

A Work Project, presented as part of the requirements for the Award of a Master's degree in
in Management from the Nova School of Business and Economics.

The Impact of Remote Work on Employee Burnout

SOFIIA KRYVOSHAPKA

Work project carried out under the supervision of:

Filipa Rocha Rodrigues

10/01/2025

Abstract

This study analyzes 102 participants to examine the relationship between remote work arrangements and employee burnout, focusing on the mediating role of social isolation and the moderating effect of autonomy. It evaluates burnout components such as emotional exhaustion, depersonalization, and reduced personal accomplishment. Findings reveal that social isolation significantly contributes to emotional exhaustion and depersonalization, particularly in fully remote settings. Autonomy showed limited moderating effects, while hybrid work arrangements did not directly impact burnout but offered flexibility that could reduce stress when paired with supportive structures. These insights highlight the importance of addressing isolation and balancing flexibility for well-being.

Keywords: remote work; workplace flexibility; employee burnout; social isolation; autonomy

1. Introduction

According to the Global Trends (2024) Report conducted by Mercer, having 12,000 people interviewed, 82% of employees are feeling *at risk* of burnout. Burnout is recognized by the World Health Organization (WHO) as an “occupational phenomenon”. It is defined as “a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed”. Similarly, another recent study conducted by Boston Consulting Group (BCG) revealed that nearly half of their employees experience symptoms of burnout, with 11,000 employees participating from 8 different countries.

The COVID-19 pandemic significantly accelerated the adoption of hybrid and fully remote work (Criscuolo, Gal, Leidecker, Losma, and Nicoletti 2021; Aksoy, Barrero, Bloom, Davis, Dolls, and Zarate 2023). Remote work also referred to as “work from home” or “telecommuting” is a type of work arrangement that allows the employee to work outside the physical office of the company (Gartner Glossary). The spread of the virus and the “stay-at-home” policy increased the use of online communication technologies worldwide in various areas (Raja et al. 2023). Currently, fully or mostly remote work arrangements are increasingly common across various industries. For instance, 68% of employees in technology, 50% in agencies and consultancies, 49% in finance and insurance, and 41% in engineering and science work under such arrangements (Statista 2023).

Gallup’s 2022 data reveals that among U.S. full-time remote-capable employees, more than a vast majority (80%) of employees have either hybrid or exclusively remote work arrangements (53% and 27% respectively).

In the post-pandemic period, major companies initially mandated a return to the office, but they faced resistance from employees. Consequently, the work-from-anywhere policies were introduced by other companies, which resulted in lowering employee turnover. Some companies have also tested a 4-day work week, which has demonstrated an increase in employee productivity (Owl Labs Study 2023). The Owl Labs Study (2023) suggests that a

partial work-from-home policy is what employees now desire, even though the majority switched back to full-time office practices. Notably, 29% of partially and fully remote employees would expect a pay increase, if there would only be a possibility to work offline. This study aims to investigate the dynamics of remote work and employee burnout, addressing the following objectives:

- **Assessing Work Arrangements and Burnout:** To evaluate how different work arrangements contribute to the components of burnout.
- **Exploring Social Isolation as a Mediator:** To examine the mediating role of social isolation in the relationship between work arrangements and burnout.
- **Understanding the Role of Autonomy:** To investigate how varying levels of autonomy moderate the relationship between work arrangements and burnout, focusing on stress reduction and burnout mitigation.

2. Literature review

2.1 The Rise and Implications of Remote Work

As previously mentioned, remote work has been adopted globally during and after the COVID-19 pandemic.

Remote work is increasingly prevalent, with a majority of employees in industries like technology, finance, and engineering adopting hybrid or fully remote arrangements, as highlighted by Statista (2023) and Gallup (2022).

According to Gallup (2022), 6/10 respondents would prefer a hybrid work-term location, about 1/3 prefer exclusively remote, and only less than 10% would prefer an on-site work location. Similarly, the McKinsey Global Institute Report (Mischke et al. 2023) indicates that, as of 2022, office attendance was 30% lower than pre-pandemic levels, with 63% of respondents working either fully remotely or in a hybrid setup. On average, employees visit the office 3.5 days per week, although this varies by country.

The rise of remote work has fundamentally changed workplace norms, with employees advocating for greater autonomy in choosing work arrangements and for less frequent on-site presence. These changes have driven a long-term reimagining of the modern workplace.

Remote work offers several advantages. According to the surveys run, the top reasons for working at home were saving money and commuting time, increased time spent with family, and a comfortable work environment at home (Mischke et al. 2023). The flexibility of working from home allows individuals to tailor their schedules, often leading to increased satisfaction and motivation (McPhail et al. 2023). Avoiding commutes not only saves time and money but also reduces stress and enhances mental well-being. Studies further emphasize the role of remote work in supporting work-life balance and enhancing job satisfaction (Savić 2020). The study (Angelici and Profeta 2020) of a randomized experiment to examine the impact of “smart-working” on three dimensions: employee productivity, well-being and work-life balance showed positive results. These benefits underline why remote work remains a preferred option for many employees in the post-pandemic era.

Despite these benefits, remote work also presents challenges. Such problems as lost time due to technical difficulties during the meetings lost time due to technical difficulties, and the usage of too many communication platforms was reported by more than half of the respondents in a McKinsey Global Institute survey. They also sometimes feel like missing the opportunities for informal or impromptu feedback. (Mischke et al. 2023). Additionally, remote work requires a high level of self-discipline, and reliance on the internet and IT tools, which could lead to extended working hours and blurred boundaries between personal life and work. Employees may also face a feeling of isolation (Savić 2020). Another downside of remote work is the “autonomy paradox”. While autonomy is often seen as a benefit, employees could face increased workloads and blurred boundaries between work and personal

life, which could be influenced by both personal ambition and employer-driven pressure (Eurofound 2020).

2.2 Remote Work and Burnout: A Review

The relationship between remote work and burnout is complex, influenced by demands on employees, and resources to support them. During the COVID-19 pandemic, remote work posed significant challenges, with employees experiencing increased workload pressures, excessive tasks, and extended working hours. The absence of commuting time was often used to justify these extended hours, which has led to emotional exhaustion, and increased mental and physical efforts, contributing to burnout. Occupational burnout and job stress resulting from long working hours can have negative consequences on employees' well-being (Maslach 2003; Jamal, Anwar, Khan, and Ahmad 2023; Shimura et al. 2021).

Burnout is a multidimensional construct consisting of three core components (Maslach Burnout Inventory, 1996): exhaustion, depersonalization, and personal achievement. Exhaustion captures feelings of physical and emotional fatigue caused by work demands and is considered the hallmark of burnout. Depersonalization refers to a sense of detachment or cynicism toward work and colleagues, characterized by reduced empathy and interpersonal connection. Personal achievement reflects an individual's perceived effectiveness and accomplishment. These components, as conceptualized by the Maslach Burnout Inventory (MBI), provide a framework for analyzing the complex effects of work arrangements on employee well-being.

A significant issue faced by remote workers is the lack of clear boundaries between home and work, which frequently results in longer working hours, heavier workloads, and higher job demands (Costin, Roman, and Balica 2023). Another significant burnout-related issue could be social isolation (Shimura et al. 2021). Working from home can contribute to the feeling of disconnection from colleagues and the organization. Remote workers experienced a reduction

in professional accomplishment during the pandemic and higher levels of emotional exhaustion. However, such challenges can be mitigated through organizational support and flexible work arrangements (Costin, Roman, and Balica 2023).

Hybrid work models, which balance flexibility with opportunities for social interaction, have emerged as an effective approach to reducing feelings of isolation and improving work-life balance. These models help reduce the risk of blurring work-life boundaries and support mental health by providing a more balanced work arrangement (Vacchiano, Fernandez, and Schmutz 2024). Moreover, remote work allows greater flexibility in managing work schedules and personal life, which can be associated with reduced burnout and enhanced job satisfaction. Autonomy over work environments and schedules can increase motivation, enhance job satisfaction, and lower stress levels (Vacchiano, Fernandez, and Schmutz 2024; Ingusci, et al. 2023).

While many studies focus on the pandemic era, the COVID-19 period demonstrated employees' capacity to adapt to new job demands, often resulting in lower burnout levels and improved productivity (Jamal, Anwar, Khan, and Ahmad 2023). Angelici and Profeta (2020) examined remote work, referred to as "smart working" and revealed predominantly positive outcomes of the research, particularly for women. Their research highlighted such factors as increased productivity, higher satisfaction with salary, more time for household tasks and family, and improved well-being. These factors contribute to better work-life balance and time management, which have positive outcomes for employees' mental health, and therefore burnout levels.

Given these advantages, it is hypothesized that:

- **H1a:** Fully remote work arrangements are associated with lower levels of exhaustion compared to face-to-face work arrangements.

- **H1b:** Hybrid work arrangements are associated with lower levels of exhaustion compared to face-to-face work arrangements.
- **H1c:** Fully remote and hybrid work arrangements are associated with lower levels of depersonalization compared to face-to-face work arrangements.
- **H1d:** Fully remote and hybrid work arrangements are associated with higher personal achievement scores compared to face-to-face work arrangements.

2.3 Social Isolation as a Mediator Between Remote Work and Burnout

The relationship between social isolation, remote work, and burnout is multifaceted since remote work significantly alters the nature of social interactions. The reduction in face-to-face communication with colleagues and supervisors often leads to feelings of loneliness, one of the most frequently reported issues in remote work settings. While digital communication offers potential alternatives, its effectiveness largely depends on individual circumstances, such as the frequency and quality of interactions within virtual networks (Vacchiano, Fernandez, and Schmutz 2024; Maslach et al., 1976).

Social isolation presents a significant challenge of remote work. It affects employee well-being, engagement, and productivity. Remote work increases the feeling of virtual isolation due to very limited interpersonal interactions and communication barriers (Jaiswal and Prabhakaran 2023). Additionally, these issues are affected by the feeling of being excluded or neglected, due to limited access to mentorship and informal learning (Jaiswal and Prabhakaran 2023), which therefore leads to a reduced sense of belongingness. Although remote work offers flexibility and autonomy, it often compromises social interaction and team cohesion. The absence of a workplace can make employees feel disconnected from their teams and destroy organizational culture (Olawale, Ajayi, Udeh, and Odejide 2024).

Technology plays a critical role in facilitating communication and collaboration in remote work settings. However, excessive reliance on digital tools can lead to cognitive overload,

further contributing to stress and burnout (Mirbabaie, Marx, Braun, and Stieglitz 2020). This paradox highlights the delicate balance between technological reliance and the human need for *meaningful* social interaction while working remotely. Remote workers often navigate competing demands: the desire for flexibility and autonomy versus the psychological need for social connection and team cohesion.

To mitigate these challenges, organizations must address the social and psychological impacts of remote work. Burnout arises when the social challenges of remote work, such as loneliness and reduced support, combine with stressors like work interruptions and conflicts. While remote work may reduce workplace interruptions, it often increases disruptions at home, particularly in inadequate work environments. For some, distancing from toxic workplace relationships can be a relief, but others may feel stressed due to increased digital supervision (Vacchiano, Fernandez, and Schmutz 2024).

Ultimately, achieving a balance in social and professional interactions is critical. Both excessive and insufficient communication can contribute to emotional exhaustion, leading to burnout (Vacchiano, Fernandez, and Schmutz 2024; Maslach 2003). Organizations must foster a supportive remote work culture by promoting intentional, meaningful social interactions while minimizing unnecessary digital stressors.

Given the impact of social isolation on burnout, this study hypothesizes that:

- **H2a:** Social isolation mediates the relationship between work arrangement and exhaustion, with fully remote work leading to higher social isolation and, consequently, greater exhaustion.
- **H2b:** Social isolation mediates the relationship between work arrangement and depersonalization, with fully remote work leading to higher social isolation and, consequently, greater depersonalization.

- **H2c:** Social isolation mediates the relationship between work arrangement and personal achievement, with fully remote work leading to higher social isolation and, consequently, lower personal achievement.

2.4 Flexibility and Autonomy in Remote Work: A Catalyst for Well-Being or Burnout?

Flexibility in remote work significantly influences employees' work-life balance and psychological well-being. It can be categorized into two dimensions: temporal flexibility and job autonomy, both of which have been shown to positively impact employee well-being (Boccoli, Sestino, Gastaldi, and Corso 2022).

Temporal flexibility refers to the ability to adjust work schedules, enabling employees to better balance their professional and personal responsibilities. When employees have control over their schedules and work locations, they are more motivated. The findings indicate that temporal flexibility allows employees to allocate their time and resources effectively, reducing conflicts between professional and personal responsibilities. This, in turn, leads to reduced stress, higher productivity, and greater satisfaction with social life, leisure time, and overall quality of life (Boccoli, Sestino, Gastaldi, and Corso 2022; Yang 2024; Angelici and Profeta 2020).

A distinction can be made between individual-oriented working time flexibility and organization-oriented working time flexibility. Individual-oriented working time flexibility gives employees control over their schedules and positively contributes to work-life balance. This type of flexibility allows employees to better manage personal and professional boundaries, enhancing overall satisfaction. While organization-oriented working time flexibility, where employees must adapt to the organization's demands, negatively affects work-life balance. These demands, such as sudden schedule changes or overtime, disrupt personal plans and reduce employees' ability to meet role requirements effectively (Wöhrmann, Dilchert, and Michel 2020).

Job autonomy is defined as the degree of freedom in work-related decision processes, which also plays a significant role in employee work-life balance and well-being. Autonomy allows employees to manage their workloads independently and fosters a sense of responsibility, which positively impacts job satisfaction and engagement (Boccoli, Sestino, Gastaldi, and Corso 2022; Eurofound 2020). However, as Maslach and colleagues emphasize, organizations must create environments where flexibility is paired with clear boundaries and adequate support to prevent burnout (Maslach 2003; Maslach, Jackson, and Leiter 1996; Maslach, Schaufeli, and Leiter 2001).

Both temporal flexibility and job autonomy contribute indirectly to psychological well-being through improved work-life balance. Employees with higher levels of work-life balance report greater engagement and satisfaction in their roles (Boccoli, Sestino, Gastaldi, and Corso 2022).

One notable issue is the autonomy paradox, where the freedom to organize work schedules can sometimes lead to overwork and stress, particularly in high-pressure environments with heavy workloads or competition. In such cases, occasional work arrangements may offer the most balanced benefits (Eurofound 2020). Hybrid work models have also emerged as an effective solution, providing employees with the flexibility to balance personal and professional responsibilities while retaining opportunities for in-person communication and collaboration. This approach addresses employees' dual need for autonomy and social interaction (Krajčák, Schmidt, and Baráth 2023).

By fostering supportive organizational cultures that mitigate the risks of isolation and overwork, hybrid work arrangements can help sustain the positive aspects of flexibility while reducing the likelihood of burnout.

Thus, while flexibility in remote work has clear benefits for work-life balance and psychological well-being, organizations must be cautious to provide clear boundaries,

sufficient resources, and adequate support to ensure that these benefits are not overshadowed by the risks of burnout, as highlighted by Maslach's research (Maslach 2003; Maslach, Jackson, and Leiter 1996; Maslach, Schaufeli, and Leiter 2001).

To investigate the role of autonomy, this study hypothesizes that:

- **H3a:** Autonomy moderates the relationship between work arrangement and exhaustion, such that higher autonomy reduces exhaustion levels in fully remote and hybrid work arrangements.
- **H3b:** Autonomy moderates the relationship between work arrangement and depersonalization, such that higher autonomy reduces depersonalization in fully remote and hybrid work arrangements.
- **H3c:** Autonomy moderates the relationship between work arrangement and personal achievement, such that higher autonomy increases personal achievement in fully remote and hybrid work arrangements.

3. Methodology

3.1 Sample Characteristics

The sample consists of 102 participants (Appendix A), of which 47% are male and 52% are female, with 3% preferring not to disclose their gender. The age distribution shows that the majority are aged 18-25 (62%), followed by 26-35 (28%), 36-45 (6%), and 45+ (3%). Regarding years of experience, 3-5 years is the most common range (47%), followed by 0-2 years (30%), 6-10 years (19%), and 11-15 years (3%). Employment settings include 42% fully remote, 41% hybrid, and 19% fully face-to-face. In terms of industries, the most represented sectors are Technology (21%), Finance (18%), Education (10%), and Retail (7%), with smaller distributions across other fields such as Government, Marketing, and Healthcare.

3.2. Data Collection and Processing

Work arrangements were categorized into three types: fully remote, hybrid, and fully face-to-face. Burnout in this study is measured using the framework provided by the Maslach Burnout Inventory (MBI) (Maslach and Jackson 1981). The Cronbach's alpha for these combined items was 0.82, indicating good internal consistency and reliability of the scale.

The MBI evaluates burnout through three components: exhaustion, depersonalization, and personal achievement. Exhaustion considered the core element of burnout, captures feelings of chronic fatigue and emotional depletion due to work. Depersonalization reflects a detachment in interpersonal relationships, characterized by cynicism and reduced empathy towards colleagues. Personal achievement measures an individual's self-evaluation, with lower scores indicating feelings of ineffectiveness and reduced accomplishment.

In this study, the total scores for exhaustion and depersonalization are summed, with higher values indicating greater burnout in these dimensions. Conversely, the total score for personal achievement is interpreted inversely, with higher values reflecting lower levels of burnout. These calculations were based on responses to survey questions adapted from the MBI framework, ensuring a validated and reliable approach to evaluating burnout levels among participants. Scores can be categorized into low, moderate, or high levels of burnout based on established thresholds for each dimension (Appendix B).

Flexibility in work arrangements was adapted from the frameworks outlined in Jabra's *Hybrid Ways of Working 2022 Global Report* (Jabra 2022) and Gallup's *The Future of the Office Has Arrived: It's Hybrid* (Gallup 2023). This study categorizes flexibility into three levels: full autonomy, partial autonomy, and no autonomy. Full autonomy represents the highest level of flexibility, where employees have complete control over their workdays, as indicated by selecting "Yes, I have full autonomy to decide the days" in the survey question. Partial autonomy refers to limited flexibility, where employees can choose remote workdays only within constraints specified by their employer or manager, reflected by the response "Yes, but

only on certain days specified by my employer/manager.” No autonomy includes both situations where employees’ remote workdays are fixed by their employer and where remote work is not an option, captured by the responses “*No, my remote workdays are fixed by my employer*” and “*Not applicable (I don’t have the option to work remotely).*”

Social isolation was assessed using a framework adapted from Golden, Veiga, and Dino (2008). The original framework was developed to measure professional isolation among teleworkers and consisted of seven validated items. Example items include “*I feel left out on activities and meetings that could enhance my career,*” “*I miss face-to-face contact with coworkers,*” and “*I feel out of the loop.*” Participants responded to the items using a frequency scale ranging from ‘Every day’ (highest frequency) to ‘Never’ (lowest frequency), with higher scores indicating greater levels of social isolation. This framework was adapted to align with the objectives of this study, providing a reliable method for evaluating the impact of remote work arrangements on professional isolation.

To prepare the dataset for analysis, a series of preprocessing steps were undertaken. These included: 1) **Reversing Scales:** The variable “Personal Achievement” was reverse-coded to align with the directionality of other burnout-related variables. 2) **Encoding Categorical Variables:** Work arrangements and autonomy levels, originally categorical, were encoded numerically to facilitate statistical analysis (“Fully remote” (3), “Hybrid” (2), and “Fully face-to-face” (1); “No Autonomy” (1), “Partial Autonomy” (2), and “Full Autonomy” (3)).

3.3. Statistical Analysis Approach

The statistical analysis began with descriptive statistics to summarize the key variables. Correlation analysis was conducted to examine the relationships between variables, such as autonomy, social isolation, and the dimensions of burnout. One-way ANOVA tests were used to compare burnout levels across different work arrangements. Moderated regression analysis was then employed to explore the interaction effects between autonomy and work

arrangements on burnout dimensions. Additionally, mediation analysis was performed to investigate the indirect effects of social isolation on the relationship between work arrangements and burnout outcomes.

The results of these analyses were used to test the study's hypotheses, with particular attention to the effects of autonomy and work arrangements on exhaustion, depersonalization, and personal achievement. All analyses were conducted using Python, leveraging libraries such as Pandas and Statsmodels for data manipulation and statistical modeling.

4. Results

4.1 Descriptive Statistics

The descriptive statistics provide an overview of the key study variables.

- **Burnout (BUR)** exhibited a moderate mean score ($M = 2.13$, $SD = 0.94$), indicating that, on average, participants experienced some level of burnout, though individual responses varied considerably.
- **Emotional Exhaustion (EMEX)** and **Depersonalization (DEP)** displayed relatively lower mean values ($M = 1.56$, $SD = 1.13$; $M = 1.59$, $SD = 1.17$, respectively), suggesting that most participants reported low-to-moderate levels of these burnout dimensions. However, their wide standard deviations indicate substantial individual differences.
- **Personal Accomplishment (PACC)** had the highest mean score ($M = 3.40$, $SD = 1.02$), suggesting that participants generally perceived themselves as competent and effective in their roles.
- **Social Isolation (SI)** showed a moderate mean ($M = 1.39$, $SD = 1.21$), with a somewhat broad distribution, implying that while some participants felt isolated, others did not experience significant social disconnection.

These findings suggest varying degrees of burnout and social isolation among participants. They provide a foundation for further analysis of their relationships with remote work arrangements and potential mediating factors.

Correlation Analysis

To examine the relationships between the primary variables of interest in this study, a Pearson correlation analysis was performed. The analysis included the following variables: Autonomy, Social Isolation, Exhaustion, Depersonalization, Personal Achievement, and Work Arrangement.

A Pearson correlation analysis was conducted to assess the relationships between work arrangement, burnout components, and social isolation. The results suggest that work arrangement has a significant positive correlation with social isolation ($r = .253, p = .010$), indicating that fully remote workers experience higher social isolation compared to hybrid and face-to-face workers. Social isolation was significantly correlated with exhaustion ($r = .409, p < .001$). Additionally, depersonalization was also positively correlated with social isolation ($r = .333, p < .001$), further supporting the role of social isolation as a mediator.

4.2 ANOVA Analysis

The results for exhaustion revealed no statistically significant differences across work arrangements ($F(2, 99) = 0.98, p = 0.38$). This finding suggests that levels of exhaustion were relatively consistent among employees regardless of whether they worked fully remotely, in a hybrid setup, or fully face-to-face. The effect size was very small (partial $\eta^2 = 0.019$), indicating that only about 1.9% of the variance in exhaustion is attributable to work arrangement. In fact, face-to-face employees reported slightly higher exhaustion on average ($M \approx 1.84$) than hybrid ($M \approx 1.40$) or fully remote ($M \approx 1.58$) employees, but these differences were not statistically significant. Therefore, H1a was not supported, as work arrangement did not have a significant effect on exhaustion levels.

For depersonalization, the ANOVA also indicated no statistically significant differences across work arrangements ($F(2, 99) = 1.68, p = 0.19$), with a small effect size (partial $\eta^2 = 0.033$). Although the mean depersonalization score was marginally higher for fully remote employees ($M \approx 2.20$) than for hybrid ($M \approx 2.01$) or face-to-face ($M \approx 2.26$) employees, these differences were not statistically reliable. Thus, H1b was not supported – depersonalization levels did not significantly differ by work arrangement.

Similarly, the analysis for personal achievement revealed no significant differences across work arrangements

$F(2, 87) = 0.100, p = .905$, indicating no significant effect, with an almost negligible effect size (partial $\eta^2 = 0.002$). Average personal achievement was relatively high and consistent across groups, reflecting that employees generally reported similar levels of personal accomplishment whether working face-to-face, hybrid, or fully remote. Accordingly, H1c was not supported.

In contrast to the above outcomes, social isolation showed a significant difference between work arrangements. The one-way ANOVA for social isolation was significant, $F(2, 99) = 3.431, p = .036$, with a moderate effect size (partial $\eta^2 = 0.065$). This finding supports H1d, which had predicted group differences in social isolation. Fully remote employees experienced significantly higher social isolation ($M = 1.73$) than face-to-face employees ($M = 0.93$), $p = .043$. The mean difference between these groups was about 0.80 on the social isolation scale, with remote workers reporting greater feelings of isolation. In contrast, the hybrid group ($M = 1.26$) did not significantly differ from either the face-to-face group ($p = .587$) or the fully remote group ($p = .166$) on social isolation. These results suggest that working fully remotely is associated with increased feelings of social isolation compared to working on-site, whereas hybrid work falls in between and is not statistically distinguishable from the other arrangements.

4.4 Mediation Analysis: Social Isolation as a Mediator

This section presents the mediation analysis performed to assess whether social isolation mediates the relationship between work arrangements (fully remote, hybrid, and face-to-face) and the outcomes of exhaustion, depersonalization, and personal achievement. The mediation framework evaluates three steps: (1) the direct effect of work arrangement on the outcome, (2) the relationship between work arrangement and social isolation, and (3) the combined effect of work arrangement and social isolation on the outcome.

To examine the mediating role of social isolation in the relationship between work arrangement and burnout, a regression-based mediation analysis was performed. The results show that work arrangement significantly predicts social isolation ($B = .414$, $SE = .158$, $p = .010$), indicating that fully remote workers report higher levels of social isolation. In turn, social isolation significantly predicts exhaustion ($B = .307$, $SE = .073$, $p < .001$), suggesting a significant indirect effect. The overall mediation model explained 16.8% of the variance in exhaustion ($R^2 = .168$, $F(1, 88) = 17.719$, $p < .001$), confirming the mediating role of social isolation in the relationship between work arrangement and exhaustion. This supports Hypothesis H2a, which posited that social isolation mediates the link between work arrangement and exhaustion.

Similarly, social isolation was found to be a significant mediator in the relationship between work arrangement and depersonalization ($B = .333$, $SE = .076$, $p < .001$), with the overall model explaining 18.1% of the variance in depersonalization ($R^2 = .181$, $F(2, 87) = 9.635$, $p < .001$). These results support Hypothesis H2b, indicating that employees in fully remote work arrangements experience greater depersonalization due to increased social isolation.

Regarding personal achievement, social isolation was initially hypothesized to act as a mediator (H2c), predicting that fully remote workers, experiencing increased social isolation, would report lower personal achievement scores. However, the analysis did not find a

significant indirect effect for personal achievement, suggesting that social isolation does not significantly impact this aspect of burnout. This indicates that while social isolation contributes to exhaustion and depersonalization, it does not substantially influence an employee's sense of personal achievement.

4.5 Moderation Analysis: The Role of Autonomy

A moderated regression analysis was conducted to explore whether autonomy moderates the relationship between work arrangement and burnout dimensions. The moderation analysis revealed that autonomy does not significantly moderate the relationship between work arrangement and exhaustion ($B = -.154$, $SE = .128$, $p = .231$), indicating that autonomy alone does not buffer against the exhaustion experienced in fully remote or hybrid work arrangements. This does not support Hypothesis H3a.

However, autonomy was found to significantly moderate the relationship between work arrangement and depersonalization ($B = .444$, $SE = .076$, $p < .001$), suggesting that higher autonomy reduces depersonalization levels in fully remote and hybrid work arrangements. This interaction indicates that while social isolation may contribute to depersonalization, employees with greater autonomy are better able to mitigate these negative effects. The overall model explained 18.1% of the variance in depersonalization ($R^2 = .181$, $F(2, 87) = 9.635$, $p < .001$), supporting Hypothesis H3b.

For personal achievement, the moderation analysis did not find a significant effect ($F(2, 89) = 0.100$, $p = .905$), indicating that autonomy does not enhance personal achievement scores across different work arrangements. This result does not support Hypothesis H3c, implying that other factors may be more influential in shaping personal achievement outcomes.

5. Discussion

5.1. Key Findings and Their Implications

Remote work continues to exhibit its dual-edged nature, as evidenced by this study's findings and those from previous research. While arrangements like hybrid and fully remote work have been associated with increased flexibility and better work-life balance, as highlighted by Angelici and Profeta (2020) and McPhail et al. (2023), this study found that such arrangements alone are insufficient predictors of burnout. Angelici and Profeta's work emphasized positive outcomes, including productivity gains and improved well-being, particularly for women. These align with this study's findings that temporal flexibility can enhance satisfaction and reduce stress. However, the marginal effects observed for hybrid work on burnout components like exhaustion and depersonalization suggest that the benefits of flexibility can be undermined by the complexity of alternating work environments.

Social isolation emerged in this study as a significant factor contributing to emotional exhaustion and reduced professional accomplishment, echoing Shimura et al. (2021). The psychological toll of disconnection from colleagues and organizational culture is consistent with earlier findings that highlight the necessity of maintaining clear communication and a sense of belonging in remote settings. This underscores the importance of organizational strategies such as virtual team-building and regular check-ins to counteract isolation.

Interestingly, the role of autonomy in this study diverges from traditional assumptions. While autonomy has been widely regarded as a protective factor against burnout, as suggested by Costin et al. (2023), this study found no effects. This raises questions about the contextual dependencies of autonomy's impact, suggesting that it may only be effective when coupled with supportive structures and clear job expectations. Such nuances reflect the multifaceted nature of burnout identified in earlier literature, including Maslach, Schaufeli, and Leiter's (2001) conceptualization of job burnout.

This study further contributes to the dialogue on remote work by providing nuanced insights into hybrid work arrangements. While McPhail et al. (2023) and Angelici and Profeta (2020)

highlighted the post-pandemic era's shift toward hybrid models as a sustainable solution, this research reveals the latent stressors inherent in managing dual work environments. The interplay of these factors suggests that hybrid work may require tailored organizational policies to maximize its benefits and minimize its challenges.

In conclusion, these findings reinforce and expand upon existing literature while also challenging some established assumptions. The complex relationships between remote work, social isolation, autonomy, and burnout necessitate a multifaceted approach. Future research should explore these dynamics further, particularly in diverse organizational and cultural contexts, to develop comprehensive solutions for modern work environments.

5.2. Practical Implications for Organizations

The findings of this study have significant implications for organizations, managers, and policymakers aiming to optimize work arrangements and support employee well-being in increasingly remote and hybrid work environments.

For organizations, the results emphasize the need for strategies that address the dual challenges of flexibility and social isolation. While remote and hybrid work arrangements provide flexibility that can enhance work-life balance (Angelici and Profeta 2020), this study highlights the critical role of social isolation in driving emotional exhaustion and reduced professional accomplishment. To mitigate these effects, organizations should prioritize initiatives that foster social connection, such as regular team check-ins, virtual and in-person collaboration opportunities, and structured team-building activities. These approaches align with previous research showing that maintaining a sense of belonging is essential to counteracting the psychological toll of isolation (Shimura et al. 2021).

Managers should recognize that autonomy, while often regarded as a protective factor, does not inherently buffer employees from burnout. The findings suggest that autonomy's effectiveness depends on supportive structures, such as clear communication, realistic

workload expectations, and adequate resources. Managers should focus on empowering employees to exercise autonomy meaningfully by providing guidance and support while ensuring accountability. Training managers to recognize and address challenges associated with autonomy could help mitigate potential stressors, particularly in remote and hybrid settings.

From a policy perspective, the study underscores the importance of flexibility in not only scheduling but also designing work environments that meet diverse employee needs. Policymakers could encourage organizations to adopt evidence-based practices that balance productivity with well-being. These include mental health programs, flexible work policies, and guidelines for healthy remote work practices. Such initiatives align with research indicating that clear boundaries and resources for remote workers can enhance engagement and reduce burnout (McPhail et al. 2023).

Leaders managing remote and hybrid teams also require targeted training to navigate the unique demands of non-traditional work settings. Development programs should equip leaders with skills to foster engagement, recognize early signs of burnout, and maintain team cohesion. By doing so, leaders can create supportive environments that address challenges inherent to remote and hybrid work.

Finally, the findings point to the need for continued innovation in digital tools and technologies to support remote and hybrid teams. Organizations should explore and invest in tools that facilitate seamless communication, collaboration, and connectedness, addressing the gap between flexibility and social interaction. Technology-driven solutions can help reduce isolation and strengthen relationships across distributed teams.

By addressing these challenges holistically, organizations can harness the potential of modern work arrangements while safeguarding employee well-being and performance. These

strategies will not only enhance productivity but also position organizations to adapt to the evolving demands of the workplace.

5.3. Study Limitations and Future Research Directions

While this study provides valuable insights into the relationship between remote work and employee burnout, it is not without its limitations. First, the cross-sectional design of the research restricts the ability to infer causality. Although significant associations were observed, it is unclear whether specific work arrangements directly influence burnout or whether other unmeasured factors play a role.

Second, the sample size, while diverse in terms of industries and work arrangements, may not be representative of broader populations. Certain sectors or demographic groups might experience remote work differently, and their exclusion could limit the generalizability of the findings.

Third, the study relies on self-reported data, which is inherently subject to biases such as social desirability and recall accuracy. Participants may have underreported or overestimated their levels of burnout or satisfaction with work arrangements, potentially skewing the results.

Additionally, the study focuses primarily on the mediating role of social isolation and the moderating effects of autonomy but does not account for other potential variables that might influence burnout, such as organizational culture, technological infrastructure, or individual resilience. Future research could expand on these dimensions to provide a more comprehensive understanding of burnout in remote work contexts.

Finally, the research was conducted within a specific time frame, capturing perceptions and experiences in a post-pandemic era when hybrid and remote work arrangements are still evolving. Longitudinal studies would be beneficial to assess how these dynamics change over time and whether observed patterns persist.

By acknowledging these limitations, this study aims to provide a foundation for future research while emphasizing the importance of cautious interpretation and application of its findings.

6. Conclusion

This study explored the impact of remote work on employee burnout, focusing on its effects on well-being dimensions such as emotional exhaustion, motivation, and cognitive functioning. The findings reveal that while remote work offers flexibility and autonomy, it also presents challenges, including social isolation and emotional exhaustion, which can significantly impact employee well-being and productivity.

The results underscore the importance of organizational strategies to address these challenges. Implementing robust support systems, fostering social connections, and defining clear boundaries between professional and personal life are critical for reducing burnout in remote work environments. Enhancing employee autonomy in managing workloads and schedules can also contribute to improved well-being and performance.

While this research contributes valuable insights, further studies are recommended to deepen understanding. Future research could involve larger and more diverse samples to capture variations across demographics, such as different age groups, industries, and cultural contexts. Longitudinal studies could explore the long-term effects of remote work on burnout, while mixed-method approaches may provide richer insights into the lived experiences of remote employees. Additionally, examining the effectiveness of specific organizational interventions, such as mentorship programs, technological tools, and wellness initiatives, could inform actionable strategies to mitigate burnout and enhance employee well-being. By addressing these areas, future research can further strengthen the foundation for creating sustainable and supportive remote work environments.

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8. Appendices

Appendix A. Demographic and Professional Distribution

Figure A1: Age Range of Respondents

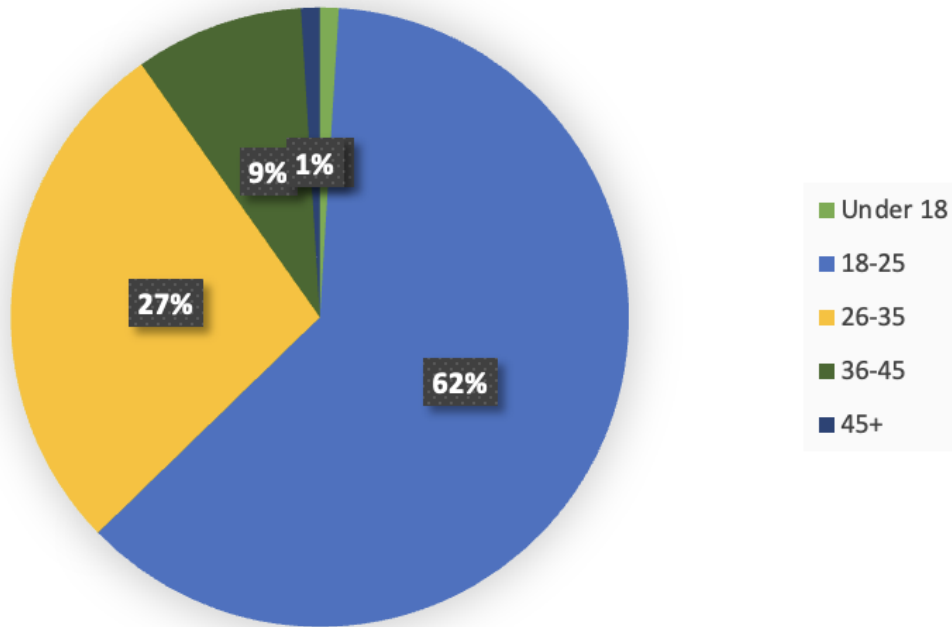


Figure A2: Gender Distribution of Respondents

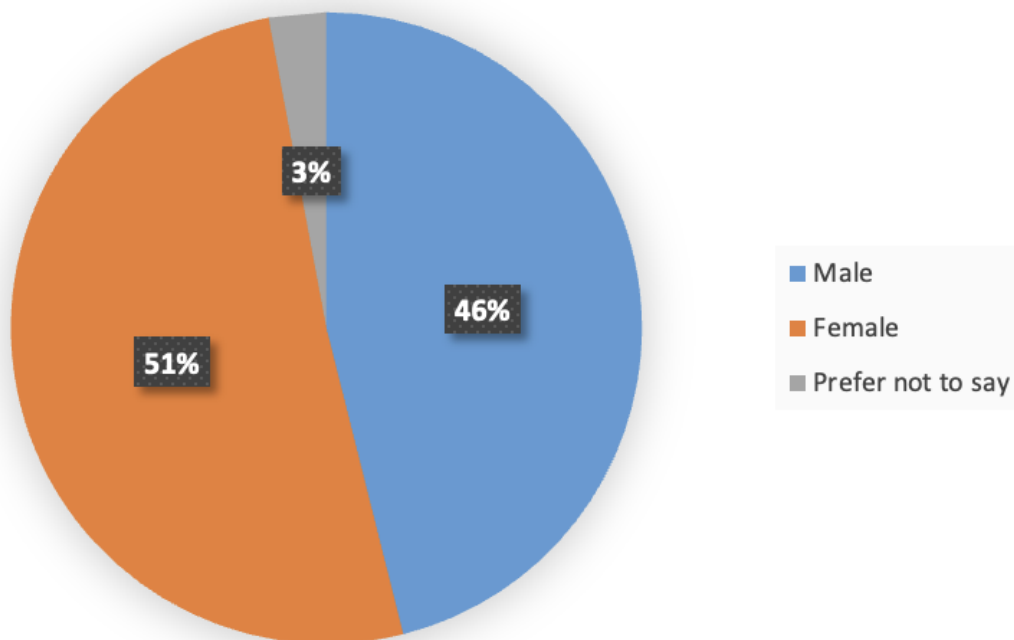


Figure A3: Years of Professional Experience of Respondents

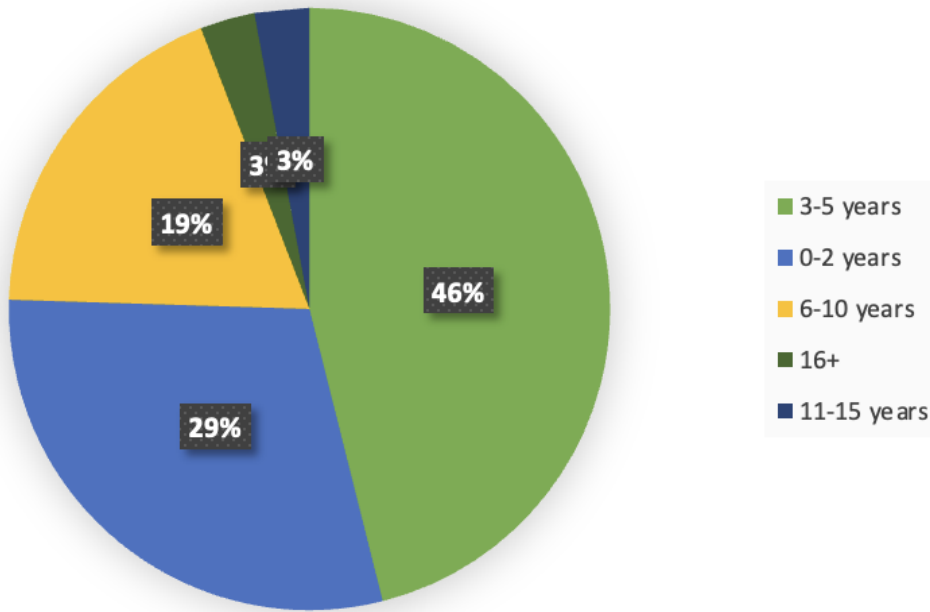


Figure A4: Work Arrangement of Respondents

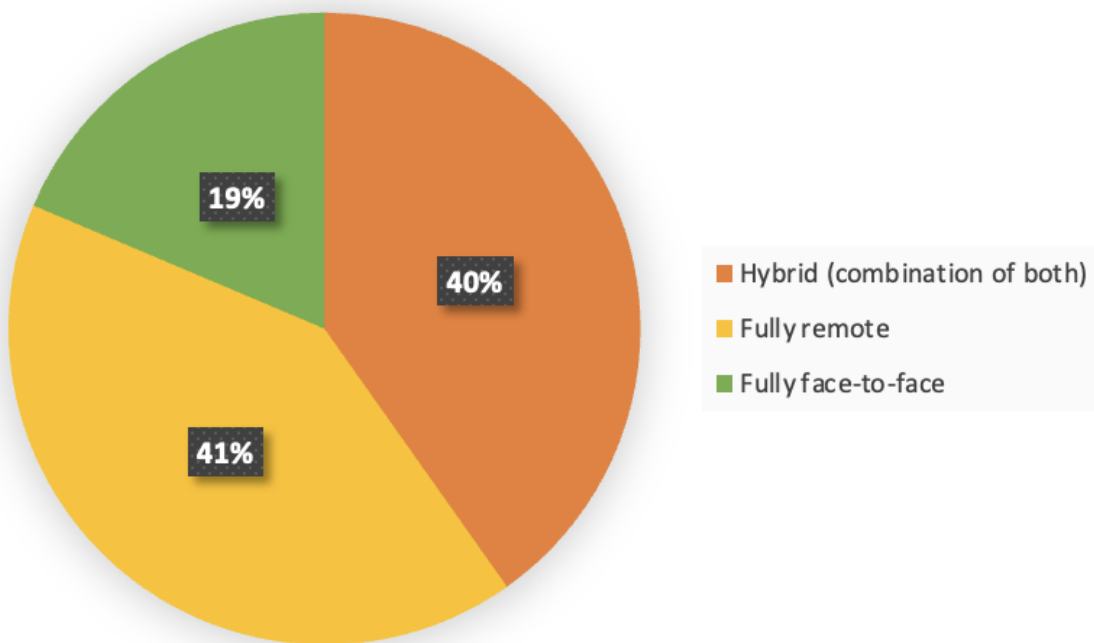
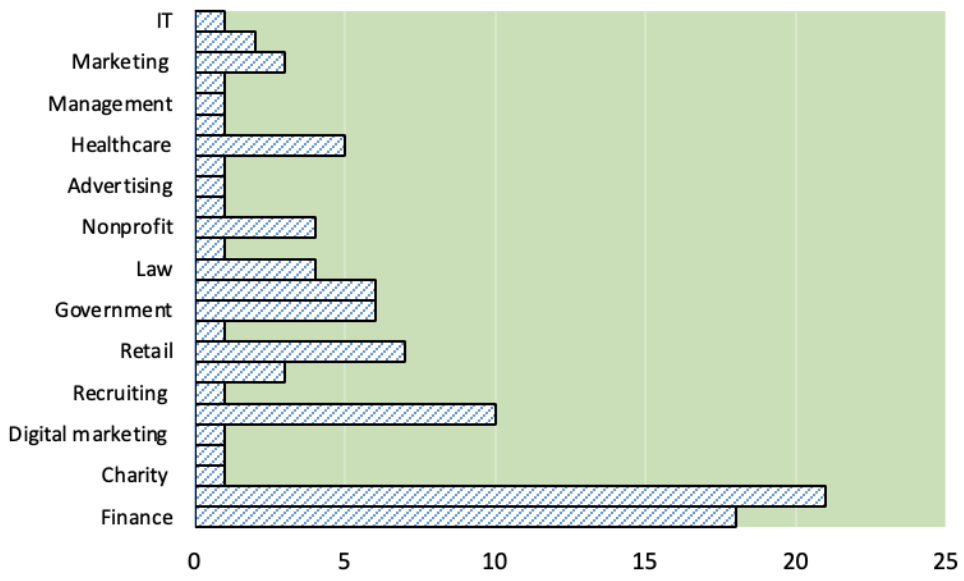


Figure A5: Distribution of Respondents by Industry



Appendix B. Maslach Burnout Inventory (MBI)

Table B1: Maslach Burnout Inventory (MBI) Burnout Level Gradations

Burnout Dimension	Low Burnout	Moderate Burnout	High Burnout
Emotional Exhaustion	≤ 17	18–29	≥ 30
Depersonalisation	≤ 5	6–11	≥ 12
Personal Achievement	≥ 40	34–39	≤ 33