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Original article

Professional isolation and pandemic teleworkers’ satisfaction and commitment: The role of perceived organizational and supervisor support

L’isolement professionnel, la satisfaction et l’engagement des télétravailleurs en contexte pandémique : le rôle du soutien de l’organisation et du superviseur

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A B S T R A C T

Background. – The COVID-19 pandemic has abruptly and profoundly changed the way people interact with their organization, their colleagues and their supervisor.

Objective. – This study assesses the effects of telework-induced professional isolation due to the pandemic. Drawing on organizational support theory, this study examines the relationship between professional isolation and satisfaction with the telework experience and affective organizational commitment during mandatory teleworking caused by the COVID-19 crisis. It does so by focusing on the moderating role of perceived organizational and supervisor support in these relations.

Methods. – Data was collected via self-reported survey questionnaires from 728 pandemic teleworkers from various industry sectors in Quebec during the COVID-19 crisis. The study’s hypotheses were tested using structural equation modeling (SEM), and moderation effects were probed with the Johnson-Neyman technique.

Results. – The results reveal that professional isolation negatively affects satisfaction with the telework experience, but does not affect affective organizational commitment. The relationship between satisfaction with telework and professional isolation was moderated by perceived organizational support, and the relationship between affective organizational commitment and professional isolation was moderated by perceived supervisor support.

Conclusion. – This study expands the organizational support theory by examining perceived organizational and supervisor support during a crisis as a counterbalance to a challenging social and organizational climate that has led to professional isolation. The implications of the findings as well as future directions for research on professional isolation and telework are discussed.

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RÉSUMÉ

Introduction. – La pandémie de Covid-19 a brusquement et profondément changé la façon dont les individus interagissent avec leur organisation, leurs collègues et leur superviseur.

Objectif. – Cette étude examine les effets de l’isolement professionnel induit par le télétravail en raison de la pandémie. S’appuyant sur la théorie du soutien organisationnel, elle examine la relation entre l’isolement professionnel, la satisfaction de l’expérience de télétravail et l’engagement organisationnel affectif durant la période de télétravail obligatoire induit par la pandémie. Pour s’y faire, elle examine le rôle modérateur du soutien organisationnel perçu de l’organisation et du soutien perçu du superviseur dans ces relations.
1. Introduction

The COVID-19 crisis has proven fascinating because of its intensity and exceptional nature. Over the past several years, crisis management literature has witnessed the transformations of this field of study as both the time frame and geographic scope of crises have tended to expand (Hart et al., 2001). The global COVID-19 pandemic appears to be an illustration of these new characteristics of crises. Crisis management as we have known it remains on the agenda of researchers and practitioners, but the COVID-19 crisis is likely to transform how organizations and people respond and adjust to crises in the future. The magnitude of the crisis induced by COVID-19 will have had major and lasting effects on many areas of people’s lives: shopping, travel, socializing, leisure, and most importantly, the world of work and how people perform their jobs (Donthu & Gustafsson, 2020). COVID-19 is becoming the accelerator for one of the most drastic workplace transformations in recent years (Carnevale & Hatak, 2020).

Thus, the COVID-19 pandemic has raised many issues in the field of organization behavior and human resources management (HRM), one of the most obvious being mandatory teleworking. Government-imposed confinement pushed millions of non-essential workers into remote work nearly overnight. While telework was already well established in some organizations, it was not a widespread practice in Europe, Canada, or elsewhere in the world (Eurostat, 2020: U.S. Bureau of Labor Statistics, 2019). As a result, the vast majority of managers and employees experienced it for the first time out of necessity in 2020. This mandatory telework challenged prior knowledge about organizational issues such as satisfaction, commitment, turnover, and well-being. Since the outbreak of the COVID-19 crisis in March 2020, organizational behavior and HRM researchers have begun to examine the effects of the crisis on individuals and organizations. Findings informed us mainly about employee emotions, attitudes and behaviors, employee well-being, team-related outcomes, career outcomes and leadership in the context of the pandemic crisis (Newman et al., 2022). These studies indicated that loneliness, social and professional isolation, stress, work and techno overload, and anxiety have been everyday realities for many people during the pandemic (Cincotta et al., 2021; Landmann & Rohmann, 2022).

Several previous findings shed light on the effects of loneliness, social and professional isolation and organizational crisis on individual attitudes (e.g. Golden et al., 2008; Marques-Quinteiro et al., 2019; Smith & Lim, 2020; Wang et al., 2020a). However, these telework and crisis management studies only partially address the COVID-19 situation, which was characterized by its unpredictability, universality, and uncertain duration (van der Ven & Sun, 2021). Thus, many researchers have studied the effects of loneliness, social and professional isolation on individuals during the pandemic. In a systematic review synthesizing recent literature on the prevalence and effects of loneliness and social isolation during the early phase of the pandemic, Buecker and Horstmann (2022) demonstrated that the quality of social relationships decreased during the pandemic. Landmann & Rohmann (2022) have shed light on the differential effects of three loneliness dimensions (physical, social and emotional) on psychological well-being and perceived stress, according to age and personality. Galanti et al. (2021)’s study showed that employees’ family–work conflict and social isolation were negatively related to productivity and engagement in the context of mandatory telework, and concluded that individual- and work-related aspects both hindered and facilitated telework during the COVID-19 outbreak. Others investigated the effects of the use of information and communication technology (ICT) in the pandemic telework context, showing it may have helped organizations and employees combat isolation, while simultaneous increases in remote work practices lead employees to feel more isolated (Van Zoonen & Sivunen, 2021). These researchers also found reciprocal effect between psychological distress and isolation, suggesting that strain may both increase perceptions of isolation and be a result of being isolated. Hu and Subramony (2022) showed that support from friends significantly weakened the negative effects of professional isolation on well-being. Though these studies are enlightening, they do not address the specific effects of professional isolation on two key attitudes in HRM, satisfaction and organizational commitment. The present study’s research is relevant in the light of the current knowledge on teleworking, in that it examines the effects of a specific type of isolation, namely professional isolation, on satisfaction with the telework experience and the deriving affective organizational commitment (AOC).

During the pandemic-induced telework experience, both organizations and supervisors have played an important role in supporting their employees (Spagnoli et al., 2020). The organizational support theory (Eisenberger et al., 1986), which is an application of social–exchange theory to the employer–employee relationship, appears to be a relevant theoretical framework to further understand how professional isolation relates to satisfaction with the telework experience and AOC. This theory is based on the premise that in order to meet socio-emotional needs and assess the organization’s readiness to reward efforts, employees develop general beliefs about the extent to which the organization cares about their well-being and values their contributions. Operationally, this theory can be translated into the concepts of perceived organizational support (POS) and perceived supervisor support (PSS). During a crisis, POS and PSS could be involved in the relationship between professional isolation and satisfaction by fulfilling the need for approval and affiliation of isolated employees. Given the uniqueness of the events of the pandemic, and the consequences they will have on individuals and organizations, the
present study revolves around examining the association between professional isolation, satisfaction with telework experience, and AOC. Its goal is twofold. First, it aims to examine the effects of professional isolation during the COVID-19 pandemic on satisfaction with the telework experience and on the AOC of mandatory teleworkers. Second, it aims to examine the buffering role of POS and PSS in these relations. From a theoretical standpoint, this study has two main contributions. First, it looks at the effects of professional isolation caused by mandatory telework in the context of a health crisis, which has been overlooked in the past. Second, it examines the role of POS and PSS in this relationship, drawing on the organizational support theory, thus applying and testing the premises of this theory in a new context. A high-complexity crisis and a changing working environment means that managers and organizations must change their practices in order to achieve long-term organizational sustainability, as organizations will certainly face other crises in the future. Although telework is no longer a mandatory practice, the will of individuals and organizations to formalize it and make it last is very real (e.g. OECD, 2020). This study provides tools for organizations and supervisors to plan, adapt, and implement practices for maintaining employee commitment and satisfaction in the post-lockdown period, as well as during future crises.

2. Theoretical background and hypotheses

2.1. Crisis-induced telework and professional isolation

Teleworking, which was initially defined as working away from the conventional workplace and communicating with the latter via telecommunications or computer technology (Nilles, 1994), is not a new phenomenon. However, the COVID-19 crisis drove millions of workers into mandatory telework almost overnight. The socioeconomic profile of teleworkers during the crisis was characterized by a high level of education, mostly salaried workers, a high level of average income, and, therefore, telework was a privileged condition (Cuerdo-Vilches et al., 2021).

Teleworking became a mandatory full-time practice, and, as a result, some employees have faced various professional and personal issues (Carillo et al., 2021). Crisis-induced telework was implemented rapidly, without all the necessary knowledge, technological and material tools (Carillo et al., 2021). Within this context, teleworkers have had to deal with difficult telework conditions, such as inadequate spaces or the lack of exclusive spaces to work from, being more than one teleworker per household, having poor digital resources, work family-conflict, and the closing of schools and daycare centers (e.g. Cuerdo-Vilches et al., 2021; Syrek et al., 2022). This situation has given rise to several studies rooted in the concepts of social isolation and loneliness (e.g. Landmann & Rohmann, 2022; Smith & Lim, 2020). Thus, against the backdrop of a global health crisis, mandatory telework may have led to a specific type of isolation, professional isolation, which can be defined as “a state of mind, or belief, that one is out of touch with others in the workplace” (Golden et al., 2008, p. 1412). Some authors also refer to professional isolation as the missing of the everyday social aspect of work, because of employees being physically away from other workmates, thus leading to them not being active participants in information sharing and co-learning (Contreras et al., 2020).

In this study, as in others (Golden et al., 2008), professional isolation is defined as encompassing beliefs about the sufficiency of both professional and social contacts (Cooper & Kurland, 2002). Past research has identified professional isolation as one of the major issues for teleworking employees and have discussed its implications on workers’ attitudes and behaviors, such as organizational commitment, job satisfaction, performance, and career development (Bentley et al., 2016; Cooper & Kurland, 2002; Golden et al., 2008; Vega & Brennan, 2000). There is a relatively small number of studies that have focused on the outcomes resulting from worker’s feelings regarding professional isolation (Golden et al., 2008; Ozcelik & Barsade, 2018). According to Golden et al. (2008), professional isolation reflects the belief that one lacks sufficient connection to “critical networks of influence and social contact” (Miller, 1975, p. 261). Thus, professional isolation can be considered isolation from colleagues, supervisors or clients; what matters is the perceived lack of professional relationships in the workplace.

As knowledge surrounding pandemic telework issues is still under development, it is not clearly established if the mandatory telework from home is so different from the voluntary telework from on which earlier studies are based. However, telework required by the COVID-19 pandemic has inherent specificities that were not taken into account as part of past studies, such as work-family conflict (Carillo et al., 2021; Elbaz et al., 2022), social and physical isolation (Ingram et al., 2021; Van Zoonen & Sivunen, 2021) and the ability to use the ICT (Van Zoonen & Sivunen, 2021). Social distancing imposed by the health authorities disrupted normal work routines and communication patterns in organizations (Hu & Subramony, 2021). For instance, traditional forms of communication and knowledge sharing (e.g., small talk) were hindered (Method et al., 2021).

As the topic has been of major interest since March 2020, knowledge about the effect of mandatory telework and professional isolation is increasingly being built up. Hu & Subramony (2022)’s study revealed that the perceived displacement from a regular work routine, lack of access to social and professional contacts, and the increasing responsibility of managing the boundaries between work and family are likely to have played critical parts in resource depletion and professional isolation during the COVID-19 crisis. Galanti et al. (2021)’s study showed that professional and social isolation were negatively related to productivity and engagement during mandatory telework. Thus, employees’ inherent need to feel connected to others in the workplace (Baumeister & Leary, 2017) may have been impeded because of mandatory telework, and this professional isolation is likely to have had an effect on the attitudinal response of employees.

2.2. Satisfaction with the telework experience

Job satisfaction refers to an evaluation or judgment that a person makes about their work (Spector, 1997). Job satisfaction is a key construct in human management resources and organizational psychology. It has been associated with multiple positive outcomes such as improved job performance, lower absenteeism, lower turnover, improved organizational citizenship behavior, and improved life satisfaction (Spector, 1997). As teleworking has gained in popularity to become a common organizational venture, researchers have investigated how job satisfaction translates from the traditional office setting to the remote office and the telework experience. Satisfaction with telework is a complex issue, as numerous potential factors may explain it. Most telework reviews relate satisfaction to feelings of autonomy (e.g. Sewell & Taskin, 2015), a balanced work-family/life relationship (Tremblay et al., 2006) and reduced commuting (Helminen & Ristimäki, 2007). Several factors influence telework satisfaction. Most studies on telework underline the meaning of job and task context, contextual factors and perceived autonomy as the main antecedents (e.g. Bailey & Kurland, 2002; Golden & Veiga, 2005; Vega et al., 2015), van Zoonen et al. (2021)’s findings demonstrate that both structural (clarity of job and work independence) and contextual factors (change in work location and perceived disruption) are important predictors of employees’ abrupt adjustment to remote work, and that these relationships are moderated by communication quality and communication technology use.
Thus, previous studies on the effects of teleworking on job satisfaction report positive (Fonner & Roloff, 2010; Gajendran & Harrison, 2007), negative (Baker et al., 2007), and curvilinear (Golden & Veiga, 2005) relationships. These conflicting results highlight a paradox that is rooted in the theoretical premises that workplace relationships, frequent feedback, and face-to-face contact are positive drivers of job satisfaction (Szilagyi et al., 1976). Among the antecedents of job satisfaction, frequent interactions with team members and social environment are frequently brought up (Tumen & Zeydanli, 2016; Wang & Brower, 2019). With pandemic-induced telework, work changed drastically within a very short time. Among other things, employees’ day-to-day use of ICT, social interactions, work environment, and autonomy may have been transformed. Emotional evaluation, or employees’ judgment of their work, is therefore tied to the experience of pandemic-induced telework.

Many theoretical discussions on satisfaction are based on the assumption that humans have a basic need for it (Baumeister & Leary, 2017). Among others, the theory of self-determination (SDT) (Deci & Ryan, 2012) states that when individuals’ needs for relatedness are satisfied, they tend to be internally motivated and more satisfied. Relatedness refers to receiving support and help from individuals’ peers, and the desire for connectedness to groups and for shared respect. Relatedness consistently appears in research as an element that improves the quality of the work experience for employees by enhancing the effect of positive organizational and psychological factors on the job, while simultaneously reducing the impact of negative ones (e.g. Van den Broeck et al., 2010). Thus, mandatory telework may have negatively affected the feeling of connection from people to their work environment (e.g. colleagues, customers, and supervisors) through the feeling of professional isolation. Some empirical studies instead choose to focus the factors related to professional isolation that explain the observed dissatisfaction with the telework experience. Telework raises several issues for employees, namely when it comes to communication, collaboration, and the use of ICT. For example, the quality of daily communication, satisfaction with the technologies used and digital literacy level, are all likely to have an impact on the satisfaction with the telework experience (Raïsiènè et al., 2020; Shockley et al., 2021). With reduced workplace relationships, feedback, and face-to-face contact, employees are likely to feel less satisfied (Baumeister & Leary, 2017; Duffy et al., 2002).

We therefore postulate that professional isolation is likely to have a negative impact on satisfaction with the telework experience.

H1. Professional isolation is negatively related to satisfaction with the telework experience.

2.3 Affective organizational commitment

Affective organizational commitment (AOC) refers to the relative emotional strength of employees’ identification with and involvement in a given organization. It refers to a sense of belonging and identification that increases employee involvement in the organization’s activities, willingness to pursue the organization’s goals, and desire to remain with the organization (Meyer & Allen, 1991; Mowday et al., 1982). This emotional bond of the employee with their organization is associated with several positive organizational outcomes, such as lower absenteeism and turnover, improved performance and organizational citizenship behaviors (e.g. LePine et al., 2002; Meyer et al., 2002; Somers, 1995; Wang et al., 2020b). At the individual level, it is associated with reduced stress and an improved work-life balance (Meyer et al., 2002).

Numerous studies suggest that social isolation can be detrimental to AOC (Wang et al., 2020a). By “hindering their ability to establish or maintain positive interpersonal relationships, work-related success, or favorable reputation within one’s place of work” (Hitlan et al., 2006, p. 217), professionally isolated workers feel less bound to their organization (Mann & Holdsworth, 2003) and less satisfied regarding their fundamental need to belong (Baumeister & Leary, 2017). Similarly, Jung et al. (2021) showed the negative effect of workplace loneliness on organizational commitment. With a reduced sense of belonging that comes with greater professional isolation, individuals are likely to feel less committed to their organization (Duffy et al., 2002).

H2. Professional isolation is negatively related to affective organizational commitment.

2.4 The buffering role of perceived organizational support and perceived supervisor support

Perceived organizational support (POS) refers to the degree to which employees believe their organization values their contributions and cares about their well-being (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). Eisenberger et al. (1986) reported that employees showed a consistent pattern of agreement with statements concerning whether the organization, as an employer, appreciated their contributions and would treat them favorably or unfavorably in differing circumstances. In the mandatory telework context, the measurable characteristics of POS can take several forms, such as providing the tools and new technologies to facilitate communication with colleagues, dedicating resources to training and support, helping employees set up facilities to work from home, or offering flexible schedules to help employees manage both work and home demands more effectively (Mihalache & Mihalache, 2022).

Perceived organizational support (POS) is thus the central construct within the organizational support theory (OST). However, social support theory has shed a light on the importance of social support from supervisors and colleagues as a useful asset for enhancing employees’ proper functioning in organizational life (Ng & Sorensen, 2008). Although the support of colleagues or customers are both of interest, in the context of a crisis, supervisor support plays a critical role in the organizational life of employees (Liden et al., 1997). Supervisors also support employees by providing them with information that reduces their apprehension towards uncertainty, which is crucial in times of crisis. Thus, just like employees develop general views on the extent to which their organization values their contributions and are concerned about their well-being, the same process takes place regarding their superiors (Eisenberger et al., 2002). Perceived supervisor support (PSS), which is the extent to which the supervisor values the employee’s contributions, has been linked to POS (Eisenberger et al., 2002; Stinglhamber & Vandenberge, 2003). PSS can take the form of emotional or instrumental support, knowledge sharing, trust or availability of the supervisor. PSS is not just one aspect of POS, and empirical findings suggest that employees can distinguish between their relations with the immediate supervisor and their relations with organizations (e.g. Maertz et al., 2007).

While the majority of research has examined the influence of POS in organizations, studies have shown that supervisor support has an independent influence on employees’ work-related outcomes (Maertz et al., 2007; Tekleab et al., 2005). Moreover, organizational support has mainly been studied as a global construct that incorporates various sources of support, despite the fact that the need to distinguish between different support sources has been suggested before (Rhoades & Eisenberger, 2002; Stinglhamber & Vandenberge, 2003). Although PSS and POS are highly correlated (Rhoades & Eisenberger, 2002) they are distinct constructs (Hutchison, 1997). To measures PSS, researchers have most often
substituted the word supervisor for organization in the POS scales items (e.g. Hutchison, 1997; Rhoades et al., 2001; Yoon et al., 1996; e.g. “My organization is willing to help me if I need a special favor” and “My supervisor is willing to help me if I need a special favor”).

POS and PSS have theoretical roots in organizational support theory (OST) (Eisenberger et al., 1986), which posits that an employee develops a general perception of appreciation for their contributions to the organization and the organization’s concern for their well-being. Under this theory, three processes explain the relationship between POS, PSS, and their positive consequences. First, based on the norm of reciprocity (social exchange theory [SET]), employees who perceive support from the organization and their supervisor feel a certain moral and relational obligation to reciprocate said support towards the organization. Second, through their ability to satisfy social and emotional needs such as approval, affiliation and self-esteem, POS and PSS contribute to making the employee’s role, status, and sense of belonging to the organization an integral part of their social identity. In turn, this helps to reduce the perceived strain and increase well-being of employees (Rhoades & Eisenberger, 2002). Finally, POS and PSS provide signals to the employee as to whether the organization is able to reciprocate efforts that are put in (Rhoades & Eisenberger, 2002).

In the context of our study, employees found themselves teleworking during a health crisis, even though they were unprepared and lacked the tools needed to perform their jobs adequately. POS and PSS may aid satisfaction with the telework experience and AOC by serving as buffers between professional isolation and attitudinal consequences. In particular, during the aforementioned crisis, POS and PSS may have counterbalanced the feeling of being professionally isolated. Consequently, this may have contributed to greater satisfaction and greater AOC for those who experienced POS and PSS. Indeed, the social and emotional support these provide meet employees’ needs for esteem, affiliation, and emotional support. Previous studies have further advanced OST by outlining the buffering role of POS and PSS in the relationship between stress factors (such as professional isolation) and outcomes, such as employee performance and well-being (Bentley et al., 2016). According to OST, POS and PSS both lead to satisfaction through the action of self-enhancement processes. Thus, when the organization and the supervisor are perceived to value and care about the employees, the latter are more likely to be satisfied with their telework experience and to feel compelled to return this attention by developing AOC.

H3a. Perceived organizational support moderates the relationship between professional isolation and satisfaction with the telework experience.

H3b. Perceived supervisor support moderates the relationship between professional isolation and satisfaction with the telework experience.

H4a. Perceived organizational support moderates the relationship between professional isolation and affective organizational commitment.

H4b. Perceived supervisor support moderates the relationship between professional isolation and affective organizational commitment.

Fig. 1 presents the hypothetical research model.

3. Methods

3.1. Participants and procedure

Data was collected through online self-administered questionnaires between December 2020 and February 2021. This study was approved by the Ethics Committee for Research Involving Humans of the Université du Québec à Rimouski. Respondents were asked to complete an online survey via an email sent by their company (five organizations from different sectors participated in the study). The participation was entirely voluntary. The data collected is completely anonymous, and, therefore, the results, which were shared with employers and employees alike, do not allow for the identification of respondents. The target population was Quebec workers who had been working remotely due to the pandemic. In Quebec, teleworking was not widely adopted prior to the pandemic, in part because of the high concentration of public service workers, a sector where telecommuting was rarely (if at all) offered (Secrétariat du Conseil du trésor du Québec, 2020). The practice of telework was therefore far from being anchored in Quebec’s organizational cultures. In March 2020, at the beginning of the pandemic, 39.1% of employees were working remotely, compared to only 6.7% in 2016 (Statistics Canada, 2020). The generalization of telecommuting is therefore a new phenomenon in Quebec that is likely to persist over time, as employees and managers increasingly embrace it (Statistics Canada, 2021).

The final sample consisted of 728 respondents (34.5% response rate). The industries targeted were administrative and support services (60.9%); information and culture (27.2%); professional, scientific, and technical services (6.7%); and real estate and rental services (5.2%). The participating organizations were of medium or large size (67.4% with 5 to 99 employees, 10.9% with 101 to 500 employees, and 21.7% with more than 500 employees). The sample was predominantly female (68.3%). The age of the respondents ranged from 21 to 73 years (M = 41.8 years; SD = 11.11). Respondents had an average of 7.1 years of organizational tenure (SD = 7.07) and 5.0 years of experience in their current position (SD = 5.82). Of all the respondents, 60.4% had never experienced teleworking before April 2020.

3.2. Measures

The survey was conducted in French, and the English scales were translated following Brislin’s translation and back-translation procedure (Brislin, 1970).

Satisfaction with the telework experience. We measure satisfaction with the telework experience with a single item, “How satisfied have you been with your telework experience since April 2020?” Assessing satisfaction by using single-item measures is effective and more favorable in some respects than by using multiple-item measures (Nagy, 2002; Wanous et al., 1997). Single-item measures are easier to understand by management, are faster to complete, and change scores are more interpretable. Single-item measures compare favorably with multiple-item measures from a psychometric perspective (Dolbier et al., 2005). The response to this question was on a 5-point Likert-type scale, with 1 = very dissatisfied and 5 = very satisfied.

Affective organizational commitment. Affective organizational commitment (α = .833) was measured with a revised version of Meyer et al.’s (1993) AOC scale that had previously been used in French-speaking environments (Vandenbergh et al., 2004). This scale originally had six items, measured on a 5-point Likert-type scale, where 1 = strongly disagree and 5 = strongly agree (e.g. “This organization has a great deal of personal meaning for me”). Two items were removed from the scale to improve internal consistency.

Professional isolation. Professional isolation (α = .890) was measured with a six-item scale adapted from Golden et al. (2008) (e.g. “Miss face-to-face contact with your coworkers”). Items were scored on a 5-point Likert-type scale, where 1 = never and 5 = most of the time.

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**Perceived organizational support.** We measure perceived organizational support (α = .870) with Eisenberger et al. (1986)’s eight-item scale. One item of the original scale was removed to improve internal consistency. The final scale had seven items, all measured on a 5-point Likert-type scale, where 1 = strongly disagree and 5 = strongly agree (e.g. “Help is available from my organization when I have a problem” or “My organization really cares about my well-being”). In the questionnaire, it was mentioned to the respondents to consider the term organization as referring to the organization as an employer, as a whole.

**Perceived supervisor support.** To assess perceived supervisor support (α = .901) we adapted Eisenberger et al. (1986)’s eight-item POS scale, as previously done by Hutchison (1997), Rhoades et al. (2001), and others, replacing the word organization with the word supervisor. Items were measured on a 5-point Likert-type scale, where 1 = strongly disagree and 5 = strongly agree (e.g. “My supervisor strongly considers my goals and values” or “My organization really cares about my well-being”).

**Controls Variables.** On the basis of prior research (e.g. Golden et al., 2008; Hu & Subramony, 2022; Shockley et al., 2021) participants’ age, organizational tenure (in years), time spent teleworking (as a percentage of time per week), former telework experience (or not), and gender were controlled.

### 3.3. Statistical analyses

Descriptive data was first analyzed with IBM SPSS Statistics (Version 27). To describe the sample and to assess the relationships between variables, descriptive statistics were calculated (means, standard deviations, and correlations). As our study was cross-sectional and used self-reported measures, several procedural remedies before data collection were applied (e.g. counterbalancing the order of the measurement of the predictor and criterion variables, and protecting respondents’ anonymity) (Podsakoff et al., 2003). We also checked the CMV issue through the Harman (1976) single-factor test. An explanatory factor analysis (EFA) of the dependent and independent variables resulted in the expected four-factor solution, and the result was higher than that of the one-factor model. In addition, the first factor did not account for the majority of the variance (34.90%).

To test direct and indirect (moderating) assumptions of our hypotheses, structural equation modeling (SEM) with Mplus v8.8 (Muthén & Muthén, 2015) was used. SEM allows for the estimation of both direct and indirect (moderating) effects. The moderation effect occurs when the strength of the relationship between two variables is dependent on a third variable (Preacher et al., 2007). To test the moderation hypotheses, the first step is to conduct a confirmatory factor analysis (CFA) in order to assess construct validity as well as the convergent and discriminant validity of the latent variables (Hair et al., 2010). The second step is to evaluate the structural model without including the interaction terms, which provides the fit indices (χ², CFI, TLI, and RMSEA) of the structural equation model. This step is essential because, when adding the interaction variable, these indices are no longer available (Muthén & Muthén, 2015). The third step is to evaluate the structural model including the interaction term, which represents the product of the variables whose interaction is to be tested, i.e., professional isolation and perceived organizational or supervisor support, to check whether the relationship between the predicted variable and the interaction variable is significant. To probe the moderation, the Johnson-Neyman regions of significance analysis was used (Bauer & Curran, 2005; Hayes & Matthes, 2009; Johnson & Neyman, 1936), and graphical representations were plotted to interpret and visualize the simple slope analysis.

### 3.4. Preliminary analysis

We first conducted a confirmatory factor analysis (CFA) using Mplus v8.8. in order to assess construct validity. Only items with a loading of 0.50 or higher on the construct were retained (Hair et al., 2010). Two of the AOC items failed to meet this inclusion criterion (“I don’t feel emotionally attached to my organization” [λ = 0.370] and “I really feel that the problems of my organization are also my problems” [λ = 0.351]), as did one of the POS items (“If given the opportunity, my organization would take advantage of me” [R] [λ = 0.412]). These items were removed. CFA results indicate that the four-factor model, in which items associated
with each construct loaded onto distinct factors, had acceptable fit ($\chi^2 = 869.080; DF = 183$; comparative fit index (CFI) = 0.922; Tucker–Lewis index (TLI) = 0.910; and root mean square error of approximation (RMSEA) [90% CI] = 0.072 [0.67; 0.77]). In this model, all item loadings from the items to their latent factors were significant ($p < 0.05$). This model was compared to alternative models. For each comparison, the four-factor model provided a superior fit. The average variance extracted (AVE) by the factors is always higher than the recommended threshold (0.50) (Hair et al., 2010). The analysis shows that the correlation score between POS and PSS is relatively high ($r = 0.687$, $p < 0.01$), but respects the generally accepted threshold for the presence of multicollinearity ($>0.70$) (Tabachnick & Fidell, 2013). Thus, although they are related, discriminant analyses confirm the singularity of the measurement of each of these concepts. The scales ratified discriminant validity as each construct shared more variance with its items than it did with other constructs, as shown in Table 1 (Fornell & Larcker, 1981). These results provide further evidence of discriminant validity between the latent constructs.

### 4. Results

Table 1 presents the means, standard deviations, and correlations. Correlation analysis revealed significant moderate negative relationships between professional isolation and satisfaction with telework experience, as well as a weak negative relationship between professional isolation and AOC. Additionally, POS was positively and weakly associated with telework experience satisfaction, positively and moderately associated with AOC, and negatively and weakly associated with professional isolation. Similarly, PSS was positively and weakly associated with satisfaction with telework experience, positively and moderately associated with AOC, and negatively and weakly associated with professional isolation.

Correlation analysis also revealed a significant positive relationship between the proportion of weekly telework time and satisfaction with the telework experience and with PSS. It also revealed a significant positive relationship between past teleworking experience and satisfaction with the telework experience as well as with PSS. These results indicate that the more time an employee spends teleworking in a week, the more satisfied they are with their teleworking experience, and the more support they perceive from their supervisor. Similarly, employees who have already experienced telecommuting seem to be more satisfied with their experience, and perceive greater support from their supervisor.

Hypothesis 1 predicted a negative relationship between professional isolation and satisfaction with the telework experience. As shown in Fig. 1, this hypothesis was supported ($\beta = -0.242$, $p < 0.001$), suggesting that greater professional isolation negatively affected satisfaction with the telework experience (controlling for age, organizational tenure, time spent teleworking, former telework experience and gender). Hypothesis 2 predicted a negative relationship between professional isolation and AOC. This hypothesis was not supported, suggesting that professional isolation did not have an effect on AOC ($\beta = -0.071$, $p = 0.230$). Hypothesis 3a, which predicted that POS moderates the relationship between professional isolation and satisfaction with the telework experience, was supported ($\beta = -0.103$, 95% CI $[-0.376; -0.006]$, $p = 0.038$). As shown in Fig. 2, the values below the x-axis refer to low professional isolation and those above the x-axis to high professional isolation. Similarly, values to the left of the y-axis refer to low-level POS, while those to the right refer to high-level POS. Thus, the adjusted effect is significant only for respondents with a higher than average POS level and for those with higher than average feelings of professional isolation. Hypothesis 3b, which predicted that PSS would moderate the relationship between professional isolation and satisfaction with the telework experience, was not supported ($\beta = -0.069$, 95% CI $[-0.299; 0.062]$, $p = 0.193$). Hypothesis 4a which predicted that POS would moderate the impact of professional isolation on AOC, was not supported ($\beta = 0.086$, 95% CI $[-0.073; 0.245]$, $p = 0.291$). Hypothesis 4b which predicted that PSS would moderate the impact of professional isolation on AOC, was supported ($\beta = 0.168$, 95% CI $[0.041; 0.295]$, $p = 0.010$). As shown in Fig. 3, the values below the x-axis refer to low professional isolation and those above the x-axis to high professional isolation. Similarly, values to the left of the y-axis refer to low-level PSS, while those to the right refer to high-level PSS. Thus, the adjusted effect is significant only for respondents with a PSS level above $-1.35$ SD below the average, and for those experiencing higher than average professional isolation (Fig. 4).

### 5. Discussion

The COVID-19 pandemic has become a large-scale laboratory for telework research, which will likely leave indelible marks on the future of work organization. The purpose of this study was to explore the ways that professional isolation relates to satisfaction with the telework experience and AOC during the COVID-19 crisis, and the role played by POS and PSS in these relationships. We confirm the negative direct effect of professional isolation on satisfaction with the telework experience. Our results showed that the relationship between satisfaction with telework and professional isolation was moderated by POS, and that PSS moderated the relationship between professional isolation and AOC. The theoretical and managerial implications of our findings are discussed below.
5.1. Theoretical Implications

Our results showed a negative association between professional isolation and satisfaction with the telework experience, thus confirming the direct effect hypothesis (H1). Result from past studies on the association between telework and job satisfaction are inconsistent, reporting positive, negative, or curvilinear relationships (Gajendran & Harrison, 2007). These contradictory findings highlight a paradox that is rooted in the theoretical premises that workplace relationships, frequent feedback, and face-to-face contact are positive drivers of job satisfaction and organizational commitment (Buchanan, 1974; Cooper & Kurland, 2002; Szilagyi et al., 1976). Our results suggest that the professional isolation felt during the crisis is negatively associated with the satisfaction towards the telework experience, which is in line with the results on the effect of isolation during the pandemic lockdown (e.g. Buecker & Horstmann, 2021; Smith & Lim, 2020; Toscano & Zappalà, 2020). These results confirm the existence of an intrinsic need for one to feel connected to one’s work network in order to be satisfied with the telework experience. Our results are the product of data gathered almost a year after mandatory teleworking began, in a context where the future of teleworking was still uncertain. Being deprived of face-to-face interactions for almost a year, full time, may explain some of the negative associations.

With respect to the moderation hypotheses, results showed that the relationship between satisfaction with telework and professional isolation was moderated by POS (H3a), and that the relationship between AOC and professional isolation was
moderated by PSS (H4b). The analysis of interactions demonstrates that POS buffered the effect of professional isolation on satisfaction with the telework experience for employees reporting high-level POS. Therefore, even if lower satisfaction with the telework experience represents a negative effect of professional isolation, our results indicate that high-level POS can serve as a buffer. The organization represents the employer as a whole, as a global entity. In accordance with the OST, the employer, through its values, strategies and resources, can attempt to meet socio-emotional needs, and thus mitigate the feeling of professional isolation in order to enhance the telework experience. OST as a work-related resource, (e.g., providing employees with quality support) is a symbol of care for employees, and it allows them to feel valued and nurtured by the organization which further increases their satisfaction with the telework experience, despite feelings of professional isolation (Mihalca et al., 2021).

As for the role played by PSS in the relation between professional isolation and AOC, the interaction is significant for employees with high-level PSS, as AOC increases despite high professional isolation. Theses results are consistent with those of Hu and Subramony (2022), who confirmed that social support significantly weakened the negative effects of professional isolation on workers’ well-being. These results suggest that in a crisis, supervisor support matters when it comes to buffering the effects of professional isolation on AOC. This specific result may be explained by the central role of supervisor support in maintaining employees’ positive mood and psychological well-being at work in times of crisis (Cole et al., 2006). From a theoretical perspective, the role of PSS in enhancing AOC during the COVID-19 crisis can be explained by the social support theory, which suggests that social support hems protects individuals from the detrimental effects of stressful events, by reducing employees’ perceived uncertainties and emotional exhaustion (Shumaker & Brownell, 1984). OST and other social exchange approaches posit that employees reciprocate favorable treatment from supervisors with greater commitment towards the organization (Eisenberger et al., 1986). Supervisors are seen as a major source of social support for employees (Chenevert et al., 2013), as they are able to provide daily rewards, protection, incentives, encouragement, and motivation (Schein, 1980). Providing both instrumental and emotional support is often viewed as an important part of supervisors’ jobs (informally, if not formally), and this support could buffer the feeling of professional isolation during the mandatory telework experience.

Control variables seem to have some effects on the telework experience. Gender, age, time spent teleworking and past telework experience, all have significant effects on satisfaction. Past telework experience and organizational tenure both have a significant effect on AOC. Gender has been recognized as a contributing factor since the earliest studies on telecommuting, particularly because of work-family related balance issues (e.g. Tremblay, 2002). During the pandemic’s home-based telework experience, female teleworkers seem to have had a more positive perception of telework compared to men (e.g. Nguyen & Armoogum, 2021; Raišiene et al., 2020). The former’s tendency to perceive telework as a potential strategy to balance work and family duties (González Ramos & García-de-Diego, 2022), leads us to believe that traditional gender roles were enabled and perpetuated by the imposed telecommuting environment. Moreover, remote work experience pre-dating the pandemic seems to have had an influence on both satisfaction and commitment. Prior telework experience has been found to be an important asset when it comes to coping effectively with the demands of teleworking (Raghuram & Wiesenfeld, 2004), especially in the context of the pandemic (Wang et al., 2021). Effectiveness of telework during COVID-19 was expected to depend on employee self-management tactics, such as planning work activities, setting start and finish times; behaviors that may have been acquired and internalized as part of past experiences.

5.2. Managerial Implications

Both organizations and supervisors can play a role in limiting the negative consequences of professional isolation as part of a mandatory teleworking situation. Organizations must provide their managers with the technological tools, the resources, and, the training necessary to adequately supervise their remote staff. Supervisors must listen, be proactive, communicate with their employees on a daily basis and offer recognition. Moreover, as gender, age, marital and family status, proportion of time telecommuting, and previous telecommuting experience are likely to play a role in the overall telework experience, organizations and managers should pay attention to the teleworkers’ personal characteristics and backgrounds when it comes to the implementation of their management practices and telework policies. In a crisis, maintaining social ties is essential to ensure the well-being of employees, and supervisors should serve as a catalyst for this support. Their actions may include organizing virtual activities between coworkers, so as to ensure sufficient levels of professional interactions, while building and strengthening interpersonal connections at a time when social distancing is mandatory.
5.3. Limitations, recommendations for future research and conclusion

This study has some limitations. First, as with any study using a self-administered questionnaire with cross-sectional data, a common method variance and social desirability bias may have influenced the results. However, our statistical analyses demonstrated that common method variance did not appear to significantly impact our results. Furthermore, our main result is focused around a moderating effect whose detection cannot stem from a common variance bias (Evans, 1985). Moreover, the cross-sectional nature of the study does not allow for the confirmation of causality-based relationships, and it instead points towards associations-based relationships. Second, for confidentiality reasons, the positions held by the respondents within their respective organizations were not collected. One’s position in an organization as well as the business sector of said organization may play a role in the overall telework experience. Because of the low representativeness of some sectors in the sample, and the unavailability of data, these two variables were not controlled, as they could have an impact on our results. Third, the correlation score between POS and PSS is relatively high (r = 0.687, p < 0.1), which is consistent with what was observed in previous studies (Eisenberger et al., 2002). However, with respect to discriminant validity analyses, the two concepts have been empirically proven to be conceptually and statistically distinct (Maertz et al., 2007; Stinghamber & Vandenberghhe, 2003). Finally, social support literature usually focuses on support from supervisors, colleagues, family, and friends (e.g. de Amorim-Ribeiro et al., 2022), which can be complementary or even additive (Rousseau & Aubé, 2010). However, these specific forms of social support were not controlled, which is a limitation of our study.

As stated by Baruch and Nicholson (1997) in one of the earliest models of telework, four influencing factors exist: individual factors, job factors, organizational factors, and family/home factors. Future research may probe more deeply into the different aspects that are central to one’s adjustment and satisfaction regarding their telework experience, such as those related to work-life dynamics, meaning of job, tasks context, contextual factors and perceived autonomy (van Zoonen et al., 2021). Future research will need to address the impacts of these factors in the relationship between professional isolation and its consequences. In particular, it appears that women are more affected by the work-life balance aspects of mandatory telework (Escudero-Castillo et al., 2021), which would warrant further investigation. Moreover, PSS is known to have an effect on POS. Future research could investigate a moderated mediation model, so as to improve understanding of the role that these two variables play during telework. Finally, this study was carried out in the context of a unique crisis. It will be necessary to validate its results with a new sample of teleworkers who have, this time, chosen this form of work, which more and more organizations are likely to offer and embrace in the future.

Drawing on OST, this paper examines the buffering roles of POS and PSS in the relationship between professional isolation and satisfaction with the telework experience and AOC during the COVID-19 crisis. This study emphasizes the contributions of POS and PSS in a crisis situation as countermeasures to a challenging social and organizational climate that has led to professional isolation.

Disclosure of interest

The author declares that he has no competing interest.

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