Procrastination is not only a "thief of time", but also a thief of happiness: it buffers the beneficial effects of telework on well-being via daily micro-events of IT workers

Received 16 May 2022
Revised 22 June 2022
14 July 2022
21 July 2022
Accepted 23 July 2022

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Abstract

Purpose – This study draws on the affective events theory (AET) to understand how telework may influence workers' well-being. Hence this study aimed to (1) analyze the indirect relationship between telework and well-being via daily micro-events (DME), and (2) test whether procrastination would moderate this indirect effect.
Design/methodology/approach – To test the goals, data were gathered from a sample of teleworkers in the IT sector (N = 232). To analyze the data, a moderated mediation analysis was performed in SPSS with PROCESS macro.
Findings – The results showed that micro-daily events mediated the positive relationship between telework and well-being; however, this relation was conditional upon the levels of workers' levels of procrastination, that is, this link became weaker for those who were procrastinators.
Practical implications – By highlighting the importance of telework, DME and procrastination, this study offers managers distinct strategies for enhancing their employees' well-being.
Originality/value – Despite the existing research investigating the effect of telework on well-being, studies investigating the intervening mechanisms between these two constructs are scarce. Moreover, there is a lack of research investigating the moderating effect of procrastination in these relations. Hence, this study fills these gaps and advances knowledge on the process that explains how (via DME) and when (when procrastination is low) teleworking influences workers' well-being.

Keywords Micro-daily events, Telework, Well-being, Procrastination, Information technology
Paper type Research paper

Compliance of ethical standard statement: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants involved in the study.
Data availability: The data are available only upon reasonable request to the authors.
Conflict of interest statement: The authors declare that they have no conflicts of interest.

International Journal of Manpower
Vol. 45 No. 1, 2024
pp. 89-108
Emerald Publishing Limited
0143-7720
DOI 10.1108/IJM-05-2022-0223

Introduction

On March 11, 2020, a pandemic situation was declared (Dhama *et al.*, 2020). To prevent the spread of the virus, many countries implemented prevention and control strategies (e.g. closing schools, universities and restaurants) (Dhama *et al.*, 2020), while organizations had to adapt to the new reality and rules imposed by the World Health Organization (WHO) – such as telework to promote physical distancing (O'Brien and Aliabadi, 2020).

This pandemic context has triggered uncertainty among people in general (e.g. Deev and Plíhal, 2022); thereby, well-being became an important resource for workers dealing with their new daily reality. Indeed, telework has been associated with benefits such as work flexibility or improved autonomy which in turn appears to deliver positive outcomes for well-being (e.g. Wang *et al.*, 2021). Further, while teleworking, employees experience several daily micro-events (DME), such as losing the Internet connection while meeting with co-workers or customers, or petting their dog while working (e.g. Junça-Silva, 2022).

The AET (Weiss and Cropanzano, 1996) has explored the importance of DME for work-related attitudes (e.g. Ohly and Schmitt, 2015) and proposes that the workplace is an affective context (Ashkanasy and Humphrey, 2011) in which DME occur, triggering affective reactions that influence attitudes (e.g. satisfaction) and behaviors (e.g. performance). Despite the already demonstrated importance of DME, in traditional working settings, for workers' well-being (e.g. Chacko and Conway, 2019; Kim *et al.*, 2018; Klaiber *et al.*, 2021), there is limited evidence of teleworking settings. Thus, this study aimed to fill this gap and relied on the AET to argue that teleworking provides opportunities for the occurrence of DME that will influence workers' well-being.

Furthermore, the AET argues that the relationship between DME and their consequences depends on the personality traits, such as procrastination. Procrastination – the act of delaying tasks – appears to be particularly important in teleworking as it may hinder or facilitate workers' well-being, satisfaction and performance (e.g. Arenas *et al.*, 2022; Muller and Niessen, 2019; Wang *et al.*, 2021). Procrastination is a trait that leads to daily procrastinating behaviors and affects between 15 and 20% of working adults (Harriott and Ferrari, 1996); at work, it is characterized by being a self-regulatory failure of tasks and is associated with high costs for the individual (e.g. dismissal) and the organization (drop in productivity) (Nguyen *et al.*, 2013). In telework, procrastinating behaviors (for instance, doing the laundry, watching YouTube during the period of work and online shopping, among other examples) have been associated with negative outcomes such as lower performance and affective well-being (e.g. Wang *et al.*, 2021).

This study contributes to the telework, DME, and well-being literature in the following ways: first, there is a scarcity of studies linking telework to specific DME. Thus, this study provides empirical evidence to bridge this gap. In their recent work, Junça-Silva *et al.*, 2021, emphasized the need for studies that explore DME in the context of telework and explore how these may impact teleworkers' well-being, as this is to date unknown. These findings have the potential to expand the understanding of how telework creates conditions for the occurrence of DME, and how these can stimulate IT workers' well-being. Understanding what might influence teleworkers' well-being is of particular importance because it impacts how workers feel and behave during work (e.g. Anlesinya *et al.*, 2020; Jamal *et al.*, 2021; Kumar *et al.*, 2022), and it has a significant impact on their overall performance. This is supported by the happy-productive worker thesis (Ayala *et al.*, 2017; Cropanzano and Wright, 2001). In addition, it is relevant to consider the research context of the study – the IT industry. IT workers are known for having heavy workloads, with increased job demands and complex jobs which tend to lead to higher levels of fatigue, an increased risk of incidents, slower time reactions and decreased performances (see Smith and Smith, 2017). Therefore, it is crucial to understand what conditions and situations may uplift these workers' well-being to avoid health and performance problematic issues.

As such, to understand how telework influences well-being, a DME perspective was adopted, and to demonstrate when it occurs, procrastination (a nuclear trait for telework success and workers' well-being; Arenas *et al.*, 2022) was identified as a moderator of the process.

This paper will briefly introduce the concept of telework, and how it may influence workers' well-being, then it follows with an explanation of the mediating role of DME, and further the moderating role of procrastination. After that, the method is explained, and then the test of the hypotheses. We finalize with the discussion of the findings, present some future directions for research and end with the practical implications.

The origins and rise of telework

The origin of telework began with the experience of Thompson, director of the Pennsylvania Railroad, in the USA, who, in 1857, implemented a private telegraph system, to be able to manage remote divisions (Ward, 1997). However, it was in the mid-1970s, during the oil crisis, that it became truly important. Nilles, its pioneer, highlighted the importance of this model of work, after having concluded that, if the use of information and communication technologies (ICT) were used, it would be possible to reduce the costs in terms of fuel, travel from work to home, home-employment and reduce the air pollution (Junça-Silva and Coelho, 2022). In 1973, Nilles implemented remote functions at the National Aeronautics and Space Administration (NASA), to respond to the problems of physical distance between members of the same team (Bailey and Kurland, 2002). With the implementation of telework, these teams were able to ensure profitability and the fulfillment of organizational goals, even when working physically distance. Telework was firstly adopted by organizations that had greater dominance in the market and that represented the economic sector at the time (Wojcak *et al.*, 2016). However, it was in the 90s that telework has been increasing all over the world (Tavares, 2017).

Telework is also known as telecommuting, remote work, distributed work, virtual work, flexible work, flexplace, hybrid work, or distance work (Allen *et al.*, 2015), however, telework is the term used more frequently in the European literature (Fonner and Rollof, 2010). Telework is a form of flexible work, far from the company's headquarters, requiring the use of technology, which must be used to facilitate communication between the employee and the organization (Bailey and Kurland, 2002; Kumar *et al.*, 2022). Thereby, telework is a broader form of telecommuting (Allen *et al.*, 2015) that may encompass full-time work from home but is not limited to home-based work; instead, it may include work from a home-based business, telecenters, call centers, or working from another office within the organization's location. In addition, the concept of flexible work arrangements is referred to as telecommuting but also includes other kinds of flexible work programs such as flextime and compressed work weeks, and therefore may be referred to other settings than telework *per se* (Allen *et al.*, 2013; Jamal *et al.*, 2021). Moreover, remote work and distributed work are generally referred to more than telecommuting or teleworking and can denote any form of work not conducted in the central office, including work at branch locations and different business units (Bosch-Sijtsema and Sivunen, 2013). Finally, *team virtual work* describes individuals, groups of individuals, or organizations using technology to communicate, because they cannot do it face-to-face due to geographic distance (Adamovic, 2018).

In 2020, the world was surprised by the COVID-19 pandemic, which forced a drastic change in the way people lived and worked. As a result, the governments were forced to take measures and implement contingency plans to prevent the spread of the virus. One of the measures was social isolation, which made telework mandatory, whenever possible, to reduce the contact between persons (Eurofound, 2020).

Theoretical framework and hypotheses development

The relationship between telework and well-being

The benefits of telework for workers' well-being have been acknowledged (e.g. Tavares, 2017). Studies focused on well-being are divided into two perspectives: eudemonic and hedonic. This study was focused on the hedonic perspective of well-being because it is related to a form of well-being (subjective well-being) that is more prone to DME (e.g. Junça-Silva *et al.*, 2021) and is the one that has been more applied to the working context (e.g. Diener *et al.*, 2020).

The eudemonic perspective argues that well-being is more than the simple pursuit of pleasure and avoidance of pain, but is related to the practice of virtuous, honest, morally correct, meaningful actions, which in the latter case, they provide personal growth (Ryan and Deci, 2001; Ryff and Singer, 2008). Ryff's (1989) model of psychological well-being is the closest concept to eudemonics and includes six dimensions: self-acceptance, autonomy, life purpose, mastery of the environment, personal growth and positive relationships with others. As such, a happy person is the one who does what is right and virtuous, actively seeks to achieve meaningful goals, allows and stimulates personal growth, and strives to use and develop their skills and knowledge, regardless of the emotions experienced through this process (Warr and Inceoglu, 2012).

The hedonic perspective assumes that happiness is the search for pleasure and the avoidance of pain (e.g. Kesebir and Diener, 2009) and is linked to subjective well-being (SWB). This includes two dimensions: the cognitive and the affective. The cognitive dimension refers to the cognitive evaluation that an individual makes about life (e.g. satisfaction in general, or satisfaction with specific areas, such as work, relationships, health and leisure time) (Diener, 2009). The affective dimension refers to the daily emotional experiences and encompasses the frequent experience of positive emotions and the lower frequency, or absence, of negative emotions (Diener *et al.*, 1999). This dimension is thereby related to individuals' emotional reactions to general events (e.g. the death of a loved one, marriage and unemployment) and specific, or DME (e.g. arguing with someone) (Junça-Silva *et al.*, 2021). These events can be positive, and stimulate positive emotional reactions, such as joy, or contentment (Diener *et al.*, 1999), or negative, leading the person to experience negative emotions, such as sadness, or anger (Junça-Silva *et al.*, 2017). For Russell (1980), a happy person evaluates life positively and has a predominance of positive emotional experiences over negative ones. The level of life satisfaction, the frequency of positive events (e.g. happiness) and negative events (e.g. anguish) determine the individual's SWB (Diener *et al.*, 2003). Diener *et al.* (1999) showed that SWB is a reliable indicator of the quality of life. At work, SWB can be defined as the degree to which a person is satisfied with work and experiences more positive emotions (e.g. joy, enthusiasm) than negative ones (e.g. sadness, anger; Bakker and Oerlemans, 2011).

Several empirical studies demonstrated the relationship between teleworking and well-being' indicators (e.g. Heiden *et al.*, 2021). Indeed, several researchers have shown that teleworkers are more satisfied with their work, experience more positive emotions and feel happier (e.g. McNaughton *et al.*, 2014; Vega *et al.*, 2015). By allowing better management, organization and prioritization of activities, teleworking contributes to the conciliation of multiple roles and, ultimately, improves work-family balance, which, in turn, results in increased well-being (Buomprisco *et al.*, 2021). Moreover, teleworkers seem to have the advantage of making better use of their time, as they do not waste so much time traveling from home to work and vice-versa (Tavares, 2017). This time can be used for other things (e.g. leisure) that contribute to individuals' well-being (e.g. Haiden *et al.*, 2021). Often, teleworkers have the autonomy to decide about their working hours (e.g. working in the period when the person is most efficient) and increase job satisfaction (e.g. Kawada, 2020). Moreover, Cohen *et al.* (2007) showed that telework reduced stress related to commuting to work and vice-versa. Thus, based on the aforementioned findings it is expected that,

H1. Telework will be positively related to well-being.

The relationship between telework and daily micro-events

The AET proposes that the working settings create conditions for the occurrence of DME provoking emotional reactions that influence the attitudes and behaviors of employees in the workplace (Weiss and Cropanzano, 1996). Daily micro-events are the tiny things that influence how individuals feel and behave in their daily life (Chacko and Conway, 2019).

Despite the significant amount of research that demonstrates the prevalence of DME in traditional working contexts (e.g. Chacko and Conway, 2019; Kim *et al.*, 2018; Klaiber *et al.*, 2021), so far, no studies are exploring these events in the context of telework. The context of telework is as important as the traditional working settings; it has specific characteristics that make this context unique, for instance, it promotes autonomy, improves the flexibility of the work schedule and enhances the need for control and organizational trust. Certainly, these characteristics create conditions for the occurrence of telework-related DME. As such, relying on the premise of the AET that states that the working context promotes the occurrence of DME, we argue that even in teleworking settings workers will experience DME, such as being interrupted by emails or chats, being controlled more tightly by the supervisor, being asked to do some tasks after hours, or taking a break to pet their dog. Therefore, the following hypothesis was defined:

H2. Telework will be positively related to DME.

The relationship between daily micro-events and well-being

An empirical line of investigation focused on well-being predictors has suggested that it is strongly influenced by contextual variables, such as DME (Junça-Silva *et al.*, 2021).

DME can be negative or positive. Negative DME are named daily hassles and have been defined as micro-irritations or micro-stressors (e.g. receiving negative feedback, being interrupted at work, or having to deal with someone in a bad mood at work; Junça-Silva *et al.*, 2017). According to Lazarus (1993), daily hassles are the little things that somehow irritate or frustrate individuals at work. These types of micro-events tend to affect emotions, thoughts and behaviors, which impair well-being (Domagalski and Steelman, 2005; Junça-Silva *et al.*, 2021), However, the way individuals deal with these types of events, and their personality significantly influence their resulting attitudes (Junça-Silva *et al.*, 2020).

On the other hand, positive DME or micro-satisfactions have been named daily uplifts and seem to positively influence the individual's day, as they tend to create positive emotions (e.g. pride, joy) influencing daily well-being (Lazarus, 1991). According to Junça-Silva and her colleagues (2017), daily uplifts are the positive and pleasurable experiences that occur throughout the working day (e.g. receiving positive feedback about performance, receiving a compliment, having a pleasant break from work). Thus, employees who tend to experience frequent daily uplifts experience more positive emotions (Junça-Silva *et al.*, 2017) which can lead to higher levels of well-being (Sonnentag *et al.*, 2010).

Relying on the AET and on the literature, it is expected that:

H3. DME will be positively related to well-being.

The mediating role of daily micro-events

As described by the AET, the working context promotes several conditions that prompt the occurrence of diverse kinds of DME. There are likely to influence how workers feel while teleworking. The teleworking context is likely to create daily hassles related to virtual meetings, tight control over workers' performance, or intensification in daily working hours. Moreover, it can also promote the occurrence of daily uplifts such as fewer interruptions by

work colleagues, improved communication with superiors or colleagues, and improved flow of concentration while teleworking, among others. The balance between DME (daily hassles and uplifts) in teleworking may explain why telework influences workers' well-being. In other words, telework may influence workers' well-being because it creates certain DME that, in turn, affect how workers feel while (tele)working.

Empirically, there have been demonstrations of the relationship between the work context, DME and well-being. For instance, Paterson and Cary (2002) suggested that affective reactions, along with job characteristics, affected employee satisfaction and other attitudes. Hosie and Sevastos (2010) also highlighted the importance of the work context in the origin of DME, and consequently, in the affective well-being of employees. Junça-Silva *et al.* (2017) showed that daily uplifts triggered positive affective experiences that increased work engagement and well-being. Also, Rueff-Lopes *et al.* (2017) showed that DME influenced emotional (e.g. enthusiasm), physiological (e.g. heartbeat) and attitudinal (e.g. job satisfaction) responses. Chacko and Conway (2019) demonstrated that micro-events related to human resource management policies predicted daily well-being. Thus, according to the empirical evidence, the following hypothesis was stated.

H4. DME will mediate the positive relationship between telework and well-being.

The moderating role of procrastination

The way people think, feel and act, on a daily basis, is strongly influenced by dispositional and personalistic factors (e.g. Barrick *et al.*, 2013; Woods *et al.*, 2013). One of the personality traits that has often been identified as a prerogative for teleworking is procrastination (Tuk, 2012), as it tends to decrease productivity and well-being (Woods *et al.*, 2013).

Procrastination is the act of putting off or delaying, an action for a later time (Bachrach *et al.*, 2012). Schouwenburg and Lay (1995) defined procrastination as the behavior of delaying action because of one's own intentions. This dilatory behavior, in daily life, can range from putting off reading an email, not getting out of bed when you wake up or buying essential goods only as a last resort. Ferrari *et al.* (2005) defined procrastination as the tendency to avoid starting and completing tasks.

Procrastinating behaviors (e.g. leaving tasks until the last day, putting off doing something) are considered common behaviors since more than 24% of the adult population tends to consider themselves to be procrastinators (Ferrari *et al.*, 2007), however, the degree to which people procrastinate may differ across contexts (e.g. work or personal life), and in their intensity (low, medium and high; Klingsieck, 2013).

Some researchers have highlighted that the context of telework is particularly vulnerable to procrastination, as individuals have more freedom to manage their working day and working tasks (e.g. Wang *et al.*, 2021); for instance, Paulsen (2015) reported that employees spent an average of 1.5–3 hours on personal activities during teleworking hours – e.g. watching YouTube, spending time on social networks, or doing the laundry. For Taschetto and Froehlich (2019), lack of motivation, laziness, or the fact that there is no supervisor can increase the tendency to postpone tasks in telework, and thereby procrastinate. More recently, Wang *et al.* (2021), in a qualitative study, identified procrastination as one of the main daily behaviors, in telework, during the first quarantine resulting from the COVID-19 pandemic.

Therefore, we expect that procrastination – the individual tendency to delay job-related tasks – will be an individual difference that will influence how teleworkers react to DME and, thus, will create differences in well-being levels. There are three reasons why this may occur. First, procrastinating involves behaviors that distract the worker from their working goals and tasks (e.g. watching Netflix while working), which decreases performance (e.g. Wang *et al.*, 2021); when they feel less productive, due to their actions, they tend to feel responsible

by it, which diminishes their well-being (García-Buades *et al.*, 2020). Hence, procrastination may lead the individual to feel guilt, discomfort, or frustration about not having proceeded as planned or expected (e.g. Soomro and Shah, 2021). Therefore, these negative emotional states triggered by procrastination may harm the positive indirect effect of telework on well-being via DME.

Second, procrastination behaviors have been associated with the fear of failure, that is, individuals may delay their tasks to avoid the negative sensation of failing in performance or goal attainment (Soomro and Shah, 2021). When procrastination behaviors are due to the fear of failure it can trigger conditions of hindrance inefficiency and self-fulfillment that harm individuals' well-being (Ojo, 2019).

Third, procrastination may be a consequence of a lack of energy, persistence, or regulatory resources (e.g. Corkin *et al.*, 2011). When individuals experience a loss of personal resources, even in positive working settings with a positive ratio of DME they become more vulnerable to unhappiness or other negative affective states (Hobfoll *et al.*, 2018), which may buffer the beneficial effect of telework on well-being through the positive ratio of DME.

Empirically, some studies have shown that, in the context of telework, procrastinating behaviors influence the relationship between teleworking and well-being (e.g. Singh and Medhavi, 2021). For example, Arenas *et al.* (2022) have shown that procrastination is a disadvantage for telecommuting as it creates conditions to impair performance and, as a result, well-being. Wang *et al.* (2021), in a study with 522 telecommuters, showed that work overload was negatively associated with procrastinating behaviors and that these intensified the negative relationship between work overload and well-being. Similarly, Miron *et al.* (2021) showed that, during the COVID-19 pandemic, work overload in telework had an impact on teleworker satisfaction, however, this relationship was moderated by procrastination, as lower levels of procrastination strengthened the negative relationship between work overload and satisfaction. Therefore, based on the empirical evidence, and because procrastination is also related to feelings of guilt, discomfort and remorse (Krause and Freund, 2014), it is expected that individuals who tend to delay work tasks in the context of telework, will not feel so happy even if they experience a positive working day – with a great number of daily uplifts. Therefore, the following hypothesis was defined:

H5. Procrastination will moderate the strength of the mediated relationship between telework and well-being via DME, such that it will be stronger for individuals with lower levels of procrastination (vs. higher) (Figure 1).

Method

Participants and procedure

Before conducting the study, this was approved by the ethics committee of the university, thereby we could proceed with the study. A non-probabilistic convenience sample was used as it included participants from the researchers' professional networks. In this study, participated 232 teleworkers from six IT organizations, in the region of Lisbon (Portugal), of which 59% were female. The ages ranged between 18 and 63 years old (M = 33.59; SD = 9.38). The mean tenure was 4.8 years (SD = 6.82). Most participants held a higher

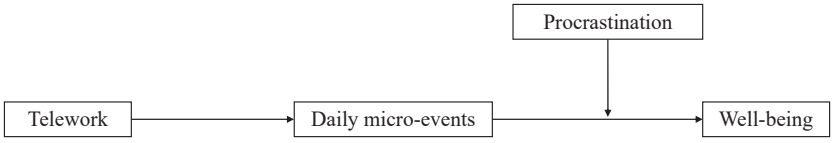


Figure 1.
Moderated mediation model

education degree (79%). About 39% of the respondents were team leaders/people managers – that is they had subordinates on their own. Furthermore, 59% were exclusively working from home, while the remaining 41% were in a hybrid model of telework (working from home combined with face-to-face work). They reported working about 42 hours per week ($SD = 9.40$) (see Table 1 for a summary).

Data were collected through a questionnaire-based survey on the second mandatory confinement due to the COVID-19 pandemic crisis (during January and March 2021). The quantitative methodology was chosen as there were already instruments validated and because in the period of data collection – mandatory confinement – the conduction of interviews was not advisable. IT professionals were emailed and asked to voluntarily participate in a study about telework and organizational behaviors. To meet the ethical requirements, the anonymity and confidentiality of their responses were assured (Islam *et al.*, 2020); if they agreed to participate in the study they replied to the email. Those who answered the email received another one with the link for the survey. Overall, from the 250 emails sent, were obtained 232 complete responses (response rate: 93%).

Measures

Telework. The 17-item e-work life scale (Grant *et al.*, 2019) was used to measure the perception of quality of life through four dimensions: (1) work-life interference (seven items; e.g. "I am happy with my work-life balance when e-working remotely"); (2) effectiveness/productivity (four items; e.g. "E-working makes me more effective to deliver against my key objectives and deliverables"); (3) organizational trust (three items; e.g. "My organization trusts me to be effective in my role when I e-work remotely") and; (4) flexibility (three items; e.g. "My line manager allows me to flex my hours to meet my needs, providing all the work is completed"). Participants responded on a five-point Likert scale (1-*strongly disagree*; 5-*strongly agree*). Cronbach's alpha was 0.77.

DME. The scale for daily hassles and uplifts at work was used (Junça-Silva *et al.*, 2020) to measure the frequency of daily hassles (10 items, $\alpha = 0.83$, e.g. "I was interrupted in what I was doing") and uplifts (eight items, $\alpha = 0.81$; e.g. "I received positive feedback about my performance"). The items were answered using a five-point Likert scale (1-*never*; 5-*four times or more*). Overall, the scale showed a Cronbach's alpha of 0.75.

Well-being. The five-item satisfaction with life scale (SWLS) was used (Diener *et al.*, 1985). Items were answered on a five-point Likert scale (1-*totally disagree*; 5-*totally agree*) (e.g. "I am satisfied with my life"). Cronbach's alpha was 0.90.

Procrastination. To measure the procrastination of employees in telework, the six items from the procrastination scale were used (Lay, 1986) (e.g. "I often complete tasks earlier than

Variable	%	*M (SD)*
Female	59	–
Male	41	–
Higher education degree	79	–
High school complete	21	–
Full telework	59	–
Hybrid telework	41	–
With a supervisor role	39	–
Age	–	33.59 (9.38)
Tenure	–	4.30 (6.82)
Weekly working hours	–	42 (9.40)

Table 1.
Sample characteristics

Note(s): $N = 232$

the required"). Participants responded using a five-point Likert scale (1-*extremely atypical*; 5-*extremely typical*). The internal consistency was 0.57.

Control variables. Sex and age were considered control variables. Past studies have suggested that these variables could influence how individuals experience DME and well-being (e.g. Ohly and Schmitt, 2015).

Data analyses

First, to analyze DME, we created a ratio between daily hassles and uplifts. The ratio allows us to assess the proportionality of daily uplifts as a function of daily hassles. That is, when the ratio is greater than 1, it means that daily uplifts outweigh daily hassles. The ratio is useful as it assumes that daily hassles and uplifts do not act independently, instead, there is an intersection among them (Junça-Silva *et al.*, 2021).

Then, we analyzed the internal consistencies of the descriptive analyses and the correlations with SPSS. Subsequently, to test our hypotheses we used PROCESS macro (Hayes, 2018). To test the direct effect hypotheses (h1, h2 and h3) we performed linear regression analyses. Further, to test the mediating hypothesis, we used model 4, and to test the moderated mediation hypothesis we used model 14 (Hayes, 2017). The products (moderations) were centered on their mean value, and the bootstrapping method was applied (5,000 resamples) to obtain confidence intervals.

As both the predictor and the criterion variables were measured at the same time, we took some measures to avoid the issue of common method variance (Podsakoff *et al.*, 2012; Islam and Tariq, 2018). First, we shuffled the questions of various measures and then used various dummy questions (e.g. I like pets). Second, Harman's single factor test was used to assess the common method variance, and it was observed that the single factor accounted for only 18.68% variance, which was much below the standard value of 50% proposed by Podsakoff *et al.* (2012), thus the common method variance issue was not severe for this study.

Results

Confirmatory factor analyses

Before testing the main hypotheses, four confirmatory factor analyses (CFA) were performed on the main variables of the study to confirm their independence by using the software JASP version 0.14.1. In line with convention, we used a combination of fit indices – comparative fit index (CFI), Tucker–Lewis Index (TLI), standardized root mean square residual (SRMR) and root mean square error of approximation (RMSEA) – to assess the adequacy of the model and compared the hypothesized model with several reasonable alternative measurement models (Bentler and Bonett, 1980). The CFI and TLI scores above 0.88 and the SRMR and RMSEA scores below 0.07 were assumed as a model with a good fit to the data (Hair *et al.*, 2010).

Four alternative models were tested. Model 1 was the hypothesized four-factor model comprising separate scales for telework, DME, well-being, and procrastination. Model 2 was a three-factor model where DME and well-being were combined into a unique factor. Model 3 was an alternative three-factor model where telework and DME were combined into a single factor. Model 4 was a one-factor solution in which all items were loaded onto a single factor. Table 2 shows that our hypothesized model (Model 1) provided a good fit for the data (CFI = 0.92, TLI = 0.90, SRMR = 0.07 and RMSEA = 0.05), and all other alternative models evidenced a poorer fit. These results together with the Cronbach alpha reliability scores across all the measurement scales evidenced the discriminant and convergent validity of the study; hence, we proceeded with the test of hypotheses.

Descriptive statistics

Table 3 shows the descriptive statistics, correlations and Cronbach's alphas.

Direct effect hypotheses. Hypothesis 1 stated that telework would positively influence workers' well-being. Linear regression analysis showed a positive and significant relationship between telework and well-being ($B = 0.66$, $t_{(1, 230)} = 7.29$, $p < 0.001$), lending support to hypothesis 1 ($F_{(1,230)} = 53.17$, $p < 0.001$ com $R^2 = 0.18$). Therefore, for each increment in the unity of the telework variable, well-being tended to increase by 66%.

Hypothesis 2 expected that telework would positively influence DME. The results showed a positive and significant relationship between telework and DME ($B = 0.61$, $t_{(1, 230)} = 9.18$, $p < 0.001$), lending support to hypothesis 2 ($F_{(1,230)} = 84.29$, $p < 0.001$ com $R^2 = 0.27$). Therefore, for each improvement in the unity of the telework, the ratio of DME increased by 61%.

Hypothesis 3 stated that DME would positively influence teleworkers' well-being. The findings evidenced a positive and significant relationship between DME and well-being ($B = 0.46$, $t_{(1, 230)} = 5.75$, $p < 0.001$), lending support to hypothesis 3 ($F_{(1,230)} = 33.10$, $p < 0.001$ com $R^2 = 0.12$). Therefore, for each improvement in the unity of the DME, well-being increased by 46%.

Mediation hypothesis. Hypothesis 4 expected that the relationship between telework and well-being would be mediated by DME. As shown in Table 4, telework was positively related to DME ($B = 0.61$, $t = 9.18$, $p < 0.001$). It appears that as the perceptions of telework improved, so did the ratio of DME. In turn, DME were positively related to employees' well-being ($B = 0.23$, $t = 2.60$, $p < 0.001$) and mediated the relationship between telework and well-being ($\gamma = 0.14$, [0.04, 0.24]). The total effect (c; $B = 0.66$, $p = 0.00$) between telework and well-being was significant. After the introduction of DME, the effect of telework on well-being remained significant (c'; $B = 0.52$, $p = 0.00$), proving to be a partial mediation (see Figure 2). As such, H4 was, thus, supported and explained 19% ($R^2 = 0.19$, $p < 0.01$) of the variance in well-being.

Moderated mediation hypothesis. To test H5 - the indirect effect of telework on well-being through DME would be moderated by procrastination, such that it would be stronger for individuals with lower levels of procrastination - we ran PROCESS Model 14. As expected, the

Measurement model comparison	SRMR	CFI	TLI	RMSEA
Model 1 (4-factor model: TW, DME, well-being and procrastination)	0.07	0.92	0.90	0.05
Model 2 (3-factor model: TW, procrastination and DME and well-being merged)	0.13	0.45	0.43	0.10
Model 3 (3-factor model: TW and DME merged, well-being and procrastination)	0.12	0.49	0.46	0.10
Model 4 (1-factor model: all measures loaded on a single latent factor)	0.13	0.36	0.34	0.11

Note(s): $N = 232$; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation. TW = telework; DME = daily micro-events

Table 2. Confirmatory factor analyses model fit indices

Variable	*M*	*SD*	1	2	3	4	5
1. Telework	3.30[1]	0.58	(0.77)				
2. Micro-daily events	1.61[1]	0.68	0.52**	(0.75)			
3. Well-being	3.38[1]	0.88	0.43**	0.36**	(0.90)		
4. Procrastination	2.66[1]	0.72	−0.06	−0.34**	−0.17*	(0.57)	
5. Age	33.59	9.38	−0.17*	−0.10	−0.14*	−0.07	–
6. Sex	–	–	0.21**	0.20**	0.12	0.01	−0.11

Note(s): $N = 232$; $^{*}p < 0.05$ $^{**}p < 0.001$. [1]Scale from 1 to 5. Cronbach's alfas are in brackets

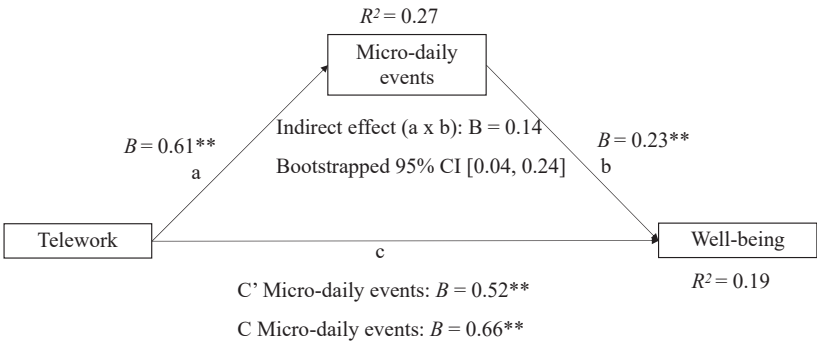
Table 3. Statistics descriptives, correlations and Cronbach's alphas

results (Table 5) showed a significant moderated mediation index (−0.15, 95% CI [−0.27, −0.03]), which means that the indirect effect of telework on well-being through DME varied according to the different levels of the moderating variable (procrastination), thereby lending support to hypothesis 5. An inspection of the slopes (Dawson and Ritcher, 2006), showed that, as expected, the indirect effect was only significant when procrastination presented lower levels (−1 SD: $B = 0.17$, $\beta = 0.06$, $p < 0.01$, 95% CI [0.06, 0.31]); the indirect effect was no longer significant when procrastination was high (+1SD: $B = -0.05$, $\beta = 0.09$, $p > 0.05$, 95%

Model	Daily micro-events (M)			Well-being (Y)		
	B	*SE*	*t*	*B*	*SE*	*t*
Telework	0.61**	0.07	9.18	0.52**	0.11	4.97
Daily micro-events	–	–	–	0.23**	0.09	2.60
Age	0.00	0.00	1.53	−0.01	0.00	−1.32
Sex	0.13	0.08	1.66	0.00	0.10	0.05
Indirect Effect	Effect (γ)	BootSE			LLCI - ULCI	
DME	0.14	0.05			[0.04, 0.24]	

Note(s): $N = 232$; $^{*}p < 0.05$ $^{**}p < 0.001$. *B* = Unstandardized coefficients; DME = Daily micro-events

Table 4. Summary regression table of the mediation model (H1)



Note(s): $^{**}p < 0.01$ (non-standardized regression coefficients with 5000 Bootstraped Samples)

Figure 2. Mediation model results

Model	Daily micro-events (M)			Well-being (Y)		
	B	*SE*	*T*	*B*	*SE*	*t*
Telework	0.61**	0.07	8.84	0.52**	0.11	4.97
Daily micro-events	–	–	–	0.23**	0.09	2.60
Procrastination	–	–	–	−0.13*	0.08	−1.72
DME * procrastination	–	–	–	−0.25*	0.11	−2.34
Age	0.00	0.00	1.53	−0.01	0.00	−1.77
Sex	0.13	0.08	1.66	−0.00	0.10	−0.07
Index of mod-med effect	Effect (γ)	BootSE			LLCI - ULCI	
DME	−0.15	0.06			[−0.27, −0.03]	

$R^2 = 0.25$ $F_{(6, 223)} = 12.09$, $p = 0.00$, $\Delta R^2 = 0.02$, $p = 0.02$

Note(s): $N = 232$; $^{*}p < 0.05$ $^{**}p < 0.001$. *B* = Unstandardized coefficients; DME = Daily micro-events

Table 5. Summary regression table of the moderated-mediation model (H2)

CI [−0.21, 0.13]) or mean (Mean levels: $B = 0.06$, $\beta = 0.06$, $p > 0.05$, 95% CI [−0.05, 0.19]) (Figure 3).

Discussion

The main goal of this study was to deepen the knowledge of how and when teleworking influences well-being in the IT sector by identifying contextual factors (DME) that explain how it happens, and personality ones (procrastination) that buffer this effect. The findings allow us to identify key ideas for this sector regarding the use of telework and understand its impacts on workers' well-being.

First, the results show a positive direct path from telework to well-being. That is while being and perceiving telework as a positive work strategy, teleworkers experience higher levels of well-being. This was consistently demonstrated in the literature by several studies developed either in the pre and during the COVID-19 pandemic crisis (e.g. Kamar *et al.*, 2022). As such, we may consider that telework - a flexible working arrangement that allows the worker to have more autonomy, flexible work schedules and avoids traffic jams (among other characteristics, e.g. Tavares, 2017) – may be a suitable strategy for IT workers' well-being.

Moreover, the results also show that telework creates conditions for a positive ratio of DME. Hence, it is important to emphasize that telework appears to be a positive working context for IT workers; because working from home, not only makes the workers experience more daily uplifts (than daily hassles) but also influences positively how they feel during work time, improving their well-being. In addition, a positive ratio of DME influences workers' well-being. Indeed, daily uplifts are positive experiences that tend to deliver well-being, satisfaction, positive affect, and happiness, among other individual outcomes (e.g. Junça-Silva *et al.*, 2021; Rueff-Lopes *et al.*, 2022). When daily uplifts exceed daily hassles, it likely improves the workers' well-being. This result has theoretical (through the AET) and empirical support (e.g. Klusmann *et al.*, 2021). Indeed, many studies have evidenced the

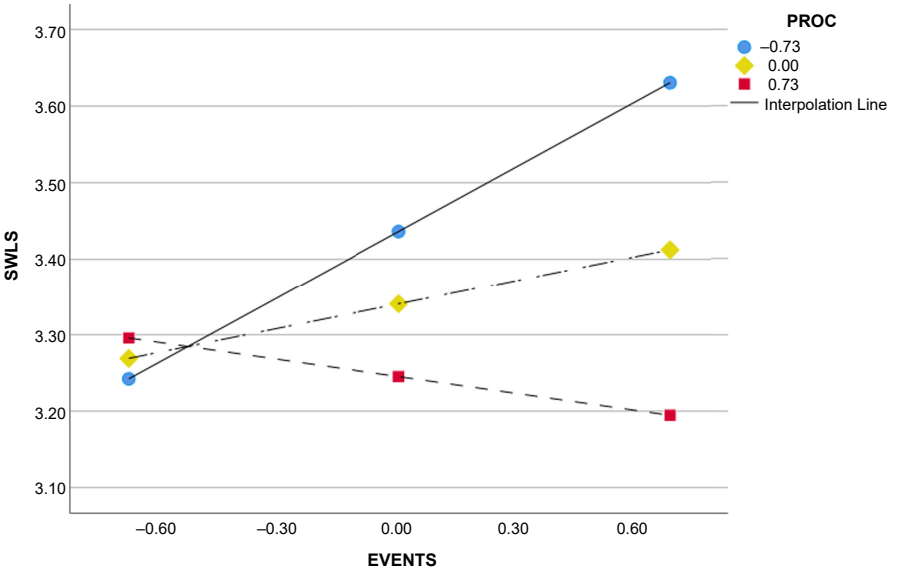


Figure 3.
Interaction between micro-daily events and procrastination

beneficial effect of experiencing more daily uplifts (than daily hassles) for workers' well-being (e.g. Junça-Silva *et al.*, 2020).

Theoretical implications

The results evidence that DME mediate the relationship between telework and well-being. That is, DME explain the process through which telework positively influences well-being. Practically speaking, the higher frequency of telework seems to give rise to a positive ratio between daily uplifts and hassles (more daily uplifts than daily hassles) which, in turn, tends to increase well-being. In other words, daily life in telework seems to be filled with different types of daily uplifts – exceeding daily hassles – that increase the individuals' well-being. This finding has theoretical and empirical support. The AET suggests that the work context in which an individual performs the work tasks promotes conditions for the occurrence of DME that may generate affective, attitudinal and behavioral consequences. Even though the AET has been applied in more traditional working settings (the face-to-face context), working from home appears to have similar conditions for the occurrence of such micro-events, and thereby workers are prone to experience these. If one considers that only the context is changing, from traditional to teleworking settings, it is likely that DME may frequently occur influencing workers' well-being (Junça-Silva and Lopes, 2020). As a result, one may conclude that the AET may also be applied to non-traditional working contexts. Empirically, this indirect effect is also supported by other studies – even though conducted in traditional working settings. For instance, Junça-Silva *et al.* (2020) showed that the working settings stimulated daily uplifts – positive experiences that foster the individual's feeling of pleasure – that improved employees' well-being. Similarly, in their daily study, Kempen *et al.* (2019), showed that affective micro-events, arising from the working conditions, were antecedents of mood and self-actualization (a dimension of psychological well-being; Ryff, 1989). Also, Cernas-Ortiz and Wai-Kwan (2021) showed that the context of interpersonal interaction at work promoted events related to social interactions that influenced affective well-being and job satisfaction. In sum, the AET may include non-traditional working settings, as it is the teleworking context – a flexible work arrangement in which workers may work from other locations, such as the home. Furthermore, DME are a contextual factor that explains why teleworkers become happier.

Second, the results show that the indirect effect of telework on well-being through DME is moderated by procrastination, in such a way that it is stronger for individuals with lower levels of procrastination and fails to be significant for higher levels of procrastination. That is, telework predisposes to the occurrence of more daily uplifts (than daily hassles) that increase well-being, however, this only happens for those individuals who do not tend to procrastinate. Some studies have shown that procrastination – delay in working on a goal one has intended to pursue (Krause and Freund, 2014) – decreases the well-being and performance of teleworkers, because individuals tend to feel guilty about the procrastination behavior (e.g. Woods *et al.*, 2013). In telework, individuals feel happier because they experience more daily uplifts, however those who tend to procrastinate see this effect mitigated. There are four reasons why this may occur. First, procrastinating involves behaviors that distract the worker from their working goals and tasks (e.g. watching YouTube); hence, it is associated with the postponement of tasks and a consequent decrease in performance (e.g. Wang *et al.*, 2021); when workers feel less productive, it is natural that they are not so happy (García-Buades *et al.*, 2020). Second, procrastination behaviors have been associated with the fear of failure, that is, individuals delay their tasks to avoid the negative sensation of failing in performance or goal attainment (Soomro and Shah, 2021). When procrastination behaviors are due to the fear of failure it can trigger conditions of hindrance inefficiency and self-fulfillment that harm individuals' well-being (Ojo, 2019). Third, procrastination is not only

related to the delay to work on a task, but it also leads the individual to feel guilt, discomfort, or frustration about not having proceeded as planned (e.g. Soomro and Shah, 2021). Therefore, these negative emotional states triggered by procrastination may harm the positive indirect effect of telework on well-being via DME. Fourth, procrastination may be a consequence of a lack of energy, persistence, or regulatory resources (e.g. Corkin *et al.*, 2011). When individuals experience a loss of personal resources, even in positive working settings with a positive ratio of DME they become more vulnerable to unhappiness or other negative affective states (Hobfoll *et al.*, 2018; Junça-Silva *et al.*, 2020). Overall, procrastination dampens the beneficial effect of daily uplifts on well-being, in teleworking settings.

Overall, IT teleworkers who frequently experience more daily uplifts than daily hassles and engage less regularly in procrastinating behaviors tend to be happier. On the other hand, as procrastination increases, this relationship appears to be no longer significant. Thus, procrastination is not only "the thief of time", but also a thief of happiness.

Practical implications

The COVID-19 pandemic had several social, economic and organizational consequences, one of which was the implementation of telework to ensure the social distance between individuals. In practical terms, it seems important that organizations, before implementing telework, analyze their employees, to identify their psychological profile and suitability for telework. This study shows, for example, that procrastination is a characteristic that limits the success of telework, regarding the individual's well-being. As such, individuals who have high levels of procrastination may be less suitable for full-time telework. Hence, managers may consider it useful to understand their employees' procrastination levels, and for those who present a greater tendency to delay tasks until the last day, it might be advisable to telework but in a hybrid format – to ensure a greater control and monitoring of tasks completion.

Several studies focused on finding solutions to overcome procrastination and proposed techniques (e.g. making a to-do list, identifying the moments of the day in which individuals are more productive) to manage priorities and time, improve work performance (Lakein, 1973), and minimize the guilt triggered by procrastinating behaviors (e.g. Soomro and Shah, 2021). However, Drucker (1967) recognized that planning tasks do not always lead to their completion, especially when employees are exposed to high levels of pressure. In the context of telework, it is essential to have discipline and responsibility to better manage the freedom gained by working from home (Taschetto and Froehlich, 2019). Hence, managers may consider these findings for training purposes regarding for instance time management, self-leadership training [as it includes training organized by learning how to set personal goals, self-monitoring behavior and self-rewarding strategies (Mayfield *et al.*, 2021)], or self-regulatory strategies to improve behavioral control during the working day as a way to minimize non-related work behaviors (e.g. Baker and De Vries, 2021).

Associated with procrastination, other more sensitive issues, such as depression, stress, or the fear of failure, may be interconnected, so it would be interesting for organizations to provide psychological support for their employees to share their fears and concerns, confidentially (e.g. coaching or counseling).

At last, because procrastination is about delaying what to do, managers may consider it relevant to implement performance management systems, for instance, through the realization of weekly meetings, to understand how teleworkers are doing in the completion of their work-related activities.

Limitations and future directions

This study, despite its strengths, has some limitations. The first refers to the fact that data were collected through self-report measures which may limit the reliability of the results, as

the respondents may have responded according to what is "socially desirable". Second, the data were collected in only one moment, which may lead to the common method bias, however, as mentioned earlier the common method bias was not a severe issue. Notwithstanding, future studies would use other designs to test this model, such as a longitudinal or a daily design. Furthermore, DME must be studied daily, and this study used only a single measure (cross-sectional design), which does not allow us to analyze the daily fluctuations (Junça-Silva *et al.*, 2021). These should be studied at various points in time, to understand their dynamics. Future studies would also consider creating a taxonomy of DME in telework, as the existing measures were created to be applied in the traditional work context, i.e. in the face-to-face traditional model. It would also be important for the academic and organizational community to test this model with other criterion variables, such as performance or health-related indicators. Finally, studying the impact of other personality traits (e.g. neuroticism; extroversion) as moderators of the relationship between DME and well-being would be enriching for the literature on this topic.

Conclusion

This study shows that telework contributes positively to workers' well-being as it promotes conditions for the occurrence of more frequent daily uplifts, than daily hassles. As a result, DME may explain why people are happier when working from home. However, there may be a personality trait that may hinder this effect – procrastination. The act of delaying work is a threatening condition that buffers the positive indirect effect of telework on well-being via DME. Therefore, procrastination is not only a thief of time but also a thief of happiness.

References

Adamovic, M. (2018), "An employee-focused human resource management perspective for the management of global virtual teams", *The International Journal of Human Resource Management*, Vol. 29 No. 14, pp. 2159-2187, doi: 10.1080/09585192.2017.1323227.

Allen, T.D., Johnson, R.C., Kiburz, K.M. and Shockley, K.M. (2013), "Work-family conflict and flexible work arrangements: deconstructing flexibility", *Personnel Psychology*, Vol. 66 No. 2, pp. 345-376, doi: 10.1111/peps.12012.

Allen, T.D., Golden, T.D. and Shockley, K.M. (2015), "How effective is telecommuting? Assessing the status of our scientific findings", *Psychological Science in the Public Interest*, Vol. 16 No. 2, pp. 40-68, doi: 10.1177/1529100615593273.

Anlesinya, A., Amponsah-Tawiah, K., Adom, P.K., Damoah, O.B.O. and Dartey-Baah, K. (2020), "The macro talent management, decent work and national well-being nexus: a cross-country and panel data analysis", *International Journal of Manpower*, Vol. 42 No. 5, pp. 777-793, doi: 10.1108/IJM-03-2020-0106.

Arenas, D.L., Viduani, A., Bassols, A.M.S. and Hauck, S. (2022), "Work from home or bring home the work? Burnout and procrastination in Brazilian workers during the COVID-19 pandemic", *Journal of Occupational and Environmental Medicine*, Vol. 64 No. 5, pp. e333-e339. doi: 10.1097/JOM.0000000000002526.

Ashkanasy, N.M. and Humphrey, R.H. (2011), "Current emotion research in organizational behavior", *Emotion Review*, Vol. 3 No. 2, pp. 214-224, doi: 10.1177/1754073910391684.

Ayala, Y., Peiro Silla, J.M., Tordera, N., Lorente, L. and Yeves, J. (2017), "Job satisfaction and innovative performance in young Spanish employees: testing new patterns in the happy-productive worker thesis—a discriminant study", *Journal of Happiness Studies*, Vol. 18 No. 5, pp. 1377-1401, doi: 10.1007/s10902-016-9778-1.

Bachrach, N., Croon, M.A. and Bekker, M.H. (2012), "Factor structure of self-reported clinical disorders and personality disorders: a review of the existing literature and a factor analytical study", *Journal of Clinical Psychology*, Vol. 68 No. 6, pp. 645-660, doi: 10.1002/jclp.21841.

Bailey, D.E. and Kurland, N.B. (2002), "A review of telework research: findings, new directions, and lessons for the study of modern work", *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, Vol. 23 No. 4, pp. 383-400, doi: 10.1002/job.144.

Bakker, A.B. and de Vries, J.D. (2021), "Job Demands–Resources theory and self-regulation: new explanations and remedies for job burnout", *Anxiety, Stress and Coping*, Vol. 34 No. 1, pp. 1-21, doi: 10.1080/10615806.2020.1797695.

Bakker, A.B. and Oerlemans, W. (2011), "Subjective well-being in organizations", *The Oxford Handbook of Positive Organizational Scholarship*, Vol. 49, pp. 178-189.

Barrick, M.R., Mount, M.K. and Li, N. (2013), "The theory of purposeful work behavior: the role of personality, higher-order goals, and job characteristics", *Academy of Management Review*, Vol. 38 No. 1, pp. 132-153.

Bentler, P.M. and Bonett, D.G. (1980), "Significance tests and goodness of fit in the analysis of covariance structures", *Psychological Bulletin*, Vol. 88 No. 3, pp. 588-606, doi: 10.1037/0033-2909.88.3.588.

Bosch-Sijtsema, P.M. and Sivunen, A. (2013), "Professional virtual worlds supporting computer-mediated communication, collaboration, and learning in geographically distributed contexts", *IEEE Transactions on Professional Communication*, Vol. 56 No. 2, pp. 160-175. doi: 10.1109/TPC.2012.2237256.

Buomprisco, G., Ricci, S., Perri, R. and De Sio, S. (2021), "Health and telework: new challenges after COVID-19 pandemic", *European Journal of Environment and Public Health*, Vol. 5 No. 2, em0073, doi: 10.21601/ejeph/9705.

Cernas-Ortiz, D.A. and Wai-Kwan, L. (2021), "Social connectedness and job satisfaction in Mexican teleworkers during the pandemic: the mediating role of affective well-being", *Estudios Gerenciales*, Vol. 37 No. 158, pp. 37-48, doi: 10.18046/j.estger.2021.158.4322.

Chacko, S. and Conway, N. (2019), "Employee experiences of HRM through daily affective events and their effects on perceived event-signalled HRM system strength, expectancy perceptions, and daily work engagement", *Human Resource Management Journal*, Vol. 29 No. 3, pp. 433-450, doi: 10.1111/1748-8583.12236.

Cohen, S., Janicki-Deverts, D. and Miller, G.E. (2007), "Psychological stress and disease", *Jama*, Vol. 298 No. 14, pp. 1685-1687, doi: 10.1001/jama.298.14.1685.

Corkin, D.M., Shirley, L.Y. and Lindt, S.F. (2011), "Comparing active delay and procrastination from a self-regulated learning perspective", *Learning and Individual Differences*, Vol. 21 No. 5, pp. 602-606, doi: 10.1016/j.lindif.2011.07.005.

Cropanzano, R. and Wright, T.A. (2001), "When a "happy" worker is really a "productive" worker: a review and further refinement of the happy-productive worker thesis", *Consulting Psychology Journal: Practice and Research*, Vol. 53 No. 3, pp. 182-199, doi: 10.1037/1061-4087.53.3.182.

Dawson, J.F. and Richter, A.W. (2006), "Probing three-way interactions in moderated multiple regression: development and application of a slope difference test", *Journal of Applied Psychology*, Vol. 91 No. 4, pp. 917-926, doi: 10.1037/0021-9010.91.4.917.

Deev, O. and Plíhal, T. (2022), "How to calm down the markets? The effects of COVID-19 economic policy responses on financial market uncertainty", *Research in International Business and Finance*, Vol. 60, 101613, doi: 10.1016/j.ribaf.2022.101613.

Dhama, K., Sharun, K., Tiwari, R., Dadar, M., Malik, Y.S., Singh, K.P. and Chaicumpa, W. (2020), "COVID-19, an emerging coronavirus infection: advances and prospects in designing and developing vaccines, immunotherapeutics, and therapeutics", *Human Vaccines and Immunotherapeutics*, Vol. 16 No. 6, pp. 1232-1238, doi: 10.1080/21645515.2020.1735227.

Diener, E. (2009), "Subjective well-being", *The Science of Well-Being*, Vol. 37, pp. 11-58.

Diener, E.D., Emmons, R.A., Larsen, R.J. and Griffin, S. (1985), "The satisfaction with life scale", *Journal of Personality Assessment*, Vol. 49 No. 1, pp. 71-75, doi: 10.1207/s15327752jpa4901_13.

Diener, E., Suh, E.M., Lucas, R.E. and Smith, H.L. (1999), "Subjective well-being: three decades of progress", *Psychological Bulletin*, Vol. 125 No. 2, p. 276.

Diener, E., Oishi, S. and Lucas, R.E. (2003), "Personality, culture, and subjective well-being: emotional and cognitive evaluations of life", *Annual Review of Psychology*, Vol. 54 No. 1, pp. 403-425, doi: 10.1146/annurev.psych.54.101601.145056.

Diener, E., Thapa, S. and Tay, L. (2020), "Positive emotions at work", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 7, pp. 451-477.

Domagalski, T.A. and Steelman, L.A. (2005), "The impact of work events and diaposition on the experience and expression of employee anger", *Organizational Analysis* No. 155174701, p. 13.

Drucker, P.F. (1967), *The Effective Executive*, Harper & Row, New York, NY.

Eurofound (2020), "Living, working and COVID-19", Dublin, available at: http://eurofound.link/covid19data (accessed 17 May 2022).

Ferrari, J.R., O'Callaghan, J. and Newbegin, I. (2005), "Prevalence of procrastination in the United States, United Kingdom, and Australia: arousal and avoidance delays among adults", *North American Journal of Psychology*, Vol. 7 No. 1, pp. 1-6.

Ferrari, J.R., Diaz-Morales, J.F., O'Callaghan, J., Diaz, K. and Argumedo, D. (2007), "Frequent behavioral delay tendencies by adults: international prevalence rates of chronic procrastination", *Journal of Cross-Cultural Psychology*, Vol. 38 No. 4, pp. 458-464, doi: 10.1177/0022022107302314.

Fonner, K.L. and Roloff, M.E. (2010), "Why teleworkers are more satisfied with their jobs than are office-based workers: when less contact is beneficial", *Journal of Applied Communication Research*, Vol. 38 No. 4, pp. 336-361, doi: 10.1080/00909882.2010.513998.

García-Buades, M.E., Peiró, J.M., Montañez-Juan, M.I., Kozusznik, M.W. and Ortiz-Bonnín, S. (2020), "Happy-productive teams and work units: a systematic review of the happy-productive worker thesis", *International Journal of Environmental Research and Public Health*, Vol. 17 No. 1, p. 69, doi: 10.3390/ijerph17010069.

Grant, C.A., Wallace, L.M., Spurgeon, P.C., Tramontano, C. and Charalampous, M. (2019), "Construction and initial validation of the E-Work Life Scale to measure remote e-working", *Employee Relations*, Vol. 41 No. 1, pp. 16-33, doi: 10.1108/ER-09-2017-0229.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, 7th ed., Prentice-Hall, NJ.

Harriott, J. and Ferrari, J.R. (1996), "Prevalence of procrastination among samples of adults", *Psychological Reports*, Vol. 78 No. 2, pp. 611-616, doi: 10.2466/pr0.1996.78.2.611.

Hayes, A.F. (2017), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford Publications, New York.

Hayes, A.F. (2018), "Partial, conditional, and moderated moderated mediation: quantification, inference, and interpretation", *Communication Monographs*, Vol. 85, pp. 4-40, doi: 10.1080/03637751.2017.1352100.

Heiden, M., Widar, L., Wiitavaara, B. and Boman, E. (2021), "Telework in academia: associations with health and well-being among staff", *Higher Education*, Vol. 81 No. 4, pp. 707-722.

Hobfoll, S.E., Halbesleben, J., Neveu, J.P. and Westman, M. (2018), "Conservation of resources in the organizational context: the reality of resources and their consequences", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 5, pp. 103-128, doi: 10.1146/annurev-orgpsych-032117-104640.

Hosie, P.J. and Sevastos, P.P. (2010), "A framework for conceiving of job-related affective wellbeing", *Management Revue*, Vol. 21 No. 4, pp. 406-436, available at: https://www.jstor.org/stable/41783662.

Islam, T. and Tariq, J. (2018), "Learning organizational environment and extra-role behaviors: the mediating role of employee engagement", *Journal of Management Development*, Vol. 37 No. 3, pp. 258-270, doi: 10.1108/JMD-01-2017-0039.

Islam, M.S., Ferdous, M.Z. and Potenza, M.N. (2020), "Panic and generalized anxiety during the COVID-19 pandemic among Bangladeshi people: an online pilot survey early in the outbreak", *Journal of Affective Disorders*, Vol. 276, pp. 30-37, doi: 10.1016/j.jad.2020.06.049.

Jamal, M.T., Anwar, I. and Khan, N.A. (2021), "Voluntary part-time and mandatory full-time telecommuting: a comparative longitudinal analysis of the impact of managerial, work and individual characteristics on job performance", *International Journal of Manpower*. doi: 10.1108/IJM-05-2021-0281.

Junça-Silva, A., Pombeira, C. and Caetano, A. (2021), "Testing the affective events theory: the mediating role of affect and the moderating role of mindfulness", *Applied Cognitive Psychology*, Vol. 35 No. 4, pp. 1075-1081, doi: 10.1002/acp.3843.

Junça-Silva, A. (2022), "Friends with benefits: the positive consequences of pet-friendly practices for workers' well-being", *International Journal of Environmental Research and Public Health*, Vol. 19 No. 3, p. 1069, doi: 10.3390/ijerph19031069.

Junça-Silva, A. and Coelho, N. (2022), "The moderating role of organizational culture on the relationship between workers' attitudes towards telework and happiness", *Kybernetes*. doi: 10.1108/K-02-2022-0231.

Junça-Silva, A., Caetano, A. and Lopes, R.R. (2017), "Daily uplifts, well-being and performance in organizational settings: the differential mediating roles of affect and work engagement", *Journal of Happiness Studies*, Vol. 18 No. 2, pp. 591-606.

Junça-Silva, A. and Lopes, R.R. (2020), "Unfriendly customer behaviors and employees' psychological capital: the role of health symptoms and positive humor events", *Current Psychology*, pp. 1-11, doi: 10.1007/s12144-020-01163-8.

Junca-Silva, A., Caetano, A. and Lopes, R.R. (2020), "A working day in the life of employees: development and validation of the scale for daily hassles and uplifts at work", *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, Vol. 27 No. 2, pp. 221-250, doi: 10.4473/TPM27.2.5.

Kawada, T. (2020), "Telework and work-related well-being", *Journal of Occupational and Environmental Medicine*, Vol. 62 No. 12, p. e775.

Kempen, R., Roewekaemper, J., Hattrup, K. and Mueller, K. (2019), "Daily affective events and mood as antecedents of life domain conflict and enrichment: a weekly diary study", *International Journal of Stress Management*, Vol. 26 No. 2, p. 107.

Kesebir, P. and Diener, E. (2009), "In pursuit of happiness: empirical answers to philosophical questions", *The Science of Well-Being*, Springer, Dordrecht, pp. 59-74.

Kim, S., Park, Y. and Headrick, L. (2018), "Daily micro-breaks and job performance: general work engagement as a cross-level moderator", *Journal of Applied Psychology*, Vol. 103 No. 7, pp. 772-786, doi: 10.1037/apl0000308.

Klaiber, P., Wen, J.H., DeLongis, A. and Sin, N.L. (2021), "The ups and downs of daily life during COVID-19: age differences in affect, stress, and positive events", *The Journals of Gerontology: Series B*, Vol. 76 No. 2, pp. e30-e37, doi: 10.1093/geronb/gbaa096.

Klingsieck, K.B. (2013), "Procrastination in different life-domains: is procrastination domain specific?", *Current Psychology*, Vol. 32 No. 2, pp. 175-185, doi: 10.1007/s12144-013-9171-8.

Klusmann, U., Aldrup, K., Schmidt, J. and Lüdtke, O. (2021), "Is emotional exhaustion only the result of work experiences? A diary study on daily hassles and uplifts in different life domains", *Anxiety, Stress and Coping*, Vol. 34 No. 2, pp. 173-190, doi: 10.1080/10615806.2020.1845430.

Krause, K. and Freund, A.M. (2014), "Delay or procrastination–A comparison of self-report and behavioral measures of procrastination and their impact on affective well-being", *Personality and Individual Differences*, Vol. 63, pp. 75-80, doi: 10.1016/j.paid.2014.01.050.

Kumar, N., Alok, S. and Banerjee, S. (2022), "Personal attributes and job resources as determinants of amount of work done under work-from-home: empirical study of Indian white-collar employees", *International Journal of Manpower*, ahead-of-print, doi: 10.1108/IJM-08-2021-0466.

Lakein, A. (1973), *How to Get Control of Your Time and Life*, Nal Penguin Inc., New York, NY.

Lay, C., H. (1986), "At last, my research article on procrastination", *Journal of Research in Personality*, Vol. 20 No. 4, pp. 474-495, doi: 10.1016/0092-6566(86)90127-3.

Lazarus, R.S. (1991), "Progress on a cognitive-motivational-relational theory of emotion", *American Psychologist*, Vol. 46 No. 8, p. 819.

Lazarus, R.S. (1993), "Why we should think of stress as a subset of emotion", in Goldberger, L. and Breznitz, S. (Eds), *Handbook of Stress: Theoretical and Clinical Aspects*, Free Press, pp. 21-39.

Mayfield, J., Mayfield, M. and Neck, C.P. (2021), "Speaking to the self: how motivating language links with self-leadership", *International Journal of Business Communication*, Vol. 58 No. 1, pp. 31-54, doi: 10.1177/2329488417731861.

McNaughton, D., Rackensperger, T., Dorn, D. and Wilson, N. (2014), "Home is at work and work is at home": telework and individuals who use augmentative and alternative communication", *Work*, Vol. 48 No. 1, pp. 117-126, doi: 10.3233/WOR-141860.

Miron, D., Petcu, M.A., David-Sobolevschi, M.I. and Cojocariu, R.C. (2021), "A muldimensional approach of the relationship between teleworking and employees well-being-Romania during the pandemic generated by the SARS-COV-2 virus", *Amfiteatru Economic*, Vol. 23 No. 58, pp. 586-600.

Müller, T. and Niessen, C. (2019), "Self-leadership in the context of part-time teleworking", *Journal of Organizational Behavior*, Vol. 40 No. 8, pp. 883-898, doi: 10.1002/job.2371.

Nguyen, B., Steel, P. and Ferrari, J.R. (2013), "Procrastination's impact in the workplace and the workplace's impact on procrastination", *International Journal of Selection and Assessment*, Vol. 21 No. 4, pp. 388-399, doi: 10.1111/ijsa.12048.

O'Brien, W. and Aliabadi, F.Y. (2020), "Does telecommuting save energy? A critical review of quantitative studies and their research methods", *Energy and Buildings*, Vol. 225, 110298, doi: 10.1016/j.enbuild.2020.110298.

Ohly, S. and Schmitt, A. (2015), "What makes us enthusiastic, angry, feeling at rest or worried? Development and validation of an affective work events taxonomy using concept mapping methodology", *Journal of Business and Psychology*, Vol. 30 No. 1, pp. 15-35, doi: 10.1007/s10869-013-9328-3.

Ojo, A.A. (2019), "The impact of procrastination on students' academic performance in secondary schools", *International Journal of Sociology and Anthropology Research*, Vol. 5 No. 1, pp. 17-22.

Paterson, J.M. and Cary, J. (2002), "Organizational justice, change anxiety, and acceptance of downsizing: preliminary tests of an AET-based model", *Motivation and Emotion*, Vol. 26 No. 1, pp. 83-103, doi: 10.1023/A:1015146225215.

Paulsen, R. (2015), "Non-work at work: resistance or what?", *Organization*, Vol. 22 No. 3, pp. 351-367.

Podsakoff, P.M., MacKenzie, S.B. and Podsakoff, N.P. (2012), "Sources of method bias in social science research and recommendations on how to control it", *Annual Review of Psychology*, Vol. 63 No. 1, pp. 539-569, doi: 10.1146/annurev-psych-120710-100452.

Rueff Lopes, R., Navarro, J., Caetano, A. and Silva, A.J. (2017), "Forecasting the influence of customer-related micro-events on employees' emotional, attitudinal and physiological responses", *European Journal of Work and Organizational Psychology*, Vol. 26 No. 6, pp. 779-797, doi: 10.1080/1359432X.2017.1360286.

Rueff-Lopes, R., Leveau, R., Junca-Silva, A. and Mosteo, L. (2022), "Adapting to a new country during an expatriate mission: the vital role of events and emotions", *Nonlinear Dynamics, Psychology, and Life Sciences*, Vol. 26 No. 2, pp. 187-208.

Russell, J.A. (1980), "A circumplex model of affect", *Journal of Personality and Social Psychology*, Vol. 39 No. 6, pp. 1161-1178, doi: 10.1037/h0077714.

Ryan, R.M. and Deci, E.L. (2001), "On happiness and human potentials: a review of research on hedonic and eudaimonic well-being", *Annual Review of Psychology*, Vol. 52 No. 1, pp. 141-166, doi: 10.1146/annurev.psych.52.1.141.

Ryff, C.D. (1989), "Happiness is everything, or is it? Explorations on the meaning of psychological well-being", *Journal of Personality and Social Psychology*, Vol. 57 No. 6, p. 1069.

Ryff, C.D. and Singer, B.H. (2008), "Know thyself and become what you are: a eudaimonic approach to psychological well-being", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 13-39, doi: 10.1007/s10902-006-9019-0.

Schouwenburg, H.C. and Lay, C.H. (1995), "Trait procrastination and the big-five factors of personality", *Personality and Individual Differences*, Vol. 18 No. 4, pp. 481-490.

Singh, N. and Medhavi, S. (2021), "Factors implicated in smartphone usage distressing individual", *International Journal of Engineering and Management Research*, Vol. 11 No. 3, doi: 10.31033/ijemr.11.3.24.

Smith, A.P. and Smith, H.N. (2017), "Workload, fatigue and performance in the rail industry", *International Symposium on Human Mental Workload: Models and Applications*, Springer, Cham, pp. 251-263, June.

Sonnentag, S., Binnewies, C. and Mojza, E.J. (2010), "Staying well and engaged when demands are high: the role of psychological detachment", *Journal of Applied Psychology*, Vol. 95 No. 5, p. 965.

Soomro, B.A. and Shah, N. (2021), "Is procrastination a 'friend or foe'? Building the relationship between fear of the failure and entrepreneurs' well-being", *Journal of Entrepreneurship in Emerging Economies*, doi: 10.1108/JEEE-12-2019-0191.

Taschetto, M. and Froehlich, C. (2019), "Teletrabalho sob a perspectiva dos profissionais de recursos humanos do Vale do Sinos e Paranhana no Rio Grande do Sul", *Revista de Carreiras e Pessoas*, Vol. 9 No. 3, doi: 10.20503/recape.v9i3.39652.

Tavares, A.I. (2017), "Telework and health effects review", *International Journal of Healthcare*, Vol. 3 No. 2, p. 30.

Tuk, B. (2012), "The influence of procrastination on the relationship between home-based telework and employee well-being", The degree Master of Science, Faculty of Social and Behavioral Sciences, Tilburg University, The Netherlands.

Vega, R.P., Anderson, A.J. and Kaplan, S.A. (2015), "A within-person examination of the effects of telework", *Journal of Business and Psychology*, Vol. 30 No. 2, pp. 313-323.

Wang, B., Liu, Y., Qian, J. and Parker, S.K. (2021), "Achieving effective remote working during the COVID-19 pandemic: a work design perspective", *Applied Psychology*, Vol. 70 No. 1, pp. 16-59.

Ward, J.A. (1997), *John Edgar Thomson and the Cult of Personality on the Pennsylvania Railroad*, Railroad History.

Warr, P. and Inceoglu, I. (2012), "Job engagement, job satisfaction, and contrasting associations with person–job fit", *Journal of Occupational Health Psychology*, Vol. 17 No. 2, pp. 129-138, doi: 10.1037/a0026859.

Weiss, H.M. and Cropanzano, R. (1996), "Affective events theory", *Research in Organizational Behavior*, Vol. 18 No. 1, pp. 1-74.

Wojcak, E., Bajzikova, L., Sajgalikova, H. and Polakova, M. (2016), "How to achieve sustainable efficiency with teleworkers: leadership model in telework", *Procedia-Social and Behavioral Sciences*, Vol. 229, pp. 33-41, doi: 10.1016/j.sbspro.2016.07.111.

Woods, S.A., Lievens, F., De Fruyt, F. and Wille, B. (2013), "Personality across working life: the longitudinal and reciprocal influences of personality on work", *Journal of Organizational Behavior*, Vol. 34 S1, pp. S7-S25, doi: 10.1002/job.1863.

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