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Impact of the COVID-19 pandemic on management-level hotel employees’ work behaviors: Moderating effects of working-from-home

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\section*{A R T I C L E   I N F O}

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\section*{A B S T R A C T}

This study examines the effects of working-from-home during the COVID-19 pandemic on management-level hotel employees’ work engagement, burnout, and turnover intentions. The study demonstrates that working-from-home tends to be a double-edged blade that leads to both positive and negative employee behavioral outcomes. Findings reveal that while working-from-home is associated with a higher level of vigor, it magnifies the effects of absorption on burnout. In addition, due to work-home interference, working-from-home suppresses the positive effect of dedication and amplifies the negative effect of burnout on turnover intentions. The theoretical contributions and managerial recommendations are provided.

\section*{1. Introduction}

The COVID-19 pandemic has caused unprecedented ravages in the hospitality industry that are believed to be stronger than any previous global crises, such as 9/11 or SARS (Djeebet, 2020; Gursoy et al., 2021). According to STR, a leading hotel operation data provider, the average hotel occupancy rates for June 2020 reduced by 68.9%, 72.8%, 71.4%, 43.0%, 72.6%, and 42.9% in the U.S., Europe, Canada, Asia Pacific, Africa, and the Middle East, respectively, compared to June 2019 (STR, 2020). Besides its dramatic effects on market demand, the pandemic has also threatened employees’ safety and health (Gursoy and Chi, 2020). As a result, many employees were asked to perform their work remotely, which has become a widely applied operational strategy during the pandemic.

Working-from-home or telecommuting refers to working remotely from a non-office location, usually an employee’s home. Since epidemiologists generally believe that congregation of individuals in one place accelerates the spread of the virus, governments encourage or even force people who can perform their work-related responsibilities and duties from a remote location to reduce the risk of amplification of the outbreak. According to a report released in the April of 2020, 59 countries required public employees who can perform their job-related duties and responsibilities remotely to work-from-home in order to control the spread of COVID-19 virus (International Labor organization, 2020). During the COVID-19 pandemic, working-from-home has arguably become one of the most utilized strategies to decelerate the unemployment rate, maintain society functions, and protect the population against the virus (International Labor organization, 2020).

Fostered by this pandemic, people have realized that working-from-home may not only be a short-term measure but can also be a long-term trend in the post-COVID-19 era. In a recent survey conducted by the World Economic Forum (Dunn, 2020), 98% of general employees indicated that they desire the option of teleworking in their future careers. In addition, experts and researchers estimate that a large portion of the workforce can potentially perform their work-related responsibilities and duties from a remote location such as home. For example, by the end of 2021, 25–30% of U.S. employees are estimated to work remotely (Lister, 2020) and it is estimated that 34% of the U.S. jobs can be performed from home (Dingel and Neiman, 2020).

Even though the demand for work-life balance and work flexibility has existed for decades, the COVID-19 pandemic and the resulting restrictions imposed by authorities have rapidly accelerated the working-from-home trend (Lister, 2020). Among all employees, managers are believed to have the highest opportunity to work from home. A study

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conducted by the International Labor Organization suggests that around 50% of managers in a variety of companies will have the ability to perform their jobs remotely in the future (International Labor organization, 2020). This is especially true for the hospitality industry. Due to the need for in-person services, frontline employees are unlikely to work remotely. However, some of the managers can easily perform their managerial duties and responsibility from a remote location easily. The financial performance of the hospitality business is highly susceptible to global crises due to the fluctuation of the number of travelers. Given that the U.S. hotels’ ADR took three and six years to recover from the 9/11 and 2008 financial crisis, respectively (HSMAI, 2020), an increasing number of hospitality firms are likely to encourage some of their management-level employees to work remotely in order to minimize operating expenses in the post-COVID-19 era to maintain/improve profitability.

Some experts suggest that working-from-home may promote positive job outcomes (Djeebet, 2020). For example, allowing employees to work remotely, especially during the fearful pandemic, exhibits the company’s human-centered management value that promotes organizational support for their employees both emotional and physical wellbeing (Djeebet, 2020; Gurchiek, 2020). Furthermore, some research data suggested that working-from-home might promote operating efficiency. For instance, Gurchiek’s (2020) reported that the implementation of the work-from-home policy has led the IT and sales departments to gain 25% and 13% increases in productivity, respectively, and has reduced the turnover of the call centers to the lowest rate in history.

Nevertheless, the effects of the work-from-home policy on employee behavior may not be all positive and require further research. Existing organizational behavior theories and studies suggest critical discrepancies in terms of job engagement and burnout and its impacts on work outcomes across employees who work at their workplaces and who work from home (Bakker and Demerouti, 2007; Delanoije et al., 2019; Shirom, 2006). For instance, due to the increase in job autonomy, compared to working at workplaces, employees who work remotely are likely to have a higher level of vigor (Shirom, 2006), a dimension of engagement that reflects positive work mode and motivation. Nevertheless, employees who work from home tend to experience a significant work-home interference (Delanoije et al., 2019). This interference results in a higher level of job demand and interacts with job absorption, which reflects the efforts employees put in their work related tasks. Moreover, work-home interference is also likely to suppress the positive effect of engagement and boost the negative effect of burnout. Therefore, working-from-home tends to be a double-edged sword, leading to both positive and negative job outcomes.

This study aims to explore the impacts of working-from-home on work engagement, burnout, and turnover intentions focusing on hospitality managers, the occupation group among hospitality employees that has the highest possibility to work from home. The current study is organized into the following sections. Section 2 reviews related literature and develops hypotheses. Sections 3 and 4 examine positive and negative effects of working-from-home and reports the results. Section 5 discusses the findings and provides theoretical and managerial implications. Section 6 provides the study limitations and future research recommendations.

2. Theoretical framework and hypothesis development

The COVID-19 pandemic and the resulting restrictions have forced employers to offer or require some of their employees to work from home in order to ensure the health and safety of their employees (Gursoy and Chi, 2021). Experts and researchers have observed several benefits resulting from applying the work-from-home policy during the COVID-19 pandemic, such as cost-saving (Lister, 2020), increased perceived emotional support from employers (Djeebet, 2020), increases in productivity (Gurchiek, 2020), and decreases in turnover rates (Gurchiek, 2020). However, a review of existing organizational behavior theories and studies indicates that working-from-home is likely to be a double-edged sword, resulting in both positive and negative impacts on managers’ work engagement, satisfaction, burnout, and turnover intention.

2.1. Job demands-resources (JD-R) framework

Previous studies (e.g., Schaufeli and Bakker, 2004; Zhang et al., 2020) commonly utilized the Job Demands-Resources (JD-R) framework to understand the impacts of work conditions (e.g., work-from-home) on employees’ job strain (e.g., burnout), job motivation (e.g., work engagement) and organizational outcomes (e.g., turnover intentions). According to the JD-R framework (Bakker and Demerouti, 2007), a work condition can be divided into two components: job resources and job demands. Job resources are described as tangible (e.g., comfortable physical environment) and intangible (e.g., work-life balance) aspects of a workplace that empower employees to achieve their work goals. Job demand refers to the physical and psychological efforts (e.g., concentration and working hard) that an employee must sacrifice to achieve the work goal. In general, job demand and job resources result in strain and motivation, respectively. When employees work from home during a global pandemic, on the positive side, they may perceive a high-level of emotional support from their company (Djeebet, 2020) and a high-level of job autonomy (Felstead et al., 2002). On the negative side, they may experience a high-level of work-home interference (Delanoije et al., 2019). For these reasons, drawing on the JD-R framework, working-from-home may induce changes in both job demands and resources that influence work engagement, burnout, turnover intention.

2.2. Impacts of work-from-home on engagement

Engagement is a positive psychological behavioral state in which “people employ and express themselves physically, cognitively, and emotionally during role performance” (Kahn, 1999, p. 694). Previous research has demonstrated that engagement predicts different organizational outcomes (see Ampofo, 2020; Harter et al., 2002; Jang et al., 2020; Karatepe et al., 2020; Rich et al., 2010; Saks, 2006) and suggests that work engagement contains three dimensions: vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor is characterized by an activation of positive work mood. It reflects high levels of energy, resilience, motivation, and effort to achieve optimal work outcomes. Dedication is described as a job-related identification that is characterized by high levels of involvement, enthusiasm, pride and inspiration. Lastly, absorption is described as a sense of immersion in the job.

Working-from-home tends to promote vigor via creating new job-related resources. Existing studies suggest that working-from-home boosts job autonomy by allowing employees to choose their work environments and plans by themselves resulting in an increase in job resources that promotes intrinsic job motivation (Felstead et al., 2002). Previous studies indicate that employees’ work motivation is highly associated with vigor (Shirom, 2006). Vigor is conceptualized as a positive mood that exhibits a high level of energy and resilience, which encourages employees to work in a more effortless and persistent manner (Schaufeli et al., 2002). Motivation is conceptualized as a “contemporary or immediate influence on direction, vigor, and persistence of action” (Atkinson’s, 1964, p. 2). Due to the close conceptual connection between these two constructs, researchers commonly treated vigor as a motivation-related construct and suggested that vigor is likely to be an outcome of work motivation (Mauno et al., 2007; Shirom, 2006). Therefore, in the context of this study, managers who work from home are likely to have more job-related resources and, therefore, have a high-level of vigor compared to managers who work at workplaces. Hence, this study proposes that:

H1. Managers who work from home have higher level of vigor
compared to managers who work at workplaces.

Among all three engagement dimensions, vigor tends to be the only one that directly results from job motivation. In contrast, absorption is defined as a state of mind that makes employees intensively concentrate on a task and is likely to be an outcome of the skill-job match (Mauno et al., 2007) or high skill utilization. Whereas dedication is illustrated by employees’ psychological involvement in the work (Schaufeli et al., 2002) and solely results from the perceived importance of the job (Mauno et al., 2007). Based on these conceptualizations, absorption and dedication reflect the physical effort/effectiveness and psychological connection in the work. Therefore, absorption and dedication are likely to activate intrinsic motivations rather than are caused by motivations. For these reasons, working-from-home is likely to cause a positive impact on vigor but not on dedication and absorption. Drawing on the discussion above, the following hypotheses are proposed.

H2. There is no difference in (a) dedication and (b) absorption across the two working conditions.

2.3. Impact of working-from-home on the burnout

Burnout is described as a series of negative job-related conditions such as reductions in work-related achievement, depersonalization, and exhaustion and it is caused by job characteristics (Maslach et al., 2001). Drawing on the JD-R, scholars suggest that job demands cause burnout (Schaufeli and Bakker, 2004; Prentice and Thaichon, 2019). Working-from-home leads employees to have a hard time splitting home and work demands due to the lack of clear-cut change of location and the lack of clearly defined working hours (Dunn, 2020). As a result, employees who work from home commonly deal with significant interferences between work and home (Delaooeje et al., 2019), which is likely to stimulate the perception of job demand.

Work-home interference is characterized by a type of role conflict that is caused by incompatible work and home demands (Parasuraman and Greenhaus, 2002). The interference takes place when an employee cannot meet demands from work and home simultaneously. According to Delaooeje et al.’s (2019) study, employees make more work-to-home transitions and home-to-work transitions on the days of working remotely, indicating that working-from-home tends to cause a greater work-home interference compared to working-at-workplace. For this reason, employees who experience work-home interference caused by work-from-home may perceive higher levels of job-demand and home-demand simultaneously. Thus, according to the JD-R, working-from-home is likely to induce burnout. For this reason, the following hypothesis is developed.

H3. Managers who work from home have higher level of burnout compared to managers who work at workplaces.

2.4. Impact of working-from-home on the engagement-burnout relationship

The relationship between engagement and burnout has been well discussed in the literature such that burnout reduces engagement (Halbesleben, 2010; Schaufeli and Bakker, 2004) or that engagement is a means to reduce burnout (Henson, 2016). Some literature also considers them as parallel concepts: both are affected by similar job characteristics (Nahrang et al., 2011; Pienaar and Willems, 2006) and suggests that there is a correlation but no causality between them (Kim et al., 2009; Llorens-Gumbau and Salanova-Soria, 2014). However, there is another view of the engagement-burnout relationship that suggests that too much engagement (e.g., highly absorbed) may serve as a burden of burnout (Maslach, 2011). Absorption, which, as discussed previously, is described as a high level of concentration, effort, and immersion in work (Schaufeli et al., 2002). A recent field study reports that the relationship between work engagement and burnout is inverted U-shaped (Nerstad et al., 2019) suggesting that a high-level of absorption results in burnout. When employees are absorbed in their work, both physical and psychological energy is consumed. In the case of a high level of absorption, employees need to spend extra compensatory effort, which drains their energy leading to exhaustion (Schaufeli and Bakker, 2004). Thus, absorption has been found to be positively correlated with job demand (Halbesleben et al., 2009), which, according to the JD-R, results in burnout. For this reason, the following hypothesis is proposed.

H4. Absorption is positively related to burnout.

According to the Theory of Role Strain, constraints such as time, energy, and resources can make it difficult to meet demands from work and home concurrently, resulting in work-home interferences (Chong et al., 2018; Goode, 1960). Employees who have high-level of absorption are likely to have difficulties detaching themselves from work and may feel time passing quickly (Schaufeli et al., 2002). Hence, highly absorbed employees tend to have less time, energy, and resources to handle home demands (Listau et al., 2017). These constraints are likely to result in work-home interference especially when employees are working in an environment where home demands are high (e.g., working-from-home). As previously discussed, work-home interference may lead to burnout. Thus, highly absorbed employees who work from home are likely to develop a higher level of burnout than who work at workplace. Thus, this study proposes that:

H5. Compared to working-at-workplace, the impact of absorption on burnout is greater for managers who work from home.

2.5. Impact of working-from-home on the relationship among burnout, engagement and turnover intentions

Turnover intention is described as an employee’s intention to leave the current firm and search for a new job in other firms (Olawale et al., 2016). Employee turnover usually causes significant operating costs to firms (Lu et al., 2016). Previous studies utilized the Social Exchange Theory to explain turnover intentions (e.g., Biron and Boon, 2013). According to the Social Exchange Theory, social behaviors are an outcome of a social exchange that primarily focuses on maximizing benefits and minimizing losses (Ekeh, 1974). Drawing on this theory, employee turnover is likely to be a mean to increase work-related positive aspect (e.g., engagement) and/or to reduce negative aspect (e.g., burnout).

However, working-from-home may moderate the impact of engagement and burnout on turnover intentions. According to the Cognitive Activation Theory of Stress (Ursin and Eriksen, 2004), stress stimuli from work is a normal and healthy physiological response that stimulates brain arousal, which usually results in a positive mindset and emotional outcomes (e.g., positive work attitude). However, repeated and persistent stress stimuli may lead to a negative mindset and health impairment (e.g., depression). Drawing on this theory, employees who can periodically detach from work and release job stress are more likely to experience less job stress and appreciate job benefits (e.g., job satisfaction), resulting in positive behavioral intentions (e.g., low turnover intentions). In contrast, the negative mindset caused by the lack of detachment may lead employees to psychologically enlarge the effect of negative job conditions (e.g., burnout), consequently, causing negative behavioral outcomes (e.g., high turnover intentions).

Existing studies found that resting at home allows employees to detach from work and leads to a better mood and more positive affects (Cropley et al., 2006; Demerouti et al., 2012). However, neither physical nor psychological detachment is likely to be effective in the context of working-from-home. Scholars suggested that the unclear line between work and home causes the stimuli from work to be continuously triggered at home (Cropley et al., 2006), prolonging the activation of work stress and undermining the effectiveness of detachment from work.
Based on the discussion above, the ineffective detachment caused by working-from-home may suppress the impact of work engagement on turnover intention and boost the effect of burnout. For these reasons, the following hypotheses are proposed.

**H6.** Compared to working-at-workplace, the negative impacts of a) vigor, b) dedication, and c) absorption on turnover intentions are weaker for managers who work from home.

**H7.** Compared to working-at-workplace, the positive impact of burnout on turnover intentions is greater for managers who work from home.

### 3. Methodology

#### 3.1. Survey and measurement items

The measurement items (Appendix A) used in this study were borrowed from existing well-established scales. More specifically, three dimensions of engagement, namely vigor, dedication, and absorption were measured using the Utrecht Work Engagement Scale (Schaufeli et al., 2002). Three items were used to measure each dimension. Turnover intention was measured using three items adapted from Wayne et al. (1997). A 5-point Likert scale (1- strongly disagree; 5- strongly agree) was used to measure engagement and turnover intentions. In addition, ten items of burnout, which were measured on a 7-point Likert scale (1- never; 5- always), were borrowed from Malach-Pines (2005) burnout scale. Working status was measured and treated as a dummy variable (0: working-at-workplace; 1: working-from-home). Three attention check questions were included to improve the quality of responses.

Since the work arrangement (e.g., working-from-home) and job outcomes can be caused by job and employee characteristics, several variables were controlled in data analysis. More specifically, gender (0: male; 1: Female), marital status (0: single; 1 married), and position (0: mid-level manager; 1 upper-level manager) were coded using dummy coding. Control variables such as the number of dependents, years of work experience, and age are treated as continuous variables. All continuous variables are standardized before data analysis.

#### 3.2. Sample and data collection

The participants in this study were management-level hotel employees in Turkey. Due to the impact of the COVID-19 pandemic, the Turkish hotel industry suffered severely throughout the year 2020. According to a recent estimation, the Turkish hospitality industry is facing a loss of up to $15.2 billion for 2020 (Güney et al., 2020). Attributable to economic impacts and safety concerns, a significant portion of Turkish hotel employees, especially managers, are currently working from home. Based on our pilot study data (n = 517), in July of 2020, among the hotel employees who were still working (55% of total samples), 19% of front-line employees were working from home. In contrast, 49.8% of management-level employees were working remotely.

The data collection for hypothesis testing utilized a Turkish online survey platform and was conducted in July of 2020. Online survey allows to study managers who work from home and who work at workplaces using the same survey platform and the same sampling method. A small amount of monetary incentive ($0.50) was provided to participants who completed the questionnaire. Furthermore, a battery of screening questions such as position, title, and work status were asked to ensure that only responses from management-level hotel employees were included in the study. A total of 211 valid responses were obtained (see Appendix B for demographic profile). Among these participants, 106 were working at workplaces and 105 were working from home.

#### 3.3. Data analysis

A three-step approach was utilized based on the recommendation of previous studies (e.g., Chi et al., 2020; Gursoy et al., 2019; Lin et al., 2019) that utilized similar research design. In the first step, this study investigated the data distribution to ensure that the assumption of data normal distribution is not void. Afterwards, the validity of the measurement instrument was examined using a CFA. Item reliability, factor convergent and discriminant validities, and measurement scale model fit were evaluated. Common variance bias was examined. Lastly, hypotheses were tested using multiple regressions. Multicollinearity was examined before interpreting the results.

### 4. Results

#### 4.1. Measurement instrument assessment

The descriptive statistics (Appendix A) indicated that all items had skewness and kurtosis values less than 2, suggesting normal distributions of measurement items. Also, the results of the CFA (Table 1) suggested that all factor loadings exceeded 0.6 and all factor Cronbach’s alphas exceeded 0.7, indicating internal consistency and reliability of measurement items. Furthermore, the factor AVEs were all greater than 0.5 and the square root of AVEs (Table 2) exceeded the corresponding factor correlations, suggesting the convergent and discriminant validities at the factor level. The measurement model also exhibited acceptable model fit ($\chi^2 = 375.29, df = 194, CFI = 0.94, TLI = 0.93, RMSEA = 0.07, SRMR = 0.05$). Moreover, the model was compared to an alternative model in which all engagement items were loaded on one factor. The model fit of the alternative model ($\chi^2 = 498.24, df = 248, CFI = 0.90, TLI = 0.88, RMSEA = 0.08, SRMR = 0.07$) was found to be significantly worse than the original model ($\chi^2$ difference $= 122.95, df = 7, p < .001$), suggesting that a three-dimensional structure of engagement was appropriate.

Since this study utilized cross-sectional common source common method self-report data, common method bias may undermine the

### Table 1

Results of CFA.

| Items | Factor Loadings | Cronbach’s Alphas | AVEs |
|-------|-----------------|-------------------|------|
| **Vigor (VI)** | | | |
| V1    | 0.84            | 0.93              | 0.77 |
| V2    | 0.89            | 0.93              | 0.77 |
| V3    | 0.90            | 0.93              | 0.77 |
| **Dedication (DE)** | | | |
| D1    | 0.97            | 0.95              | 0.86 |
| D2    | 0.97            | 0.95              | 0.86 |
| D3    | 0.88            | 0.95              | 0.86 |
| **Absorption (AB)** | | | |
| A1    | 0.74            | 0.74              | 0.63 |
| A2    | 0.74            | 0.74              | 0.63 |
| A3    | 0.69            | 0.74              | 0.63 |
| **Burnout (B)** | | | |
| B1    | 0.62            | 0.90              | 0.51 |
| B2    | 0.61            | 0.90              | 0.51 |
| B3    | 0.70            | 0.90              | 0.51 |
| B4    | 0.74            | 0.90              | 0.51 |
| B5    | 0.80            | 0.90              | 0.51 |
| B6    | 0.81            | 0.90              | 0.51 |
| B7    | 0.81            | 0.90              | 0.51 |
| B8    | 0.75            | 0.90              | 0.51 |
| B9    | 0.60            | 0.90              | 0.51 |
| B10   | 0.65            | 0.90              | 0.51 |
| **Turnover Intention (TI)** | | | |
| T1    | 0.94            | 0.90              | 0.75 |
| T2    | 0.84            | 0.90              | 0.75 |
| T3    | 0.83            | 0.90              | 0.75 |

Model fit indexes: $\chi^2 = 375.29; df = 194; CFI = 0.94; TLI = 0.93; RMSEA = 0.07; SRMR = 0.05$
Table 2
Correlations between Factor and Square Root of AVEs.

| Factors   | VI   | DE   | AB   | B    | TI   |
|-----------|------|------|------|------|------|
| Vigor (V) | 0.877|      |      |      |      |
| Dedication (DE) | 0.713| (0.927) |   |      |      |
| Absorption (AB) | 0.540| 0.733| (0.793) |   |      |
| Burnout (B) | -0.489| -0.338| -0.243| (0.714) |   |
| Turnover Intention (TI) | -0.417| -0.378| -0.386| 0.431| (0.866) |

Notes: Numbers in parentheses are square roots of AVE; Correlations in bold are significant at p < .05 level.

reliability of the results (Podsakoff et al., 2003). To address this potential issue, common method bias was examined using Harman’s single-factor test. This study found that the single-factor model explained 38.52% of the total variance, which was lower than the recommended cutoff of 50% (Podsakoff et al., 2003). Moreover, the primary focus of this study was on examining interaction effects which are likely to be deflated rather than inflated through common method bias (Siemsen et al., 2010). For the reasons above, common method bias was not likely to be an issue that influences the robustness of the results.

4.2. Hypothesis examination

To investigate the impact of working-from-home on employees’ engagement and burnout, working status and a battery of control variables were regressed on vigor, dedication, absorption, and burnout. The results (Table 3) revealed that working status was a significant predictor of vigor (β = .15, b = 0.29, SE₁ = 0.15, t = 2.01, p = .046) suggesting that managers who work from home had a significantly higher level of vigor compared to managers who work at a workplace. Thus, H1 was supported. In addition, the levels of dedication (t = −0.60, p = .55) and absorption (t = −1.18, p = .24) were not significantly different across two groups, providing evidence to support H2. Working status was not a significant predictor of burnout (t = −0.38, p = .70). Therefore, H3 was not supported.

To test the effect of absorption on burnout, a regression analysis was performed. The results of regression (Table 4) suggested a significant positive effect of absorption on burnout (β = .25, b = 0.25, SE₁ = 0.10, t = 2.47, p = .01, supporting H4.

Lastly, the moderation effect of working-from-home was investigated (Table 5 and Fig. 1). This study found that working status moderated the absorption-burnout relationship (β = .88, b = 0.54, SE₁ = 0.20, t = 2.71, p = .01). A positive b-value suggested that working-from-home significantly boosted the positive effect of absorption on burnout, providing evidence for H5. The results also indicated that working status weakened the negative impact of dedication (β = .76, b = 0.46, SE₁ = 0.18, t = 2.57, p = .01) and promoted the positive impact of burnout (β = .43, b = 0.26, SE₁ = 0.11, t = 2.38, p = .02) on turnover intentions. Thus, H6b and H7 were supported. However, the moderation effects were not found in the relationships of vigor-turnover (t = −0.54, p = .59) and absorption-turnover (t = −0.73, p = .47), thus, H6a and H6c were not supported.

5. Discussion of findings

By examining the differences across working conditions of managers, this study finds that working from home results in both positive and negative job outcomes. On one hand, working-from-home (vs. at workplaces) yields a higher level of vigor. As discussed earlier, remote working may promote job autonomy that positively influence motivation (Shirom, 2006), and work motivation is highly associated with engagement (Schaufeli and Bakker, 2004). The results of this study provide a more in-depth understanding of engagement by suggesting that working-from-home tends to influence engagement via promoting vigor but not dedication and absorption.

On the other hand, profound negative impacts of working-from-home have been identified. This study finds that, for managers who work from home, the positive effect of absorption on burnout is significantly higher, the negative effect of dedication on turnover intention is weaker, and the positive effect of burnout on turnover intentions is stronger. These findings suggest that working-from-home is likely to be a powerful moderator through the mechanism of work-home interference. The negative mindset caused by the work-home interference may lead managers to be psychologically more influenced by the negative job factors and less encouraged by the positive factors.

In the context of the current study, dedication has been found to be the only engagement dimension that interacts with working-from-home. A possible explanation is that Turkish culture is considered to be highly collectivistic (Van Hoye et al., 2013), a type of culture that values the group benefit. Thus, Turkish employees’ dedication is likely to be associated with the commitment to the social group in an organization. Hence, a dedicated employee may not want to leave the company due to

Table 3
Impacts of Working-from-Home on Engagement and Burnout.

| DV: Vigor |  |  |  |  |  |
|-----------|---|---|---|---|---|
| (Constant) | -0.46 | 0.61 | -0.75 | 0.46 |
| Working Status | 0.29 | 0.15 | 0.15 | 2.01 | .046* |
| Gender | 0.00 | 0.17 | 0.00 | 0.02 | 0.98 |
| Marital | 0.27 | 0.19 | 0.12 | 1.40 | 0.16 |
| Position | -0.18 | 0.16 | -0.09 | -1.13 | 0.26 |
| Work Experience | 0.05 | 0.08 | 0.05 | 0.59 | 0.55 |
| Number of Dependents | -0.08 | 0.08 | -0.08 | -0.97 | 0.33 |
| Year of Birth | -0.01 | 0.08 | -0.01 | -0.15 | 0.88 |
| DV: Dedication |  |  |  |  |  |
| (Constant) | -0.76 | 0.62 | -1.22 | 0.22 |
| Working Status | -0.09 | 0.15 | -0.04 | -0.60 | 0.55 |
| Gender | 0.16 | 0.17 | 0.07 | 0.95 | 0.34 |
| Marital | 0.18 | 0.20 | 0.08 | 0.90 | 0.37 |
| Position | 0.15 | 0.16 | 0.07 | 0.89 | 0.37 |
| Work Experience | -0.03 | 0.08 | -0.03 | -0.43 | 0.67 |
| Number of Dependents | -0.10 | 0.09 | -0.10 | -1.22 | 0.22 |
| Year of Birth | 0.00 | 0.08 | 0.00 | -0.04 | 0.97 |
| DV: Absorption |  |  |  |  |  |
| (Constant) | -0.25 | 0.61 | -0.41 | 0.68 |
| Working Status | -0.17 | 0.15 | -0.09 | -1.18 | 0.24 |
| Gender | 0.34 | 0.17 | 0.15 | 1.97 | 0.05 |
| Marital | 0.30 | 0.19 | 0.13 | 1.53 | 0.13 |
| Position | -0.18 | 0.16 | -0.09 | -1.09 | 0.28 |
| Work Experience | -0.01 | 0.08 | -0.01 | -0.15 | 0.88 |
| Number of Dependents | -0.10 | 0.08 | -0.10 | -1.13 | 0.26 |
| Year of Birth | -0.04 | 0.08 | -0.04 | -0.48 | 0.63 |
| DV: Burnout |  |  |  |  |  |
| (Constant) | 0.77 | 0.62 | 1.24 | 0.22 |
| Working Status | -0.15 | 0.03 | -0.38 | 0.70 |
| Gender | 0.07 | 0.17 | 0.03 | -0.40 | 0.69 |
| Marital | -0.34 | 0.20 | -0.15 | -1.73 | 0.08 |
| Position | 0.00 | 0.16 | 0.00 | 1.00 | 0.00 |
| Work Experience | 0.00 | 0.08 | 0.00 | 1.00 | 0.00 |
| Number of Dependents | 0.06 | 0.09 | 0.06 | 0.67 | 0.51 |
| Year of Birth | 0.13 | 0.08 | 0.13 | 1.56 | 0.12 |

* significant at 0.05 level
the potential negative impacts on the group, resulting in a high effect size of dedication on turnover. However, working-from-home hinders employees from interacting with their colleagues socially. Thus, the loss of psychological/social relatedness and belongingness may result in employees being less motivated to stay in an organization, which can significantly weaken the negative effect of dedication on turnover intentions.

5.1. Theoretical contributions

This study is the first study that aims to understand management-level hotel employees’ behavioral reactions to working-from-home during the COVID-19 pandemic. Existing studies heavily focused on estimating the impact of the pandemic on the magnitude of working-from-home (e.g., Bick et al., 2020; Kramer and Kramer, 2020). In contrast, this study investigates how working-from-home influences and moderates management-level hotel employees’ behaviors and job outcomes. The results of this study provide a profound understanding of employees’ behavior changes caused by working-from-home.

In addition, this study extends our understanding of the engagement-burnout relationship. Through examining the moderation effect of working-from-home, this study found a positive relationship between burnout and work-from managers working from home. This finding demonstrates that the general relationship of engagement and burnout should not be assumed during crises and pandemics. Therefore, even though previous studies generally suggest that there is no causality between engagement and burnout (e.g., Kim et al., 2009; Hollens-Gumbau and Salanova-Soria, 2014), it is critical to consider the functions of different engagement dimensions and the existence of contextual factors (e.g., work-home interference).

Furthermore, existing studies have documented that work-home interference contributes to work stress (Delanoijje et al., 2019; Huang et al., 2018). However, the direct relationship between work-home interference and turnover intention has been found in some studies (e.g., Karatepe and Karadas, 2014) but not in others (e.g., Wright et al., 2014). Drawing on the Cognitive Activation Theory of Stress, this study argues that work-home interference is likely to be a moderator when predicting turnover intentions. The results of this study suggest that dedication and burnout cause different impacts on turnover intentions across two working conditions (working-from-home versus working-at-workplace) that differ in terms of work-home interference.

5.2. Managerial implication

It is undeniable that working-from-home may result in positive job outcomes. The results of this study indicate that working-from-home promotes employees’ vigor. Existing studies suggest that vigor may contribute to increases in performance (e.g., Carmeli et al., 2009). These findings suggest that increases in productivity caused by working-from-home during the pandemic revealed in previous studies (e.g., Gurciiek, 2020) is likely to be caused by increases in employees’ vigor. In addition, as argued by other scholars (e.g., Lister, 2020), working-from-home may reduce the company’s operating costs such as utility and office supply expenses, therefore, increase profitability. However, industry leaders should not overlook the negative impacts of working-from-home.

According to the findings of this study, working-from-home tend to amplify the effects of negative job-related factors (e.g., absorption, burnout) and undermine the impacts of positive factors (e.g., dedication), which is, employees who are absorbed in their work are more likely to develop burnout and turnover intentions when they work from home than work at the workplace. The reason is that absorbed employees who work from home tend to experience higher-level of work-home interference. Moreover, the blurry line between work and home prevents them from an effective detachment from work, resulting in negative mindset toward job stress (Ursin and Eriksen, 2004). Given that these consequences (e.g., burnout and turnover intentions) are likely to be developed gradually, working-from-home may cause more negative job outcomes than positive in the long run.

To mitigate the drawbacks of working-from-home, the following recommendations should be considered by hotel firms. First, hotel firms should carefully examine how managers engage in work from three perspectives: vigor, dedication, and absorption. Since absorption mainly causes negative work outcomes when managers work from home, hotel firms should consider reducing managers’ work pressure to decrease absorption by implementing flexible deadlines and efficient management and communication systems. In addition, more job resources such as emotional support and detailed work instructions can be provided to promote vigor and dedication.

Second, hotel firms should develop policies to facilitate employees setting a clear line between home and work to reduce work-home interference. On one hand, firms can consider reducing the triggers of work stimuli at employees’ homes (Cropley et al., 2006). For example, firms can consider providing managers who work from home with work laptops. This way, employees can have separate computers for personal and business needs that allow them to physically detach themselves from work after hours. On the other hand, a rigid time schedule should be used to minimize work tasks and work-related communications after working hours, allowing managers to psychologically detach from work.

6. Conclusion

COVID-19 pandemic has resulted in substantial operational changes in the hospitality industry to ensure employees’ health and safety (Gursoy and Chi, 2020; Yu et al., 2021). Working-from-home is believed to be not only one of the best strategies to maintain the health and safety of the society, and the viability of the economy and businesses during the pandemic but also a long-term industry trend to promote work-life balance (Lister, 2020). Focusing on employees’ behavioral responses

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**Table 5**

Moderation Effect of Working-from-Home.

| Model 1: Moderation Effect on Absorption-Burnout Relationship | DV: Burnout | b | SEb | β | t | p-value |
|-------------------------------------------------------------|-------------|---|-----|---|---|---------|
| (Constant)                                                   | 0.54        | 0.59 | 0.92 | 0.36 |
| Absorption                                                  | -0.55       | 0.31 | -0.55 | -1.81 | 0.07 |
| Dedication                                                  | 0.39        | 0.38 | 0.39  | 1.01  | 0.31 |
| Vigor                                                       | -0.53       | 0.30 | -0.53 | -1.75 | 0.08 |
| Working Status                                              | 0.10        | 0.14 | 0.05  | 0.68  | 0.49 |
| Absorption * Working Status                                 | 0.54        | 0.20 | 0.88  | 2.71  | 0.01 |
| Dedication * Working Status                                 | -0.29       | 0.23 | -0.45 | -1.17 | 0.24 |
| Vigor * Working Status                                       | 0.11        | 0.19 | 0.17  | 0.58  | 0.56 |
| Gender                                                      | -0.17       | 0.17 | -0.08 | -1.02 | 0.31 |
| Marital                                                     | -0.33       | 0.19 | -0.14 | -1.78 | 0.08 |
| Position                                                    | 0.04        | 0.16 | 0.02  | 0.25  | 0.80 |
| Work Experience                                             | 0.01        | 0.08 | 0.01  | 0.12  | 0.91 |
| Number of Dependents                                        | 0.04        | 0.08 | 0.04  | 0.47  | 0.64 |
| Year of Birth                                               | 0.13        | 0.08 | 0.13  | 1.62  | 0.11 |

| Model 2: Moderation Effect on Engagement, Burnout, and Turnover Relationships | DV: Turnover | b | SEb | β | t | p-value |
|-----------------------------------------------------------------------------|-------------|---|-----|---|---|---------|
| (Constant)                                                                 | -0.23       | 0.46 | -0.47 | 0.64 |
| Absorption                                                                  | 0.00        | 0.24 | 0.00  | 0.99 |
| Dedication                                                                  | -0.84       | 0.29 | -0.84 | -2.86 | 0.005* |
| Vigor                                                                        | 0.17        | 0.24 | 0.17  | 0.72  | 0.47 |
| Burnout                                                                     | 0.18        | 0.18 | 0.18  | 1.01  | 0.31 |
| Working Status                                                              | 0.47        | 0.21 | 0.23  | 4.24  | < 0.001 |
| Absorption * Working Status                                                 | 0.11        | 0.16 | -0.19 | -0.73 | 0.47 |
| Dedication * Working Status                                                 | 0.46        | 0.18 | 0.76  | 2.57  | 0.01* |
| Vigor * Working Status                                                       | -0.08       | 0.15 | -0.13 | -0.54 | 0.59 |
| Burnout * Working Status                                                     | 0.26        | 0.11 | 0.43  | 2.38  | 0.02* |
| Gender                                                                      | -0.39       | 0.13 | -0.17 | -0.30 | 0.13* |
| Marital                                                                     | 0.04        | 0.15 | 0.02  | 0.25  | 0.80 |
| Position                                                                    | -0.02       | 0.12 | -0.01 | -0.13 | 0.90 |
| Work Experience                                                             | 0.06        | 0.06 | 0.06  | 1.11  | 0.27 |
| Number of Dependents                                                        | -0.03       | 0.06 | -0.03 | -0.44 | 0.66 |
| Year of Birth                                                               | -0.07       | 0.06 | -0.07 | -1.17 | 0.24 |

*p-value significant at 0.05 level
to working-from-home during the COVID-19 pandemic, this study examined management-level hotel employee’s engagement, burnout, and turnover intentions by investigating the direct and moderation effects of working-from-home.

This study is not free of limitations. First, due to the constraints imposed on data collection methods by the COVID-19 pandemic, a cross-sectional self-reported online survey was used. Even though this approach allows this study to reach managers who work from home and who work at the workplace using the same survey platform and the same sampling method, the order of causality between variables in the model cannot be assumed. Thus, future studies should consider investigating the same issue by utilizing other data collection approaches. In addition, this study collected data from Turkish hotels. As suggested by existing studies (e.g., Chi et al., 2020; Gursoy et al., 2019; Lin et al., 2019), the cultural background of the study site may limit the generalizability of the study findings. Therefore, future studies are needed to understand employees’ reactions toward working-from-home in different cultural contexts.

Furthermore, this study focuses on examining the impacts of working-from-home on hotel managers. The results of the study may or may not be generalized to employees of other ranks/titles. Moreover, since the relationships, especially the one between engagement and burnout, can be caused by some common antecedents, such as the personality of the participants (Kim et al., 2009) or the job characteristics...
such as type of hotel, department, and working hours, it might be necessary to include these potential confounding variables as control variables in future studies. Lastly, this study assumes that working-from-home involves higher levels of autonomy and work-home interference. Since the impacts of working-from-home may differ across different jobs, it is useful for future research to directly measure these variables.

Appendix A. Descriptive statistics

| Item No. | Descriptions | Mean | SD  | Skewness | Kurtosis |
|----------|--------------|------|-----|----------|----------|
| **Engagement-Vigor (VI)** | | | | | |
| VI1 | At my work, I feel bursting with energy | 3.70 | 1.13 | -0.77 | -0.09 |
| VI2 | At my job, I feel strong and vigorous | 3.76 | 1.02 | -0.67 | -0.03 |
| VI3 | When I get up in the morning, I feel like going to work | 3.71 | 1.11 | -0.75 | -0.06 |
| **Engagement-Dedication (DE)** | | | | | |
| DE1 | I am enthusiastic about my job | 4.10 | 0.90 | -1.12 | 1.50 |
| DE2 | My job inspires me | 4.11 | 0.89 | -1.12 | 1.54 |
| DE3 | I am proud on the work that I do | 4.17 | 0.90 | -1.20 | 1.65 |
| **Engagement-Absorption (AB)** | | | | | |
| AB1 | I feel happy when I am working intensely | 3.82 | 1.02 | 0.00 | 0.64 |
| AB2 | I am immersed in my work | 3.64 | 1.07 | -0.66 | -0.00 |
| AB3 | I get carried away when I’m working | 3.73 | 1.05 | -0.76 | 0.17 |
| **Burnout (B)** | | | | | |
| B1 | Tired | 4.00 | 1.88 | 0.04 | -1.16 |
| B2 | Disappointed with people | 3.99 | 1.90 | -0.09 | -1.19 |
| B3 | Hopeless | 3.40 | 2.05 | 0.23 | -1.34 |
| B4 | Trapped | 3.03 | 2.03 | 0.50 | -1.22 |
| B5 | Helpless | 3.04 | 2.14 | 0.56 | -1.20 |
| B6 | Depressed | 2.57 | 1.97 | 0.89 | -0.70 |
| B7 | Physically weak/Sickly | 2.57 | 2.00 | 0.95 | -0.60 |
| B8 | Worthless/Like a failure | 2.81 | 2.09 | 0.72 | -1.01 |
| B9 | Difficulties sleeping | 3.49 | 2.18 | 0.19 | 1.14 |
| B10 | “I’ve had it” | 2.54 | 2.01 | 1.00 | -0.55 |
| **Turnover Intention (TI)** | | | | | |
| TI1 | I seriously think about quitting my job | 1.84 | 1.09 | 1.15 | 0.38 |
| TI2 | As soon as I get a better job, I will leave this job | 1.92 | 1.18 | 1.20 | 0.47 |
| TI3 | I often think about quitting this job | 1.79 | 1.08 | 1.26 | 0.62 |

Appendix B. Demographic profile

| Overall (n = 211) | Working-at-Workplace (n = 106) | Working-from-Home (n = 105) |
|-------------------|-------------------------------|-------------------------------|
| **Gender** | | | |
| Male | 153 | 72.5 | 90 | 84.9 | 63 | 60 |
| Female | 58 | 27.5 | 16 | 15.1 | 42 | 40 |
| **Year of Birth** | | | | | |
| Pre-1960 | 3 | 1.4 | 1 | 0.9 | 2 | 1.9 |
| 1960–1979 | 127 | 60.2 | 62 | 58.5 | 65 | 61.9 |
| 1980–1999 | 81 | 38.4 | 43 | 40.6 | 38 | 36.2 |
| **Education** | | | | | |
| Primary/Secondary School | 9 | 4.3 | 8 | 7.5 | 1 | 1 |
| High School | 38 | 18 | 28 | 26.4 | 10 | 9.5 |
| Associate Degree | 28 | 13.3 | 14 | 13.2 | 14 | 13.3 |
| Bachelor’s degree | 104 | 49.3 | 48 | 45.3 | 56 | 53.3 |
| Postgraduate | 32 | 15.2 | 8 | 7.5 | 24 | 22.9 |
| **Marital Status** | | | | | |
| Single | 51 | 24.2 | 21 | 19.8 | 30 | 28.6 |
| Married | 160 | 75.8 | 85 | 80.2 | 75 | 71.4 |
| **Number of Dependents** | | | | | |
| None | 32 | 15.2 | 11 | 10.4 | 21 | 20 |
| 1 | 43 | 20.4 | 21 | 19.8 | 22 | 21 |
| 2 | 60 | 28.4 | 30 | 28.3 | 30 | 28.6 |
| 3 | 54 | 25.6 | 29 | 27.4 | 25 | 23.8 |
| 4 and more | 22 | 10.4 | 15 | 14.2 | 7 | 6.7 |
| **Position** | | | | | |
| Mid-level manager | 101 | 47.9 | 43 | 40.6 | 58 | 55.2 |
| Upper-level manager | 110 | 52.1 | 63 | 59.4 | 47 | 44.8 |
| **Work Experience** | | | | | |
| Less than 1 Year | 2 | 0.9 | 1 | 0.9 | 1 | 1 |
| 1–5 Years | 14 | 6.6 | 6 | 5.7 | 8 | 7.6 |
| 5–10 years | 26 | 12.3 | 11 | 10.4 | 15 | 14.3 |
| More than 10 years | 169 | 80.1 | 88 | 83 | 81 | 77.1 |
Ursin, H., Eriksen, H.R., 2004. The cognitive activation theory of stress. Psychoneuroendocrinology 29 (5), 567–592. https://doi.org/10.1016/s0306-4530(03)00091-x.

Van Hoye, G., Ban, T., Cromheecke, S., Lievens, F., 2013. The instrumental and symbolic dimensions of organisations’ image as an employer: a large-scale field study on employer branding in Turkey. Appl. Psychol. 62 (4), 543–557. https://doi.org/10.1111/j.1464-0597.2012.00495.x.

Wayne, S.J., Shore, L.M., Liden, R.C., 1997. Perceived organizational support and leader-member exchange: a social exchange perspective. Acad. Manag. J. 40 (1), 82–111.

Wright, K.B., Abendschein, B., Wombacher, K., Shelton, A., 2014. Work-related communication technology use outside of regular work hours and work life conflict. Manag. Commun. Q. 28 (4), 507–530. https://doi.org/10.1177/0893318914533332.

Yu, J., Park, J., Ilyun, S.S., 2021. Impacts of the COVID-19 pandemic on employees’ work stress, well-being, mental health, organizational citizenship behavior, and employee-customer identification. J. Hosp. Mark. Manag. 30, 529–548. https://doi.org/10.1080/19366623.2021.1867283.

Zhang, M., Geng, R., Hong, Z., Song, W., Wang, W., 2020. The double-edged sword effect of service recovery awareness of frontline employees: from a job demands-resources perspective. Int. J. Hosp. Manag. 88, 102536 https://doi.org/10.1016/j.ijhm.2020.102536.