demanding. Definitely. You notice that when you work ten hours four times a week, you definitely notice it.
Question 5
I think it's pretty much the same. The shorter Friday in the construction industry is often less productive, making a four-day workweek almost more productive.
Question 6
Sometimes it's a bit challenging for customers or with other trades. Coordination becomes a bit tricky when not everyone is on a four-day workweek. But it works out; you just need to communicate clearly. We rarely work overtime unless it's a special project or if we want to finish something. The four-day workweek doesn't make

me feel compelled to work longer.
Question 7
Personally, I don't think so. It's more about individual tendencies. Having a four-day workweek doesn't make a significant impact. So far, there haven't been any. Having one day less working closely together actually reduces stress factors.
Question 8
Bad weather can be challenging, but it's similar to a five-day workweek. My employer is great, understanding, and motivating, contributing to a positive work environment. The work-life balance is decent. However, the physical toll on the body is considerable, and I feel it's sometimes not adequately compensated.
Question 9
My employer is supportive, friendly, and provides a good work environment. There's recognition and motivation, creating a positive atmosphere. I try disconnecting from work during my free time, enjoying my days off. Having a pleasant work environment and good colleagues contribute to a positive mindset.
Question 10
Conduct surveys to gauge interest, maybe start with a trial period, and gather feedback. Clear communication is key to making it work. Personally, I find the four-day workweek highly beneficial and wouldn't want to go back.

**Table 5 Interview B**

Question 1
I am the managing director and owner of a gas, water, and heating installation company. Initially, we had a five-day workweek of 37.5 hours. Recently, we switched to four days of nine hours each. This change resulted in a more efficient use of time, and employees received the same pay with flexible hours.
Question 2
Due to legal reasons, we had to consult employees individually. Only a few preferred the old schedule, mainly for personal reasons. Overall, flexibility in working hours is crucial for employee satisfaction. The new model increased productivity, allowing more tasks to be completed. Employees appreciated the longer weekends, and some found improved work-life balance. Reduced energy costs and environmental impact were additional advantages.
Question 3
No, if anything, it has become more effective. The longer day on Thursday motivates employees, providing a better work-life balance. Team dynamics and communication have remained positive, with employees supporting each other when needed.
Question 4
No, absenteeism has reduced, and employees are more punctual and engaged. Medical appointments are scheduled on Fridays, minimizing disruptions during working hours.
Question 5
Yes, there is a noticeable increase in job satisfaction. Employees enjoy longer weekends and approach Mondays with increased motivation.
Question 6

The four-day workweek has not increased stress. In fact, it has improved productivity, and employees find the longer weekends beneficial for recovery. While the four-day workweek was hoped to attract more candidates, the impact has been limited. Candidates do not specifically choose the company for this reason.

Question 7

Involving employees in the decision-making process is crucial. Flexibility in working hours should align with individual preferences, contributing to overall satisfaction.

**Table 6 Interview C**

Question 1
We actually have the traditional 40 hours per week, and it's usually divided up so that colleagues work half an hour longer from Monday to Thursday and then the two hours worked in advance finish earlier on Friday.
Question 2
Some people can, of course, organize their private lives to a certain extent by saying that they only have a four-day week and undertake leisure activities or similar on that day. From a purely organizational point of view, some people have certain challenges when it comes to completing certain tasks in a team. And if you then say that one employee wants Friday off, the other wants to avoid coming in on Monday. So that's also a problem because the trade carries out the work and we are not there. We're less likely to find ourselves in the situation where we say, well, of course, things always go on somehow on a construction site like this.
Question 3
We realize we have a shortage of skilled workers and that the job is not very attractive in terms of working conditions. You must also know that you can come an hour later, take your child to nursery school or sports in the morning, and arrive at eight or half past eight. On the other hand, construction site mornings require meetings until seven. The site manager divides teams with 10, 15, or more people. He says the three of you go into the underground car park and build the lights, the two in the back go up to the roof and make bollard lights, and the other five do installations on floors 7 and 8. Normal procedure. People then go to work.
Question 4
But you definitely need to plan more and think more strategically about how to organize the whole. There needs to be more planning. And you also have to say that it's fundamentally the case that a process on the construction site is not a completely random process because, in case of doubt, the entire workplace doesn't change completely between Tuesday at the end of the working day and Wednesday morning. That does happen, but it's different from the typical process.
Question 5
Another issue is that we as a company are obliged to have first aiders on construction sites. As a rule, we always have at least one first aider on site, and this is usually the site manager. Whether something changes in terms of quality and quantity depends very much on the task. With physically demanding tasks, it can be worse. With normal tasks, it can have positive effects.
Question 6
I think if everyone has the same working hours, the counterproductive behavior will improve. Then it has a very positive overall effect because everyone has a long weekend. Ultimately, everyone looks forward to it and works longer, from Monday to Thursday. If there are different departure times, jealousy can arise and completing tasks that others have started can also have a negative effect.
Question 7

Yes, so I very much assume that the work-life balance will improve, at least in the initial phase. One of our customers actually introduced it at first with a trial period, where they said, we'll do it, I don't know, I think a year or so, where they said, then we'll just see how it is, whether you turn it back or not, but the interim result with them was at least good
Question 8
The first attempt at a solution says we could organise the construction sites differently so that we have something like every second Friday off. But then, with alternating staffing on Fridays. Or you could say that half the team works Monday to Thursday and the other half Tuesday to Friday
Question 9
It certainly sounds more modern and it will definitely be more contemporary. I very much expect that. You have this four-day week now. I wouldn't limit it to the four-day week, but actually to the topic of flexibility in general. But flexible also means that someone might actually say that they only want to work 35 hours so that they can do something else the rest of the time. You can also negotiate other flexibilities such as more holiday days
Question 10
We have employees who have been working for 40 years and don't really want to change their working time models. They say, I'll do a 40-hour week and then that's fine. And we will certainly have the gradual process of them perhaps wanting a different way of working every week and us gradually adapting to this. That might not be so stupid, you would have to plan everything down to the last detail when you flip that switch to make it work.
Question 11
I think you should start with a small team and then see what you need to change. I generally think that there needs to be an urgent change to more flexible working hours and that not only the 4-day model is interesting, but more flexible working hours. Because working on the construction site must become much more attractive. Some things are not possible, but you should pay attention to where you can make the job more attractive.

**Table 7 Interview D**

Question 1
Work hours are from 7 a.m. to 5:30 p.m., Monday to Thursday, totaling 4 days with 10 hours each. It was a positive side effect, primarily influenced by colleagues. The main advantage is having a fantastic long weekend, providing more personal time.
Question 2
Having a four-day week means a busy schedule, especially from Monday to Thursday. Despite the long hours, I can recharge on Fridays and feel fit for the next week. The switch hasn't significantly impacted the quality or quantity of my work tasks.
Question 3
Towards the end of the day, especially after 4 p.m., there's a drop in productivity. Despite that, voluntary assistance to colleagues, beyond the job description, hasn't been negatively affected by the transition to a four-day workweek, although it hasn't been particularly remarkable either.
Question 4
I find myself more motivated in the week, particularly on Tuesdays. The shorter timeframe, knowing it doesn't stretch over five days, feels like a more achievable goal. Regarding counterproductive behaviour, like being late or dealing with stress, it hasn't been influenced negatively, but neither has it seen a positive change.

Question 5
No, it doesn't have any effect on that. Overall, the working atmosphere and morale have improved with the four-day week. In terms of work stress, while 10 hours are long and tiring, I don't feel stressed. Regarding work-life balance, I've positively noticed having more time on weekends for friends and family, making a whole day noticeably more enjoyable.
Question 6
Positively, I have more time for friends and family on weekends, feeling the freedom to do more. If considering a new job, having a 4-day week would be a significant factor for me. While transitioning back to a 5-day week would be challenging, I'd prefer a 4-day week in the future. As for my employer, specific adjustments haven't been mentioned to make the 4-day week easier.
Question 7
Yes, it helps, especially with the 10-hour shifts. As for our boss's direct approach and occasional feedback are more of a general management style, not specifically related to the four-day week. Regarding tips for transitioning from a 5-day to a 4-day week, prioritizing effective communication with employees would be crucial.
Question 8
Effective communication is key; whether it's feasible, I've considered ways to stagger work, like having one block off on Mondays and another on Fridays. We consistently have Fridays off, and while it's widely accepted, occasional challenges may arise but are generally managed well.
Question 9
Very rarely, but not the norm. Regarding the idea of staggering workdays, potential challenges might arise, such as task handovers between Thursday and Friday. However, managing this could involve a different approach by separating tasks on construction sites.
Question 10
It might be strange if someone constantly takes over on Friday or Monday without being involved beforehand. I like the four days a week now.

**Table 8 Interview E**

Question 1
The current working hours of employees are from 7 am to 4.30 pm, a total of 40 hours per week. The current operating hours are standard, and the potential move to a 4-day week is seen as a potential benefit for employee convenience, particularly for those who commute from far and away. A disadvantage, however, is the impact on construction sites, where there may be management gaps with subcontractors on Fridays.
Question 2
Fridays when the team is off site can lead to client disappointment as problems can arise, and responsiveness becomes an issue when the team is off-site. This can lead to organizational challenges and potentially affect customer relationships.
Question 3
I am unsure that productivity can be maintained over 10 hours, and I suspect that this arrangement could affect concentration. The quality and quantity of work could be affected, which could have advantages and disadvantages.

Question 4
One option would be to split the team's working days, especially if this benefits the customers, who would then have a contact person every day. This concept has been successfully implemented in previous projects.
Question 5
Employees' preferences vary: some appreciate a longer weekend, while others, especially foreign employees, prefer to work on Fridays. Flexibility is a challenge in the construction industry due to the nature of teamwork and the interdependence of tasks.
Question 6
The difficulty of introducing flexible working hours due to the need for coordination on construction sites. Flexibility could disrupt the distribution of tasks and cause logistical problems for site managers.
Question 7
I do not anticipate any significant changes but recognize that communication and clarity are crucial. There is a possibility that sickness levels will decrease. I suggest that a longer weekend could discourage taking Fridays off.
Question 8
The impact on work-life balance can vary from person to person, and I believe that offering a 4-day week could be beneficial for recruitment, especially in a market where competitors are also introducing flexible models.
Question 9
I suggest clear communication, possibly in a team meeting or at a company event, to explain the change and its benefits. A trial period or pilot project is also a possible approach.

**Table 9 Interview F**

Question 1
We haven't officially introduced anything, but informally, over the past three years, and since the onset of the pandemic, we've implemented flexibility in departments. Office roles like procurement, calculation, and invoicing have the option to work from home, allowing for rotation. However, fieldwork, critical for safety, remains unchanged, and the 4-day week entails remote work.
Question 2
The site manager works remotely, handling measurements, etc. Technicians or subcontractors typically work 10 hours a day, essentially creating a 4-day week. They start on Thursday afternoons. Yes, they work... Exactly, it's not a new practice. The key is the 10-hour workdays, from 7 am to 5 pm. We officially condensed it to 8 hours, depending on construction hours.
Question 3
Yes, we're discussing this with the works council. The advantage is an extra day off, emphasizing work-life balance. Another point is cost savings for the company—things like cars, wear and tear, fuel, energy, etc. You save in terms of energy. So, that's an advantage, along with one extra recovery day for each employee and one less day of physical strain, especially for technicians or manual workers.
Question 4
One drawback is the CEO perspective—employees often seek full compensation as it's legally tricky. With a 40-hour week compressed into four days, legal implications arise, like providing accommodation due to

extended working hours. This needs careful consideration, checking labor rights for a 10-hour workday plus commute. Adjusting hours per the collective agreement might be necessary.
Question 5
The standard is 37.5 hours for us, while some firms opt for a 36-hour week. The 90-minute adjustment is possible, but it means gifting four hours. Regarding recovery, I think a 40-hour week lacks sense; to maintain adequate regeneration with a 4-day week, one should consider reducing hours to 36-37.
Question 6
No, I'm even of the opinion that it's positive for the company, for the quality of work, and also the performance. They function better because they are more motivated. Okay, so simply through motivation and engagement. It's seen as positive. As I said, we wanted to start a survey again. Do you want a 4-day week? Do you not want it? Etc. If we were to maintain these hours. But there were already voices.
Question 7
No, I don't want it. I leave home at 6 am, return just before 8, missing time with my kids. Having Friday off may not suit everyone; some find the current model perfect. It's not age-dependent; opinions vary. The feasibility of different start and end times depends on the half-hour range.
Question 8
We adopted the 12:30 model, including a 45-minute break to start Fridays earlier. In this scenario, it's a preliminary 4-day week. As for stress, adding half an hour doesn't impact it; more regeneration might reduce stress. This aligns with a positive work-life balance.
Question 9
To implement a change, you must involve the entire workforce and consider customer needs. If half prefers five days, we will assess and offer both options based on employee preference.
Question 10
Regarding customer interactions, discussions would be needed for individual cases. I'll keep it brief to respect your time. Any additional thoughts on flexible working hours? In the office, it's flexible, but on-site, with a strict 7 am to 4:30 pm schedule, finding flexibility is challenging.
Question 11
We're exploring flexibility for technicians, but it's challenging on-site, where teamwork is crucial. Scheduling disparities pose a mammoth task. There is no clear solution yet; employers must address the rising challenges, especially for single parents with early commitments like kindergarten drop-offs.
Question 11
Flexible hours and a 4-day week make the company appealing, particularly to younger generations. Positive responses were noted, such as employees working until 4 pm on Fridays. Especially for the younger generations it is attractive, definitely.

**Table 10 Interview G**

Question 1
Our general working hours are 38 hours per week spread over four days. The salary is based on a 40-hour week, and there has been a continuous salary increase for employees during the transition to the four-day week. Different core hours are in place during the week when people are present, but the 38 hours are essentially

spread over four days.
Question 2
We started on October 1, 2022, last year. We came across this topic through various reports in the German media. We were the first company in the construction industry to switch to a four-day week. We did it mainly to retain existing employees and offer an incentive for new hires.
Question 3
Absolutely. We experienced a 75% increase in job applications, and the quality of applications also improved significantly compared to before the switch.
Question 4
The main advantages are a natural reduction in overtime, a decrease in sick leave, and a significant decrease in absenteeism. The only drawback is that we had a training session every second Friday, and now the training sessions are moved online during the workweek.
Question 5
Not at all. Quite the opposite. Things went out on time with the same punctuality and quality. It was an adjustment at the beginning, but now things are back to the same level of punctuality and quality.
Question 6
Only positively. Continuous customers found it very positive, and employees as well. We have a satisfaction rate of 95% on this matter and don't plan to change it.
Question 7
For some, it was an adjustment, especially in terms of childcare, which sometimes posed challenges. But we started internally with a daycare center and cooperation with kindergartens to address the issue.
Question 8
No, I've noticed that motivation has increased significantly. Employees now often spend Thursday evenings together for a glass of wine or beer. It has been very well received. Also because they know they might be able to sleep in on Friday or have a day off and start the weekend early
Question 9
There is generally an excellent working atmosphere, as we invest a lot in it. As I mentioned, the cohesion is very good, and people do a lot together privately.
Question 10
Many take advantage of it and travel to the Adriatic on Thursday afternoons, staying until Saturday or Sunday.

**Table 11 Interview H**

Question 1
I am a project manager and am always out and about on construction sites. I have been working for the company for five years and my working hours are from 7 am to approx. 8 pm. 12 hours, including lunch in 4 days. I also have traveling time on Mondays and Thursdays
Question 2

One advantage for me is that I'm at home one day more. That's a huge advantage, as we work abroad and are therefore often away from our family. That's the most significant advantage.

#### Question 3

We don't have less time during the week than before; we just have shorter working hours, so the job performance has to take place in less time. This means that we work the same hours during the week but have one more day on the weekend.

#### Question 4

The most significant disadvantage is that the construction site staff work Monday to Saturday. As a project manager, I'm only on-site until Thursday, in theory, but in practice, we also have to be available on Fridays and Saturdays. That's exactly the day when you're free, so you have to be on the phone. Even if the customer wants an appointment on Friday, you have to keep it, and there are also problems with other trades. The solution is to either wait until Monday or solve it from home.

#### Question 5

That means more planning work; we're trying it out so that one part of the team works Monday to Thursday and the other part works Tuesday to Friday. The project manager has to be available daily, but now it's during the leisure time.

#### Question 6

I think that quality control suffers somewhat because I'm on site less. You have much less time in the team, and it's much more stressful. Tasks are quickly distributed. Communication has become faster and less frequent and stress has increased. But there are fewer conflicts and disputes because the team has so much work to do that it doesn't even happen. They try to find a solution quickly so they don't lose any time. So, there are fewer friction points and fewer conflicts. You try to work through your process and only discuss problems very briefly. The quick solution is not always the best. In some situations, it is better to find a quick solution.

#### Question 7

People voluntarily work longer hours, as the employees are not at home every four days, and the colleagues want to work through everything so that they don't have to work on Fridays and weekends. As a result, many often work longer than planned. So that they can enjoy the weekend and get the work done.

#### Question 8

In general, the employees are happier. Towards the end of the project, the 4-day week often changes to a 5-day week. This is normal for older employees, but the younger generation, who have only found the new model, are sometimes unhappy with it. In general, however, it is much better than working only five days a week. Many young employees only apply because of the four-day week, and they are very motivated. Many more people have applied because of the four-day week. You finish at 5 pm on Thursday at our headquarter. It is four days there.

#### Question 9

The 4-day week means I'm at home one day longer and have an extra day off. This is much more for me, as I now have three days. I think it's very good. The work-life balance has already improved.

#### Question 10

You should always clarify beforehand whether the majority of the company agrees with the change. Under no circumstances should you cut employees' salaries if they work fewer hours. Otherwise people will look for new jobs. If you reduce the labor force but also the wages by the same number of hours, then it won't work. People will count on their salaries.

#### Question 11

On the whole, it's a great system, but it increases stress. It makes you work more effectively. You have to learn to deal with it, and the working time as working time, then the 4-day working week is a great topic and also works.

**Table 12 Interview I**

Question 1
I am the site manager of a large construction company that only carries out large construction projects in the B2B sector, i.e. only hotels, office buildings and large residential complexes. We are still working a 5-day week, but we have been thinking about more flexible working hours. However, we already have a short Friday as colleagues work longer during the week so they can leave around 12 or 1 on Fridays and start their weekend earlier. I'm 31 years old and have been working in this company since my apprenticeship when I was 16. So a long time.
Question 2
The four-day working week has some advantages, including the longer weekend and better work-life balance. I think employees would be more motivated and I can imagine there would be less absenteeism. However, I think that in my case as a site manager, it can also lead to challenges, such as better organisation of staff. Usually, someone must always be on site to allocate tasks and monitor safety. It can also cause more problems with clients as they work five days and if someone schedules a meeting on a Friday, I have to be there.
Question 3
I guess the problems arise with more flexible working hours, which should be the case on-site as everyone in the offices already has the flexibility to come in later and stay longer or leave earlier and work longer on another day. On the construction site, however, a lot of work is done as a team, and as site manager, I have to organize the workers on site and usually assign them their tasks first thing in the morning. If someone arrives late, this could lead to problems. Even if a task has to be completed by a team and half of the team leaves early, the rest will probably not be able to work.
Question 4
I don't think task fulfillment would be negatively affected in the four-day working week; it could even be positively impacted as employees now have more days to complete tasks and may be more motivated to complete everything before the long weekend.
Question 5
In the team, the 4-day week would not harm team spirit or team culture, but increased stress could lead to poorer communication. But perhaps it could also lead to workers completing fewer tasks and preferring to finish their tasks instead of talking or doing something similar. However, the four-day week could cause problems with customers and other trades. We would have to organize half the team from Monday to Thursday and the other half from Thursday to Friday. Regarding adaptability, I think this should remain the same as the working style, which doesn't change, just the days and hours.
Question 6
As for counterproductive behavior, I think it will decrease; employees will be more motivated, do fewer tasks, and work more efficiently to get everything done. There will also be less absenteeism and tardiness due to the increased motivation from the more extended weekend. There will also be fewer conflicts, perhaps with increased stress before a deadline, but that has already happened with the five days.
Question 7
The employees will be happier overall. The construction industry could have a better reputation, with tough

working conditions, like hard physical labor, bad weather, etc. This would definitely have a positive impact because then workers would have more free time to relax, unwind, and spend time with their family. They work quite early and therefore have to leave the house early. As far as satisfaction is concerned, a better work-life balance definitely has a positive effect.
Question 8
The stress could increase, but I don't know if that will harm work. As they have one day less in the week, they will have to plan their time better and finish everything in the four days. However, working hours would not decrease, so this should be possible.
Question 9
Yes, work-life balance will increase, which will also positively impact many aspects, such as job performance in terms of motivation and job satisfaction. I think the correlation is quite strong and that many employees should focus more on employee satisfaction. My employees usually work better on-site when the team spirit is positive and when they are happy.
Question 10
First, I would ask every employee for their opinion on the change in working hours. Either in personal conversations or with a survey. Some would prefer it, but others have problems with their private lives. Because their working hours are longer, they may not be able to keep appointments in the afternoon. But now they can do more on Fridays. It's important to understand everyone's perspective. Then I would start with a trial group and see how it works. Then if it works well, I would do it with everyone for a while to see if everyone can cope or if there are special situations for some employees, and if there is a part that doesn't want to do it, I would let them work the five days. This could lead to more planning for the onsite manager as he has to give them tasks in advance, as I would probably only work 4 days as well.
Question 11
This can definitely attract more workers. The sector could be more attractive now, especially because many companies have introduced the possibility of home office during Covid, which does not work for construction workers. It can also be beneficial for the decision-making process of potential employees whether they go into the company within 4 or 5 days.

**Table 13 Interview J**

Question 1
I start my working day at 7 am and work 10 hours until 5.30 pm from Monday to Thursday, and we always have Fridays off. This includes a 45-minute break. I've been working at the company for two years and we introduced the four-day week about one year ago. My position is a journeyman carpenter
Question 2
I decided to join the company because my friend was already working there. He told me about the work culture and the benefits of the four-day week, and I was interested. I realized that I would have a longer weekend to spend time with my friends and family, which was why I applied for the job.
Question 3
The first advantage is that I have a longer weekend and can do more private things so I don't have to take a holiday. Generally, it's just nice to get things done on Fridays, such as shopping for groceries, going to the gym or going on a weekend trip. I also feel more energized when I start the week on Mondays. I'm more motivated than before because I've had much free time and know the week isn't long. During the week, however, the days are longer, and it's challenging to get several things done after work. Especially after a busy day, I'm exhausted, so I don't feel like exercising, meeting up with friends or sometimes even going grocery shopping. This has pros

and cons, but you can organize your time as it suits you. I enjoy the longer weekend and the full day when I can finish all my work. I used to have to go to work on Fridays and then go out in the evening, so I didn't have much time to get things done on Fridays either. So there was really only Saturday. Because the shops are closed on Sunday.

#### Question 4

It depends on the tasks. In general, performance is better when the task doesn't put a lot of strain on your body because you now have a long day to get everything done. You know you want to finish the whole project by the end of the week, so you'd rather work hard and efficiently than risk not finishing. However, if the tasks are very demanding, it may be even worse, as completing them 10 hours a day is difficult and exhausting. Helping colleagues and peers has not changed, in fact, I think teamwork has increased at times as everyone is more motivated to get the tasks done.

#### Question 5

Adapting to the new work has not had a negative impact. You now even have more time to understand tasks and complete them by the end of the day because you have more time. But in general, there is little difference.

#### Question 6

Now, with the four-day week, I am more committed and motivated to turn up on time and finish my work without conflict. I appreciate the opportunity that we have all of Friday off, so there is no reason for me not to show up since I already have a longer weekend than most people. There is also less time for conflict because the team is only in contact with each other during the day, and we try to work hard on those days to avoid falling behind.

#### Question 7

I've been happier since the new work schedule. It helps me to be motivated, and the long weekend makes me want to go to work on Monday more than before. The only time I'm unhappy is after a long day at work with strenuous tasks when my body aches, and I know it's not good for my health in the long run. My boss communicates well, gives constructive feedback, and shows appreciation. And I enjoy the team culture and my colleagues. I even do things with them in my free time on Fridays.

#### Question 8

Overall, I feel more stressed because we only have four days to complete the tasks for the week, but as the working hours haven't changed, it's always possible to complete the tasks as long as I don't take long breaks. I even think that as a team, we sometimes work more efficiently and motivated due to the new schedule and the stress and that the stress doesn't negatively impact the work.

#### Question 9

The work-life balance has improved. Although I no longer have so much time after work, I used to be tired and unmotivated to go out and do things. But now I have a whole day off and can spend more time with my friends and family. This even allows me to visit friends in another city at the weekend, as I have a whole extra day.

#### Question 10

Everyone in the team must want to work according to the new schedule. Before the introduction, the reasons for the change should be communicated, and everyone should be asked for their opinion. Also, the team's work can deteriorate if not everyone is motivated by the change. Perhaps those not interested in the change should be offered the opportunity to work with the old schedule. I also think that a trial period with part of the team or a project could be a good idea.

#### Question 11

Yes, the four-day week attracts skilled labor. I've even seen it with my friends who started at the company for this reason. And I wouldn't want to go back to the 5-day week either, as I know the other option. However, I

think the younger generation is particularly interested in the working time arrangement.

**Table 14 Interview K**

Question 1
I am the founder and managing director of a large electrical company. We install large eclectic systems for large construction sites such as hospitals, commercial premises, shopping centers, railway stations, airports, and residential complexes. I have been in the industry for about 30 years and know many people, as the largest companies always meet once a year to discuss the problems and goals of the industry.
Question 2
I'm a big supporter of introducing the four-day week, and I'm sure it will become commonplace soon, but I think more flexible working hours are even more critical for the industry. So that employees can say that they want to take their children to school in the morning or that they need to drive their children to football training earlier in the afternoon. I know that's not easy to implement, but it will greatly impact employee motivation. In my company, there are always special needs from employees and a lot of absences or delays that would be eliminated with more flexible working hours.
Question 3
We need to ensure that the number of hours in the four- or five-day week is either reduced or maintained. Either way, the quantity of tasks and the quality could be affected. Because when you work 10 hours at a time, your performance changes, especially in the last few hours. But it could also be that the employees are so much more motivated that they work better, but I wonder if that is the case; we'll have to see in practice.
Question 4
I've heard from customers who are already working a four-day week that the company culture has improved and employees spend more time together in their free time. Teamwork and supporting new employees will also have a positive impact. Better motivation will also increase commitment, and the team will want to achieve the goal of completing the tasks.
Question 5
The new system can challenge the older generation to adapt. But, e.g., apprentices or younger workers will not have problems but will rather show positive effects, such as less absenteeism and better punctuality. I think it will be difficult for those who have been working five days for the last 30 years, and I can understand that. But for younger workers and workers with young families, the four-day working week will have many advantages.
Question 6
As I said before, I think the four-day week will improve absenteeism and punctuality. There could also be fewer scheduling issues as employees can now attend appointments in their free time, e.g. on Mondays or Fridays, depending on their day off.
Question 7
Job satisfaction will increase, especially for employees looking forward to the change. For those who want to keep the old schedule, I'm not sure, but they, too, will see some benefits in the long run. Overall, the satisfaction will also lead to better performance. The best thing would be flexibility because they can do their work when they feel most motivated and go home earlier if they don't have energy or other things on their mind. Similar to what we do in the office.
Question 8
The stress will be the same. As the working hours won't change, employees will have the same time to do their

work. The stress may increase for managers as they have to plan more, but they also have more time to recover, so it should be fine.

#### Question 9

The work-life balance will have a positive impact. The extra day off should make employees happier and improve overall industry standards. Now, they can pursue their hobbies or spend more time with their family on their day off.

#### Question 10

It's essential to plan the implementation carefully. Things like labor law need to be carefully analyzed, and the scheduling of employees on site each day of the week must also be considered. This is also why we have not yet introduced flexible working hours and the four-day week; we have not yet finalised all aspects, from pay to planning. Thoughts such as sick days, holidays, etc., also need to be considered. But I definitely believe in the positive aspects and the company's carbon footprint because I'm traveling one day less and using fewer cars.

#### Question 11

I would start with a few employees and analyze and solve the challenges before rolling it out to a larger team. I would start with three months. Then another three months with more work and then over a longer period with the whole team. During this time, I would try to solve any problem. Also, after these periods, I would interview the workers and talk to each department, such as HR and the on-site managers. Then I would see if everyone is a fan or if some still want to work with the old version and try to implement both.

In the case of recruitment, this will have a big impact. I would also show it in the job adverts and do a social media campaign to get attention in other companies. Having innovative leadership shows a positive impact. We need to adapt our working practices. We live in a world where the construction industry has a shortage of skilled labor, and it's challenging to find good workers, so we need to be the first to get skilled labor.

## Appendix E: Likert scale questions and results

Please rate your satisfaction with your current working schedule on a scale from 1 (Not at all satisfied) to 5 (Extremely satisfied).

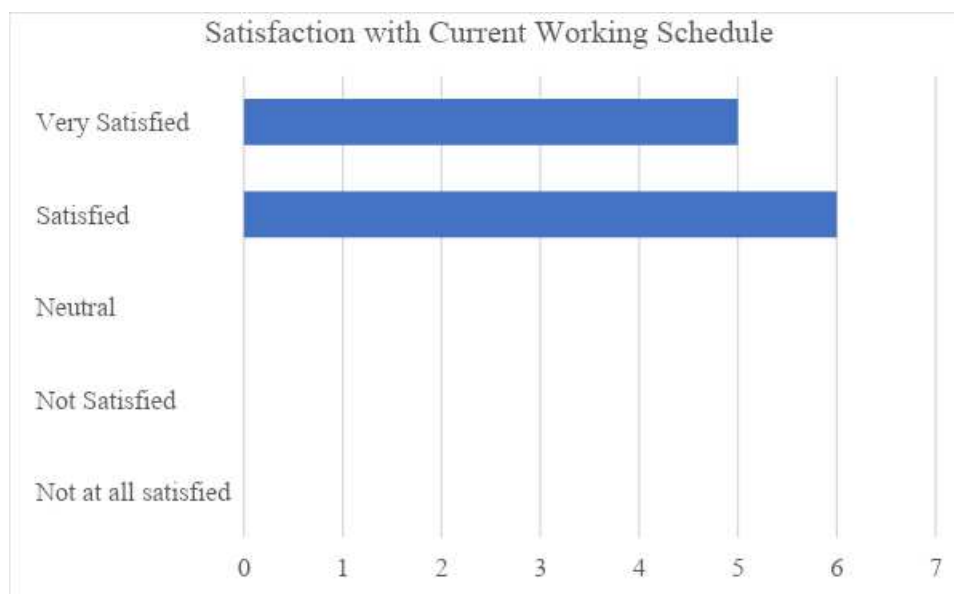
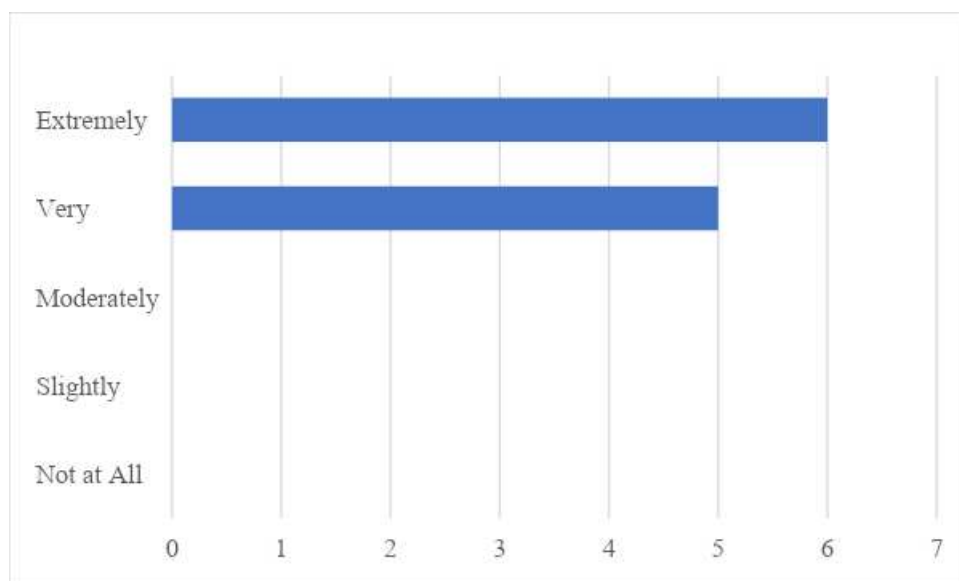


Figure 7 Likert Scale Question A

To what extent does the 4DWW contribute to your dedication and motivation at work?

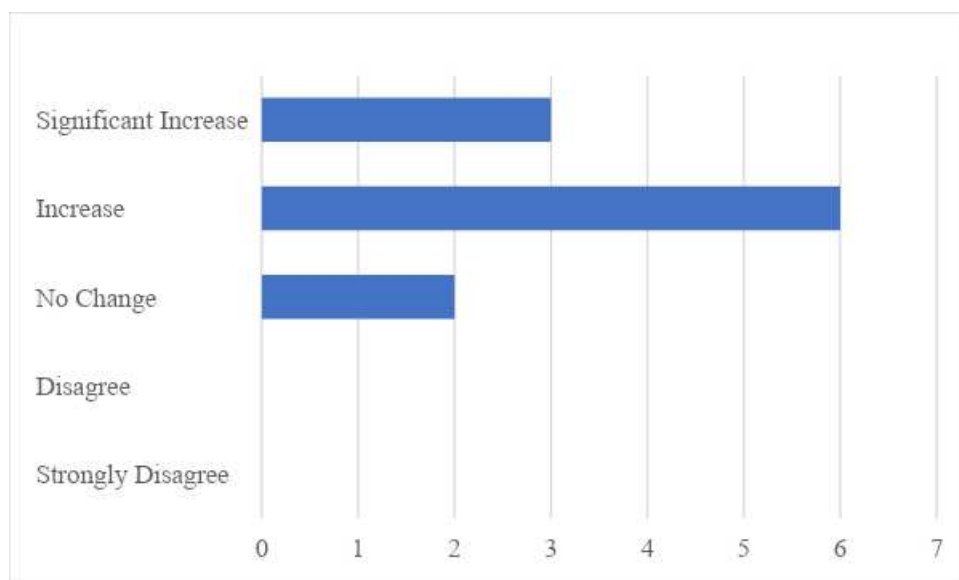
- Please rate your response on a scale from 1 (Not at All) to 5 (Extremely).



*Figure 8 Likert Scale Question B*

Since the implementation of the 4DWW, how would you rate changes in punctuality and absenteeism?

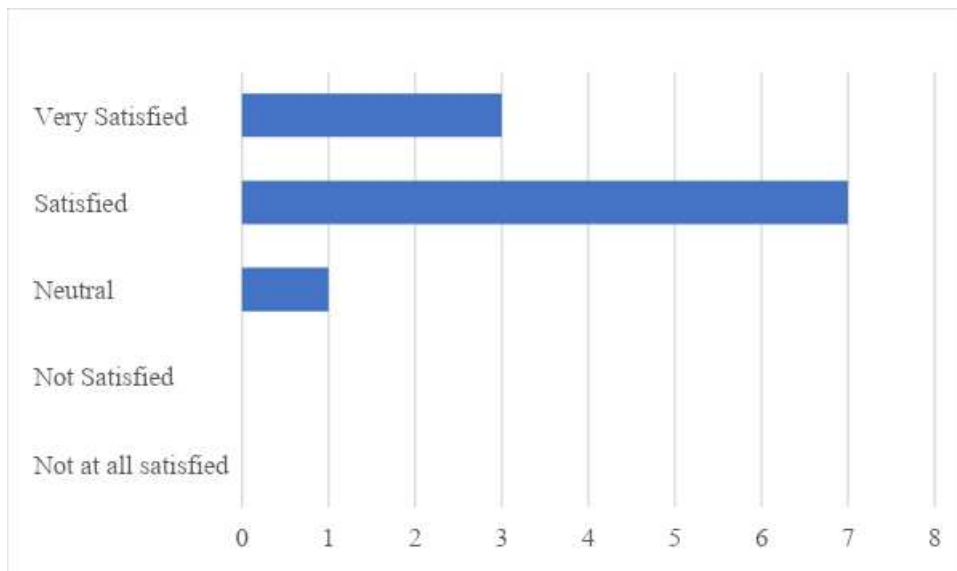
- Rate the changes on a scale from 1 (Significant Decrease) to 5 (Significant Increase).



*Figure 9 Likert Scale Question C*

How effective is the 4DWW in helping you achieve a better work-life balance and reducing work-related stress?

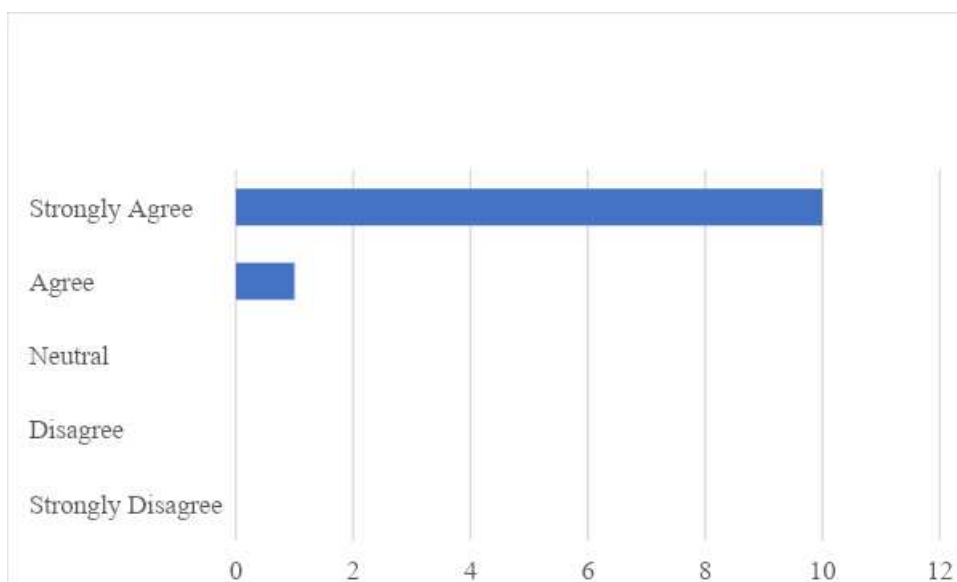
- Rate the effectiveness on a scale from 1 (Not Effective) to 5 (Very Effective).



*Figure 10 Likert Scale Question D*

To what extent do you agree with the statement: Construction companies implement the four-day workweek as a strategic response to address the shortage of skilled labor in the industry?

- Please rate your agreement on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).



*Figure 11 Likert Scale Question E*

To what extent do you agree with the statement: "Construction companies implement the four-day workweek based on the expectation that their competitors are adopting or will adopt a similar schedule?"

- Please rate your agreement on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

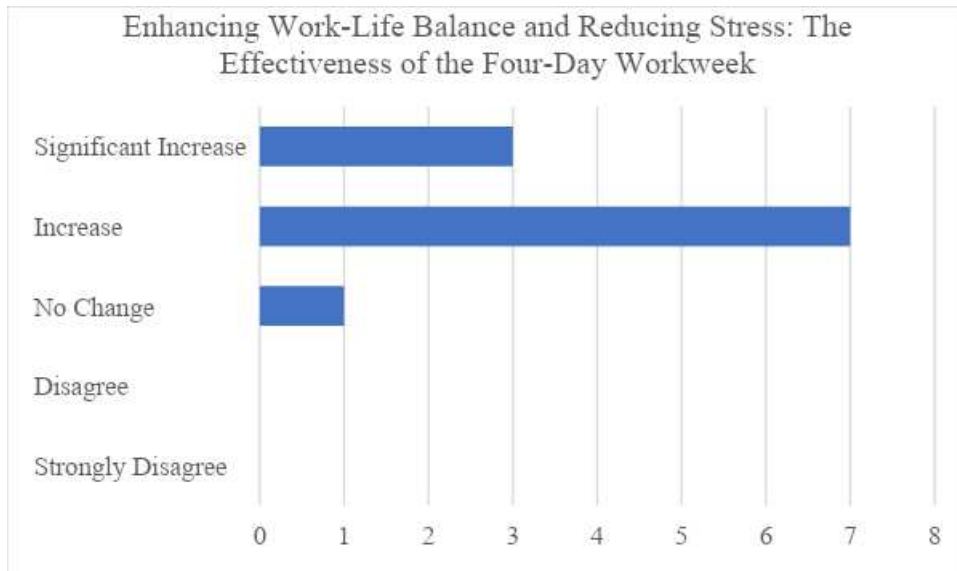


Figure 12 Likert Scale Question F