

The relationship between various social work environment elements and hybrid worker well-being

Social work
environment
elements

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Received 10 March 2023
Revised 28 September 2023
21 November 2023
Accepted 30 November 2023

Abstract

Purpose – Work environments are undergoing a transition and COVID-19 accelerated this change. Prior studies have associated various physical, digital and social work environment elements with occupational well-being. However, holistic approaches to the social work environment to compare the effects of the different elements have received less attention. The purpose of this study is to examine the relationship of various social work environment elements with hybrid worker well-being. The findings help organizations design their work environments and cultures for the post-COVID era.

Design/methodology/approach – The study builds on a quantitative survey with 1,057 respondents. The respondents were randomly selected, the answers were anonymous and the results were based on regression analysis.

Findings – The analysis indicated that working methods and practices, leadership and management practices, organizational communality and social interaction associate with hybrid worker well-being. Organizational values, reward systems and organizational structures yield no association with hybrid worker well-being.

Originality/value – The value of this paper is in that it investigates elements of the social work environment, presents a research model that examines the relationship of social work environment elements with hybrid worker well-being and provides new empirical data on their implications in a comparative manner.

Keywords Social work environment, Work environment change, Remote work, Hybrid worker, Well-being, COVID-19

Paper type Research paper

1. Introduction

Work environments changed radically as COVID-19 forced individuals to different locations. In summer 2020, 34% of dependent employees in the EU-27 countries worked from home, 14% worked in combinations of different locations and 52% worked in employer premises



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Facilities
Vol. 42 No. 15/16, 2024
pp. 1-16
Emerald Publishing Limited
0263-2772
DOI 10.1108/F-03-2023-0019

only (Ahrendt *et al.*, 2021). The highest amount of remote working was reported from the Nordics and Benelux countries, with percentages between 55 and 59 (Ahrendt *et al.*, 2021). In spring 2021, the figures changed slightly due to a partial lockdown, with 24% of dependent employees in the EU-27 countries now working from home, 18% working in combinations of different locations and 59% working solely from employer premises (Ahrendt *et al.*, 2021).

According to Sostero *et al.* (2020), an archetypal teleworker works in high-level occupations, is experienced, highly educated, well-paid and views the granted autonomy as a privilege associated with high professional status. *Telework*, *remote work* and *work from home* all describe the same work mode, with only minor deviations (Sostero *et al.*, 2020). The broadest concept is remote work, where work is fully or partly executed in a destination alternative to the default place. Telework can be regarded as a subcategory of remote work and defined as remote work accomplished with the help of digital devices. Work from home refers to work that is conducted at home, and unlike with remote work and telework, not in third locations (Sostero *et al.*, 2020). During COVID-19, a new term, *hybrid work*, gained popularity, describing work that is partly performed from employer premises and partly from employee home or third locations (Llave *et al.*, 2022). As we investigate knowledge work in this latest context, we apply the concept hybrid work.

Prior research associates various physical and digital work environment influences with occupational well-being and performance, e.g. Ipsen *et al.* (2021, 2022), Niebuhr *et al.* (2022), Müller *et al.* (2022) and Bergefurt *et al.* (2022). The effect of the social work environment on occupational well-being has been explored by at least the following researchers: Zwetsloot *et al.* (2013), ter Hoeven and van Zoonen (2015), Vander Elst *et al.* (2017), Gorenak *et al.* (2019), Marino and Capone (2021), Magnavita *et al.* (2021), Ervasti *et al.* (2021), Chirico *et al.* (2021), Schade *et al.* (2021) and Niebuhr *et al.* (2022). Their studies relate social work environment elements such as organizational culture, values, leadership and management practices, working methods and practices, organizational structures, organizational communality and social interaction with employee well-being. In contrast, a holistic approach to the social work environment has been taken less frequently to compare the effects of the different elements, leaving a research gap. Lindeberg *et al.* (2022) found that social work environment changes relate more strongly to the development of organizational well-being than other changes in the activity-based work environment, which motivated further investigations. As a contribution, this study presents a research model which examines the relationship of various social work environment elements with hybrid worker well-being. The study completes prior findings and provides new empirical data on hybrid work implications in a comparative manner. The findings help organizations design their work environments and cultures for the post-COVID era.

Section 2 presents a literature review of work environment dimensions and various elements of the social work environment. It also addresses studies of the connection between the social work environment and occupational well-being, helping formulate hypotheses. Section 3 presents the research methodology. The results are shown in Section 4. Finally, implications for theory and practice as well as recommendations for further research are presented in Section 5.

2. Literature review

2.1 Work environment dimensions and various elements of the social work environment

Knowledge work environments can be examined holistically through three dimensions: the physical, the digital (virtual) and the social environment (e.g. Palvalin, 2019). The physical environment addresses not only organizational facilities and spaces but also any other

physical space where work is conducted (Vartiainen *et al.*, 2007; Palvalin, 2019). The digital environment includes information and communication technology and the collaborative virtual workspace between employees (Vartiainen *et al.*, 2007; Palvalin, 2019). The social environment refers to organizational culture, values, leadership and management practices, working methods, organizational structures and aspects of human relations (Vartiainen *et al.*, 2007; Bosch-Sijtsema *et al.*, 2009; Zwetsloot *et al.*, 2013; Palvalin, 2019). Organizational culture can be defined in several ways. It emerges and evolves in social encounters, which are regulated by the beliefs and assumptions the participating individuals hold true (Schein, 2010). Organizational culture can be divided into three levels:

- (1) artifacts such as visible structures and processes;
- (2) espoused beliefs and values such as ideals, goals, values, aspirations, ideologies and rationalizations; and
- (3) basic assumptions such as unconscious, taken-for-granted beliefs and values (Schein, 2010).

Building on prior studies, we designed a research model (presented in detail in Section 3.2) to explore seven social work environment elements as independent variables: organizational values, leadership and management practices, reward systems, working methods and practices, organizational structures, organizational communality and social interaction. These seven social work environment elements were selected due to their previous impacts on well-being as described in Section 2.2.

2.2 Former studies of the relationship between the social work environment and occupational well-being

The physical and digital work environments may affect not only occupational well-being and performance (Ng, 2010; Ipsen *et al.*, 2022; Niebuhr *et al.*, 2022; Müller *et al.*, 2022; Bergefurt *et al.*, 2022) but also other factors, such as the social work environment, may have relevance (Ward and Shabha, 2001; Marino and Capone, 2021; Magnavita *et al.*, 2021; Ipsen *et al.*, 2022).

Definitions of occupational well-being abound, embracing physical, psychological and psychosocial components. However, these components may interplay, yield short- or long-term effects and produce either objective or subjective interpretations (Foldspang *et al.*, 2011; Warr and Nielsen, 2018). Measuring occupational health, whether psychological or psychosocial, is often complicated by the several, simultaneous, intervening factors, triggering subjective experiences (Foldspang *et al.*, 2011). To further complicate the matter, occupational well-being may be comprehended as a context-free phenomenon referring to overall mental health and satisfaction with life (Warr and Nielsen, 2018; Marino and Capone, 2021). Autonomous knowledge work mode during the pandemic (Sostero *et al.*, 2020; Ahrendt *et al.*, 2021) urges us to analyze the outcomes on the individual level. This substantiates the subjective perspective of the individual in this study.

In the past ten years, the determinants of occupational well-being have been widely discussed. Zwetsloot *et al.* (2013) explored organizational values supportive of health, safety and well-being at work, whereas Gorenak *et al.* (2019) delved into the influence of organizational values on job satisfaction. Ter Hoeven and van Zoonen (2015) explored the connection between flexible work designs and employee well-being, accentuating the influence of leadership and management practices. Moreover, Langfred and Rockmann (2016) drew attention to contradictions between staff and management regarding the degree of autonomy and organizational control, whereas Maier *et al.* (2022) took an interest in the

perceived disparity between office workers and remote workers, and the ways in which these tensions affect individual and organizational performance, highlighting the role of leadership and management practices. Where [Vander Elst et al. \(2017\)](#), [Marino and Capone \(2021\)](#), [Magnavita et al. \(2021\)](#), [van Zoonen et al. \(2021\)](#) and [Niebuhr et al. \(2022\)](#) stressed leadership and organizational culture as antecedents of work-related well-being, [Ervasti et al. \(2021\)](#) researched organizational changes during COVID-19 as contributors to perceptions of the psychosocial work environment and well-being, emphasizing the impact of organizational structures and working methods. [Chirico et al. \(2021\)](#) investigated various physical and mental effects on remote workers, whereas [Vander Elst et al. \(2017\)](#), [Schade et al. \(2021\)](#) and [Kirchner et al. \(2022\)](#) inspected social support, showing the role of organizational culture and interaction between employees.

This body of literature confirms the complexity of the influence of various work environment dimensions on occupational well-being, and that the social work environment with its elements may be pertinent for the outcomes. Furthermore, [Bergefurt et al. \(2022\)](#) discerned various physical work environment qualities that affect well-being, whereas [Ipsen et al. \(2021, 2022\)](#) and [Niebuhr et al. \(2022\)](#) demonstrated some physical and digital work environment properties to impact occupational well-being and performance when working from home during COVID-19. These influences deserve attention, although remain outside the focus of this paper.

2.3 Background for the hypotheses

This paper investigates the relationship of various social work environment elements with hybrid worker well-being. Experiences from remote work vary but according to [Gajendran and Harrison \(2007\)](#) and [Ipsen et al. \(2021\)](#), the advantages may be more pronounced than conventional work practices. Remote work can support employee perceptions of autonomy and work–family balance without reducing the sense of belonging to the working community ([Gajendran and Harrison, 2007](#)). It may also increase job satisfaction and performance, although these results are not unambiguous and some studies indicate the opposite ([Gajendran and Harrison, 2007](#); [Pyöriä, 2011](#); [Niebuhr et al., 2022](#); [Beckel and Fisher, 2022](#)). During COVID-19, work–life balance, efficiency and work control were improved, whereas the negative experiences were related to constraints at home, work uncertainties and insufficient tools for remote work ([Ipsen et al., 2021](#)), as well as to perceived disparity between office workers and remote workers ([Maier et al., 2022](#)). [Stempel and Siestrup \(2022\)](#) showed autonomy, worktime control and fewer interruptions as advantages, whereas poor communication, lack of information and inadequately equipped work environment surfaced as disadvantages of remote work. [Erro-Garcés et al. \(2022\)](#) argue for remote work to affect well-being positively but indirectly through work–life balance. However, employees with high remote work preferences experienced remote work to affect well-being directly and positively ([Erro-Garcés et al., 2022](#)). Perceptions may also depend on employee age, gender ([Kirchner et al., 2022](#)), and whether remote work is enforced or voluntary ([Kirchner et al., 2022](#); [Kaluza and van Dick, 2022](#); [Lopes et al., 2022](#)), and on industry, occupation, job and personal characteristics of the remote worker ([Beckel and Fisher, 2022](#); [Nenonen and Sankari, 2022](#)). In addition, the location of remote work ([Morganson et al., 2009](#)), the design and condition of the home office ([Ng, 2010](#)), the quality of job crafting ([Stempel and Siestrup, 2022](#)), the amount of remote work ([Niebuhr et al., 2022](#)) and national conditions ([Ipsen et al., 2022](#)) may affect well-being and performance.

As described in Section 2.1, the social work environment includes various elements such as organizational values, leadership and management practices, reward systems, working methods and practices, organizational structures, organizational communality and social

interaction, which may affect occupational well-being. Among them, this paper first examines the effects of organizational values. According to [Zwetsloot et al. \(2013\)](#), values are crucial cultural elements, and they are principles that provide operating and strategic guidance for people and organizations. In addition, values provide a meaning to organizational existence and its value for society. Values related to autonomy, connectedness or interconnectedness, sense making and social inclusion are relevant for occupational well-being ([Zwetsloot et al., 2013](#)). [Gorenak et al. \(2019\)](#) demonstrated a correlation between organizational values and job satisfaction, highlighting values related to quality, innovation, responsibility, ethics, customers and employees.

As a summary of the above findings, various organizational values associate with perceived well-being, although also other variables within the social work environment affect the results. Thus, it is crucial to understand whether organizational values have a relationship with hybrid worker well-being. Based on this, *H1* was formulated:

H1. Organizational values have a relationship with hybrid worker well-being.

Second, this paper analyzes the effects of leadership and management practices and reward systems. In the information society where work is widely location-independent, the importance of the individual has grown and organizations are becoming more flexible regarding how, where and when the work is performed ([Palvalin and Vuolle, 2016](#); [Nenonen and Sankari, 2022](#)). [Ter Hoeven and van Zoonen \(2015\)](#) yielded a positive relationship between flexible work designs and employee well-being as mediated by improved work and life balance, higher degree of autonomy and more effective communication. However, a negative relationship appeared for increased interruptions. Although the benefits of individual autonomy are recognized in former research, the outcomes between employees and managers may be contradictory regarding autonomy degree and organizational control ([Langfred and Rockmann, 2016](#); [Marino and Capone, 2021](#); [Niebuhr et al., 2022](#)). Despite technology-enabled working and collaboration regardless of location, some organizations remain hierarchical and prefer to restrict autonomy ([Langfred and Rockmann, 2016](#)). Further, some managers prefer granting autonomy to employees, yet feel pressured to retain control, which negatively affects not only the employees but also themselves ([Langfred and Rockmann, 2016](#)). According to [Vander Elst et al. \(2017\)](#), task autonomy and the possibility to participate in decision-making were directly related to occupational well-being, whereas the amount of remote work did not directly relate to the outcomes. The perceived disparity between office workers and remote workers should be solved with transparent and equal policies, highlighting leadership and management practices ([Maier et al., 2022](#)). [Magnavita et al. \(2021\)](#) found that authoritarian leadership and demand for overtime work, regardless of remote working, may lead to negative results. In contrast with previous studies, relational factors such as trust in peers and superiors does not seem to support adaptation to remote work ([van Zoonen et al., 2021](#)). [Hertel et al. \(2005\)](#) discovered similarities in the management of virtual teams and conventional teams, although there are differences depending on the extent of remote work. According to [Webster and Staples \(2006\)](#), management of virtual teams should include team selection, training, appraisal, compensation and strategic planning of human resources. Concrete and observable reward systems are especially important for individuals performing virtual teamwork and may affect employee motivation and performance ([Hertel et al., 2005](#); [Webster and Staples, 2006](#)).

As a summary, leadership and management practices appear to associate significantly with perceived well-being, although also other variables within the social work environment affect the results. Thus, it is crucial to understand whether leadership and management

practices, and reward systems, have a relationship with hybrid worker well-being. Based on this, *H2* and *H3* were formulated:

H2. Leadership and management practices have a relationship with hybrid worker well-being.

H3. Reward systems have a relationship with hybrid worker well-being.

Third, this paper investigates the effects of working methods, practices and organizational structures. Individuals working from home during COVID-19 gain superior results in perceived worktime control and well-being to those working on-site ([Ervasti et al., 2021](#)). In addition, working from home seems to compensate, at least partially, for the negative effects on employee well-being caused by changes in tasks and organizational structures ([Ervasti et al., 2021](#)). Further, remote work outside traditional hours affects well-being significantly ([Magnavita et al., 2021](#)), and similarly, training and implementing new practices is critical when working methods change ([Marino and Capone, 2021](#)). [Van Zoonen et al. \(2021\)](#) showed that structural factors such as work independence and clarity of job criteria are crucial predictors of employee adjustment to remote work, and that these relationships can be supported by the quality of communication and technology. In addition, [van Zoonen et al. \(2021\)](#) argued that contextual factors such as perceived disruption of work routines and change of location are crucial predictors of employee adjustment to remote work.

As a summary of the above findings, working methods, practices, and organizational structures associate with perceived well-being, although also other variables within the social work environment affect the results. Thus, it is crucial to understand whether working methods, practices, and organizational structures have a relationship with hybrid worker well-being. Based on this, *H4* and *H5* were formulated:

H4. Working methods and practices have a relationship with hybrid worker well-being.

H5. Organizational structures have a relationship with hybrid worker well-being.

Fourth and last, this paper explores the effects of human relations, organizational communality and social interaction. Already before the pandemic, this was important for remote workers who usually performed their tasks independently. In an optimal situation, remote work can support employee well-being without reducing the sense of belonging to the work community ([Gajendran and Harrison, 2007](#)). [Vander Elst et al. \(2017\)](#) investigated the effects of social support and showed collegial support directly related to occupational well-being. [Schade et al. \(2021\)](#) and [Kirchner et al. \(2022\)](#) highlighted the importance of knowledge sharing between colleagues when working from home. [Chirico et al. \(2021\)](#) demonstrated that lack of interaction between employees reduced well-being during the pandemic, whereas [Magnavita et al. \(2021\)](#) discovered that reduced support from the organization may increase stress and decrease job satisfaction in remote work. In addition, [Schade et al. \(2021\)](#) found relatedness to colleagues remarkably lower for people working from home, which may affect individuals' well-being.

As a summary, human relations, organizational communality and social interaction associate significantly with perceived well-being, although also other variables within the social work environment affect the outcomes. Thus, it is crucial to understand whether organizational communality and social interaction have a relationship with hybrid worker well-being. Based on this, *H6* and *H7* were formulated:

H6. Organizational communality has a relationship with hybrid worker well-being.

3. Methodology

3.1 Data collection

A total of 1,596 people were randomly selected, out of which 1,057 individuals were accepted for the survey. A total of 539 individuals who did not perform knowledge work were eliminated from the final survey with a screening question. The responses were collected with an anonymous survey questionnaire during the period 17 to 25 of May 2022. The survey was administered by Taloustutkimus Oy. The sample size was assessed as sufficient to describe knowledge workers in Finland and in other working cultures in Europe. An analysis of variance (ANOVA) was used for non-response bias tests. Differences between two groups of respondents, early and late, were tested on all study constructs. According to [Armstrong and Overton \(1977\)](#), late respondents are like non-respondents. This test confirmed no significant differences between the two groups (variation was 0.130 – 0.956 in the significance levels). Thus, non-response bias is not a problem in this study, and the data represent the entire sample.

Former literature allowed developing the questionnaire items. The survey consisted of close-ended items: the first four were background questions addressing respondent age, gender, position in the organization and the share of office presence at the time of responding ([Table 1](#)). One question was related to the dependent variable and had a four-point Likert-type scale

	%		%		%
<i>Gender</i>		<i>Education</i>		<i>Org. Size</i>	
Female	58	Elementary	2	One	2
Male	42	Secondary	30	<20	13
		Higher education	68	20–49	9
<i>Age</i>				50–249	18
18–25	0	<i>Business</i>		>250	57
26–35	9	Public administration and defense	18		
36–45	18	Information and communication	11	<i>Office presence now</i>	
46–55	34	Manufacturing	10	<50% of work hours	49
56+	40	Education	10	50%–79%	15
		Human health and social work activities	8	80%–94%	13
<i>Position</i>		Professional, scientific and technical activities	8	>95%	24
Foreperson	20	Finance and insurance	5		
Worker	80	Administrative and support service activities	5	<i>Off. pres. under COVID-19</i>	
		Construction	4	<50% of work hours	58
<i>Office type</i>		Wholesale and retail trade	3	50%–79%	12
Open	28	Transportation and storage	3	80%–94%	11
Room	25	Other service activities	2	>95%	19
Combi	21	Real estate activities	2		
Activity-based	19	Arts, entertainment and recreation	2	<i>Off. pres. before COVID-19</i>	
Home	3	Agriculture, forestry and fishing	1	<50% of work hours	12
Office Hotel	1	Accommodation and food service activities	1	50%–79%	13
Co-working	1	Other	9	80%–94%	22
Other	3			>95%	54

Source: Authors' own creation

Table 1.
Respondents'
background
information

ranging from poor (1) to outstanding (4). In addition, 14 supplementary questions were related to the independent variables, with a five-point Likert-type scale ranging from completely disagree (1) to completely agree (5). Different scales for independent and dependent variables were used to minimize the potential for common method bias (Podsakoff *et al.*, 2003).

The reliability of the constructs was assessed with Cronbach’s alpha (α). The α -values for the independent variables exceeded 0.7 (at a minimum of 0.833), which confirmed internal consistency of the constructs. A two-item scale was adopted for the independent variables as many scholars argue against single-item measures owing to problems with their reliability and validity (Sarstedt and Wilczynski, 2009; Diamantopoulos *et al.*, 2012). Productivity was chosen as the second item, as it is closely related to well-being (Foldspang *et al.*, 2011; Palvalin, 2019) and considered important when determining implications for well-being. Table 2 presents the statistical means, standard deviations variables and the α -coefficients.

3.2 Data analysis

A research model for this study was constructed by the main author on the basis of seven social work environment elements as independent variables: organizational values,

Construct	Items	N	Mean	SD	α
Organizational values	a. Our organizational values support my well-being at work	1,057	3.7133	0.91889	0.843
	b. Our organizational values support my productivity at work				
Leadership and management practices	a. Our leadership and management practices support my well-being at work	1,057	3.2190	1.16939	0.907
	b. Our leadership and management practices support my productivity at work				
Reward systems	a. Our reward systems support my well-being at work	1,057	2.7148	1.18516	0.926
	b. Our reward systems support my productivity at work				
Working methods and practices	a. Our working methods and practices support my well-being at work	1,057	3.5766	0.95435	0.833
	b. Our working methods and practices support my productivity at work				
Organizational structures	a. Our organizational structures support my well-being at work	1,057	3.3051	1.00959	0.837
	b. Our organizational structures support my productivity at work				
Organizational communality	a. Our organizational communality and general atmosphere support my well-being at work	1,057	3.6977	0.98433	0.855
	b. Our organizational communality and general atmosphere support my productivity at work				
Social interaction	a. Social interaction in our work community support my well-being at work	1,057	3.7507	0.95696	0.859
	b. Social interaction in our work community support my productivity at work				
Perceived well-being	Evaluate your own well-being at work right now	1,057	2.86	0.734	

Source: Authors’ own creation

Table 2.
Construct
measurement and
reliability

leadership and management practices, reward systems, working methods and practices, organizational structures, organizational communality and social interaction. The dependent variable, the outcome, was limited to one: perceived well-being on the individual level. Four covariates, age, gender, position in the organization and the extent of office presence, were included in the model as their effects have been recognized (Ervasti *et al.*, 2021; Kirchner *et al.*, 2022; Beckel and Fisher, 2022). Thus, a research model was created as shown in Figure 1.

A linear regression analysis was applied to test the hypotheses. The method was selected because it provides a scientific calculation for identifying future outcomes, in this case the role of the social work environment for predicting well-being. Prior hypothesis testing and the pre-assumptions of linear regression were checked as follows: normality and heteroscedasticity were investigated with a normal P-P plot and a scatterplot of the residuals; and multicollinearity was checked by analyzing the correlation coefficients and variance inflation factor values. As presented in Table 3, all the coefficients were lower than

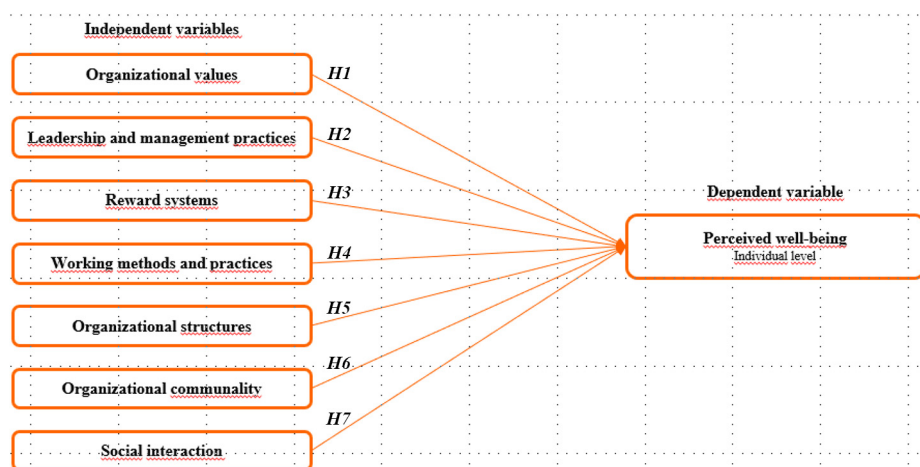


Figure 1.
Research model

Source: Authors' own creation

	1	2	3	4	5	6	7	8
1. Organizational values	1.000							
2. Leadership and management practices	0.675***	1.000						
3. Reward systems	0.534***	0.569***	1.000					
4. Working methods and practices	0.613***	0.687***	0.467***	1.000				
5. Organizational structures	0.672***	0.771***	0.545***	0.714***	1.000			
6. Organizational communality	0.646***	0.660***	0.440***	0.602***	0.672***	1.000		
7. Social interaction	0.419***	0.435***	0.315***	0.421***	0.478***	0.702***	1.000	
8. Perceived well-being	0.447***	0.498***	0.357***	0.505***	0.481***	0.460***	0.355***	1.000

Note: *** Sig. ≤ 0.001

Source: Author's own creation

Table 3.
Spearman's rank
correlation
coefficients (rho)

Hypothesis testing and regression results for hybrid worker well-being are presented in Table 4.

H1, *H3* and *H5* were rejected. According to the results, organizational values, reward systems and organizational structures yield no association with hybrid worker well-being ($p > 0.05$).

H4 was accepted. Working methods and practices have a positive relationship with hybrid worker well-being ($\beta = 0.210, p \leq 0.001$), and the impact is strongest for social work environment elements.

Model well-being	Unstandardized coefficients <i>B</i>	<i>Std. Error</i>	Standardized coefficients <i>Std.β</i>	<i>t</i>	<i>p</i>
(Constant)	0.997	0.179		5.560	<0.001
Age	0.001	0.002	0.008	0.322	0.748
Gender	0.015	0.038	0.010	0.397	0.691
Position	0.054	0.048	0.029	1.137	0.256
Office presence now	−0.001	0.000	−0.074	−2.855	0.004
Organizational values	0.034	0.031	0.042	1.069	0.286
Leadership and management practices	0.092	0.029	0.147	3.237	0.001
Reward systems	0.026	0.020	0.042	1.304	0.192
Working methods and practices	0.161	0.030	0.210	5.405	<0.001
Organizational structures	0.057	0.033	0.079	1.741	0.082
Organizational communality	0.077	0.034	0.103	2.232	0.026
Social interaction	0.065	0.028	0.085	2.374	0.018
F	50.418***				
R Square	0.347				
Adj. R Square	0.340				

Note: Sig. *** ≤ 0.001
Source: Author's own creation

5. Implications

5.1 *Implications to theory*

First, based on the regression analysis, *H2*, *H4*, *H6* and *H7* were accepted. Leadership and management practices have a positive relationship with hybrid worker well-being, which is also reported by [ter Hoeven and van Zoonen \(2015\)](#), and [Vander Elst et al. \(2017\)](#), who highlighted the importance of flexible work designs and employee autonomy. However, the results from this study may be affected by a higher degree of autonomy, which was granted during COVID-19 ([Sostero et al., 2020](#)) and was not necessarily related to leadership and management practices. Recent studies by [Magnavita et al. \(2021\)](#) and [Maier et al. \(2022\)](#) underline leadership and management practices, which, if poor, may lead to reverse effects like perceived disparity, stress and decreased remote worker job satisfaction. This study found a strong relationship between working methods and practices and hybrid worker well-being. This finding stresses the importance of flexible working methods and practices ([ter Hoeven and van Zoonen, 2015](#); [Vander Elst et al., 2017](#); [Ervasti et al., 2021](#); [Magnavita et al., 2021](#); [Marino and Capone, 2021](#)). Testing *H6* and *H7* related to organizational communality and social interaction yielded a positive relationship with hybrid worker well-being. Similar study designs recognize the importance of social support, interaction and knowledge sharing in the work community ([Vander Elst et al., 2017](#); [Kirchner et al., 2022](#); [Schade et al., 2021](#); [Chirico et al., 2021](#); [Magnavita et al., 2021](#)). It should be noted that observations related to organizational communality and social interaction may emerge more prominently in such exceptional circumstances as COVID-19 that force people to isolation for longer periods of time. The sense of belonging and communality should therefore be further investigated in the post-COVID era once new practices of hybrid work have established themselves.

Second, regression analysis resulted in *H1*, *H3* and *H5* being refuted. Organizational values, reward systems and organizational structures yield no association with hybrid worker well-being. The results comprising organizational values differ from previous studies ([Zwetsloot et al., 2013](#); [Gorenak et al., 2019](#)), which found values to affect employee well-being. However, this study did not scrutinize organizational values, which are known to vary widely across organizations. This study yielded no association between reward systems and hybrid worker well-being, although [Hertel et al. \(2005\)](#) and [Webster and Staples \(2006\)](#) found reward systems important for individual motivation and performance. [Ervasti et al. \(2021\)](#) found changes in organizational structures to affect the well-being of the employee, which could not be confirmed in this study. However, this study did not examine changes in organizational structures on a detailed level, which might have yielded different results.

Third, a negative influence was revealed for office presence: more extensive presence had a negative influence on well-being. This finding is supported by [Ervasti et al. \(2021\)](#), who found individuals working from home during COVID-19 gaining slightly better results in perceived worktime control and well-being, than those working on-site. This might be explained, e.g. by employees harnessing strong expectations regarding decision-making and autonomy ([Vander Elst et al., 2017](#)), while some organizations are still hierarchical and prefer to restrict autonomy ([Langfred and Rockmann, 2016](#)) and force people to the office. Therefore, unmet autonomy-related expectations potentially result in a negative influence overall. Other reasons for the negative results could be related to perceived disparity between office workers and remote workers ([Maier et al., 2022](#)) or issues related to COVID-19 risks owing to human contacts at the office.

The covariates age, gender and position in the organization showed no association with hybrid worker well-being, although their influence has been acknowledged in previous studies ([Kirchner et al., 2022](#); [Beckel and Fisher, 2022](#)).

5.2 Implications to practice

The results from this study may help organizations design their work environments and cultures for the post-COVID era or prepare organizations for new crises or pandemics, where telework is mandatory. Understanding the relationship of various social work environment elements with hybrid worker well-being is valuable to support strategic and operative decisions.

The present study contributes to the academic domain by providing a simplified research model for indicative research, to be adopted also in practice to discern the implications of the different social work environment elements and to substantiate targeted action with relevant knowledge. Some practical measures from former literature can be recommended. Issues related to working methods and practices could be solved with reasonable working hours, as well as by training employees in new practices when working methods change, as proposed by [Magnavita et al. \(2021\)](#) and [Marino and Capone \(2021\)](#). The challenges related to organizational communality and social interaction could be solved with an open and supportive organizational culture that enables interaction and knowledge sharing between colleagues, regardless of location ([Vander Elst et al., 2017](#); [Chirico et al., 2021](#); [Marino and Capone, 2021](#); [Magnavita et al., 2021](#); [Schade et al., 2021](#); [Kirchner et al., 2022](#)). The issues related to leadership and management practices could be resolved with a transparent organizational culture and equality that provides optimal latitude for decision-making and autonomy for the hybrid worker ([ter Hoeven and van Zoonen, 2015](#); [Langfred and Rockmann, 2016](#); [Vander Elst et al., 2017](#); [Magnavita et al., 2021](#); [Maier et al., 2022](#)). In addition, flexible work designs may be relevant for hybrid worker well-being ([ter Hoeven and Van Zoonen, 2015](#)). It should be noted that these recommendations may not be adapted to every organization, various organizations have different needs and national legislation may restrict, e.g. measures related to flexible work designs and working hours ([Llave et al., 2022](#)).

6. Conclusions

The relationship of various social work environment elements with occupational well-being is relatively well established. However, the findings in this study support the significance of a comprehensive approach to the social work environment by comparing the effects of different elements. It can be considered a limitation that the study measured the dependent variable with subjective items, and well-being at work may be understood as a context-free dimension referring to general mental health. On the other hand, appreciation of the employee experience invites consideration of all domains of human life ([Lappalainen et al., 2019](#)). For example, personal factors, work–family conflict and social isolation contribute to well-being, especially under exceptional circumstances such as COVID-19, which intervened in the results. This study only covered, although holistically, elements from the social work environment, even though there are various factors within the physical and digital work environment that affect hybrid worker well-being. In this study, a survey-based method was used owing to its possibilities in providing a scientific calculation for identifying future outcomes. Admittedly, this induces some limitations. The first one relates to the low R^2 value of the model. However, studies addressing aspects affected by human behavior tend to have R^2 values below 50%, and the results in this study are in line with this tendency. Second, the current study examines only direct relationships between various social work environment elements and occupational well-being. Future analyses could overcome this limitation by including additional variables or paths to the model. Future research could also address the social work environment elements defined in this study and examine their implications and interconnections with experimental methods.

This study was executed under COVID-19 conditions when remote work was not voluntary for most people. However, perceptions of well-being may depend on whether remote work is forced or discretionary. This provides some compelling topics for future studies, for example: What is the range of individuals' autonomy in hybrid work and how does autonomy impact well-being and performance?

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