



TECHNIUM
SOCIAL SCIENCES JOURNAL

www.techniumscience.com



Vol. 77/2025
A New Decade for Social Changes

PLUS
COMMUNICATION P



International
Communication & PR

When coworking space and setting boundaries affect well-being of remote workers

Samar Khoury

Faculté des lettres et Sciences humaines, Université Saint Joseph, Beirut, Lebanon

samar.khoury@hotmail.com

Abstract. Background: Establishing clear boundaries would help remote workers delineate their professional responsibilities from their personal time and promoting a healthier work-life balance. this study aims to investigate the impact of different living arrangements and boundary-setting strategies on overall well-being. Methods: In a cross-sectional design, a total of 293 workers participated in an online survey. Well-being was measured using the 14-item Scale of General Well-Being (14-SGWB). Results: Only 35.8% of remote workers had a dedicated desk at home in a room with a door that can be closed. Around 35% stated that the boundaries set between work and personal life were a little unclear and 38.5% reported often feeling that work intruded on their personal time. Linear regression analysis showed that setting clearer work-life boundaries (Beta=2.46), having comfort in people around them (Beta=4.46) were significantly associated with higher well-being scores. Conclusion: a dedicated workstations, clear boundaries, and support from cohabitants positively impact remote workers well-being. It is recommended that organizations prioritize the implementation of supportive measures such as training programs, flexible work arrangements, and clear communication channels to enhance the well-being of their remote workforce.

Keywords. Remote work, worker, well-being, boundaries, personal life, Digital

Background

Well-being, as a multidimensional construct, encapsulates physical, mental, and social dimensions that collectively contribute to an individual's quality of life (WHO, 2001). In the realm of work, understanding the dynamics of well-being has become essential, as it is intrinsically linked to individual and organizational success. Research consistently highlights the reciprocal relationship between employee well-being and productivity, with well-supported evidence demonstrating that content, satisfied employees are more likely to contribute meaningfully to their work (1). Individuals with reported higher well-being scores demonstrate enhanced learning abilities, improved productivity at work, greater creativity and flexibility, more interpersonal skills, pro-social behavior, healthier relationships and eventually good physical health (2). Studies have shown, for instance, that increased well-being correlates with numerous improved outcomes in terms of health and life expectancy (3) and individual workplace performance (4).

Remote work, once considered an alternative work arrangement, has rapidly transformed into a global phenomenon, reshaping the traditional dynamics of work and challenging established norms. The COVID-19 pandemic acted as a catalyst, expediting the adoption of remote work on an unprecedented scale (5). However, beyond being a response to crisis, remote work has emerged as a strategic approach for fostering flexibility, autonomy, and efficiency in the workplace. A key feature for progressing in the debate around the impact of remote working on the well-being of remote workers would be to better determine the influencing factors, or enablers, that can positively affect the general well-being of employees in the remote working setting. Contradictory findings in the literature about remote working have been raising interest, as some of the published studies defend the role of remote working as a work mode that has the ability to improve the general well-being of employees (1, 4, 6, 7), while other just as solid researches argue that, despite the several benefits one can obtain from working remotely, this work arrangement can turn out to be detrimental to those professionals, their co-workers, and to their overall well-being (8-11).

In a traditional office setting, the commute serves as a spatial and temporal boundary, delineating the transition from personal life to professional responsibilities. The absence of a physical separation between the office and home constitutes a fundamental characteristic of remote work. Remote work, however, eradicates this spatial distinction, allowing work to permeate the domestic sphere. Consequently, remote workers may find themselves navigating the challenges of an environment where the professional and personal coexist within the same physical space. Grant (2013) highlights that this convergence can lead to an extension of working hours (12). The permeability of boundaries makes it challenging for remote workers to disengage from work-related responsibilities at the end of the conventional workday. The absence of a physical departure from the office may contribute to a continuous availability mindset, where the delineation between professional obligations and personal time becomes increasingly fluid. As a result, remote workers may experience difficulties in establishing clear temporal boundaries, leading to prolonged working hours and an extended engagement with work tasks.

The clarity of boundaries between work and personal life, with the support provided by living and working space dynamics, emerges as influential factors (8-11). These factors remain understudied although they could play significant roles in offsetting the above-mentioned disadvantages of remote work. It could be in fact, that establishing clear boundaries would help remote workers delineate their professional responsibilities from their personal time, reducing the risk of burnout and promoting a healthier work-life balance. Simple physical setup of the workspace for instance, such as having a dedicated office area versus working in shared spaces, could favor concentration and productivity as it would reduce distractions and enhance focus, while clearly defined work hours can help maintain a balance between professional responsibilities and personal time. Additionally, the level of support and interaction from family members or housemates would play a major role in the overall success of this unconventional work arrangement; either mitigating feelings of isolation and enhancing a sense of community and support or, accentuating the tensions and struggles to keep the focus on work. Physical and psychological separation between work and home life both become crucial aspects in ensuring a healthy work-life balance and in promoting sustainable worker well-being.

In Lebanon, a Levantine country plagued by accumulating collective adversities since the COVID-19 pandemic (13), remote work arises as a viable alternative to address the high cost of commute due to massive devaluation of the local currency and fuel crisis. This is

particularly relevant to avoid the brain-drain of employees in digital industries (14). Including the dynamics of the living space and the ability to set boundaries between personal and professional life, adds layers of complexity to the remote work experience in such settings. Furthermore, the digital sector in Lebanon not only represents a crucial area of economic activity but also serves as an indicator of the growth and sustainability of this country that base on the adaptability and satisfaction of its workforce, particularly in sectors that drive innovation and technological advancements. The digital sector encapsulates the essence of Lebanon's future economic landscape, making it an ideal focal point for understanding the dynamics of remote work and its implications for individual well-being. Understanding the well-being of professionals in this sector can provide valuable insights into broader economic and social trends.

Our study thus aims to investigate how different living arrangements and boundary-setting strategies influence well-being, offering valuable insights for individuals seeking to optimize their remote work environment

Methods

Research Design and participants

A quantitative cross-sectional design was adopted to examine the relationships between contextual factors and the well-being of Lebanese remote workers in the digital industry. An online survey was distributed and was completed by a total of 293 participants. Two organizations were contacted to access a target population of Lebanese remote workers in the digital industry. These included the Beirut Digital District (a pioneer national initiative aiming to create a tech-hub for the digital industry in Lebanon and the region) and Jobs for Lebanon (a non-governmental organization that has built a solid and extended database of Lebanese professionals during the past couple of years). Having direct access to Lebanese professionals who work remotely in the digital sector, these organizations were channels that helped recruit respondents with profiles that were adequate for the requirements of this survey.

Other channels were also employed, including the use of the professional social media platform LinkedIn to post the link to the survey on the various groups and forums involving remote workers and professionals of the digital industry. Participants were recruited through a purposive sampling approach, targeting individuals engaged in remote work. The inclusion criteria encompassed Lebanese individuals, aged 18 and above, previous or current experience in the digital sector, and currently engaged in remote work arrangements.

Data Collection

Respondents were approached by the researcher via e-mail, electronic messages or phone messages and were first asked for informed consent (stating the purpose of the research, expected timing to complete the survey, confidentiality settings as well as contact information of researcher). They were then given access to the survey through a web-based link where they were able to go through the various categories of questions and submit their answers anonymously. Data collection took place through a public online survey platform, ensuring accessibility and convenience for participants. The survey link was also distributed via digital and social media platforms commonly used by professionals in the Lebanese digital industry. Participants were assured of the confidentiality and anonymity of their responses. Once data collection was completed, it was inspected for missing data and patterns and interrelations between data sets were organized and cross-checked for validity and reliability.

Instrument: The Online Survey

Data collection involved the administration of a structured survey questionnaire explicitly developed for this study. The survey comprised several sections to capture sociodemographic information, contextual factors and participants' general well-being. The survey instrument was pilot-tested with a small sample to ensure clarity and relevance.

Questions included in the survey included the following categories:

Sociodemographic and Personal Traits:

This section of the survey collected information on participants' age, gender, education level, marital status, nationality, residence, monthly income, physical activity, leisure activity, and job security.

Questions about contextual Factors

Participants were queried about their work situation, including the description of their workstation, the clarity of boundaries between work and personal life, and the impact of people/family members sharing the living/working space.

- Description of the workstation: Respondents were presented with a structured question prompting them to specify the nature of their workstation. The question offered a range of distinct options, and participants were required to choose the description that most accurately characterized their remote work setup. The available options are the following: A dedicated desk at home in a room with a door that can be closed; a dedicated desk at home in a common living area; a space used for other home-related purposes; an open space shared with colleagues working for the same company/client; an open space shared with other people working for another company/client; at the same coffee shop or public location; I do not have a dedicated workstation and work from a different place every time.
- Boundaries between work and personal life were assessed using two questions: "How often do you feel that work intrudes on your personal time" and "How clear are the boundaries you set between your work and personal life".
- The frequency of work intrusions into personal time, including activities such as receiving emails or calls during weekends or after standard working hours, was evaluated. Respondents were asked to rate the regularity with which such work-related encroachments occurred.
- Impact of presence of family/people sharing living space. The evaluation of the impact of the presence of family or individuals sharing the same household on respondents was conducted through statements reflecting diverse dimensions of this influence. The statements were rated on a 4-points Likert Scale ranging from almost never (1) to most of the times (4). The statements were as follows: Acted as a source of distraction, supported and impacted their overall productivity, brought them comfort, impacted their stress levels and their feelings of loneliness

General Well-being

The well-being of participants was measured using a validated well-being scale, the 14-item Scale of General Well-Being (14-SGWB) capturing various dimensions of mental and emotional health (15). This scale provided a comprehensive assessment of participants' overall well-being. The 14-SGWB, being a self-reporting instrument, included fourteen items each assessing a distinct facet of well-being (15). Respondents score the 14 items on a 5-point Likert-

type scale, with 1 denoting "not at all true" and 5 denoting "very true." Total scores can vary from 14 to 70 with higher scores indicating greater well-being.

Data analysis

Statistical analysis was done using SPSS version 25.0. Quantitative data was presented using mean and standard deviation, and qualitative data using frequencies and percentages.

The normality test of the well-being scale was checked by the visual inspection of the histogram, while the skewness and kurtosis were below |1.96|. After that the bivariate analysis was conducted taking the well-being scale as the dependent variables. The Student T-test and ANOVA test were used in the bivariate analysis to compare two or more than three means. Pearson's correlation was applied to examine the association between continuous variables

Three linear regressions analysis using the Stepwise method were conducted, taking the well-being scale as the dependent variables and all the variables that showed a $p < 0.2$ in the bivariate analysis were considered as independent variables. A p-value less than 0.05 was considered significant.

Results

Sample description

The sociodemographic and other characteristics of the participants are displayed in Table 1.

A total of 293 participants were enrolled in the study where almost all of them were Lebanese (95.9%). More than half of the participants were female (57.2%), aged between 35 to 45 years (51.9%), having a master degree (64.0%), married (64.0%), residing in Lebanon (56.3%) and 34.0% have a monthly income between 2000 to 5000 USD. The majority were physically active (66.7%), have done a leisure activity less than 1 a week (52.7%) and 39.6% have a very secure job.

Table 1: Sociodemographic and other characteristics of the participants (N=293).

Variable	N (%)
Age	
< 25 years	9 (3.1%)
25 to 35 years	95 (32.4%)
35 to 45 years	152 (51.9%)
>45 years	37 (12.6%)
Gender	
Male	125 (42.8%)
Female	167 (57.2%)
Education level	
High school diploma	3 (1.0%)
Technical/vocational training	4 (1.4%)
Bachelor degree	68 (23.3%)
Masters degree	187 (64.0%)
Doctorate	30 (10.3%)
Marital status	
Living alone	36 (12.5%)
Married or living with a partner	59 (20.4%)

Married with children	126 (43.6%)
Living with parents and siblings	62 (21.5%)
Living with roommates or friends	6 (2.1%)
Nationality	
Lebanese	281 (95.9%)
Non-Lebanese	12 (4.1%)
Residence	
Lebanon	165 (56.3%)
Other	128 (43.7%)
Monthly income	
<1,000USD	17 (5.9%)
1,000 to 2,000USD	49 (17.0%)
2,001 to 5,000USD	98 (34.0%)
>5,000USD	124 (43.1%)
Physical activity	
Less active	97 (33.2%)
Moderate active	95 (32.5%)
More active	100 (34.2%)
Leisure activity	
None	40 (13.7%)
Less than one a week	154 (52.7%)
A few times a week	59 (20.2%)
Once a day	39 (13.4%)
Job security	
Not secure at all	6 (2.0%)
A little insecure	42 (14.3%)
Somewhat secure	129 (44.0%)
Very secure	116 (39.6%)

Description of the work characteristics

Only 35.8% of the participants have a dedicated desk at home in a room with a door that can be closed, 34.8% stated that the boundaries set between work and personal life is a little unclear and 38.5% often feels that work intrudes on the personal time. Considering the statements about people/family sharing the living/working space, 56.3% stated that sometimes they are a source of distraction and thought that sometimes the people around increase the stress level (44.6%) and decrease their productivity (47.0%).

Also, most of the times 40.6% of the participants declared that the people around are supportive, 35.9% said that they bring them comfort and 42.9% thought that they make them feel lonely (Table 2).

Table 2: Description of the work situation and people/family sharing the living/working space

Variable	N (%)
Workstation description	
A dedicated desk at home in a room with a door that can be closed	105 (35.8%)

A dedicated desk at home in a common living area	87 (29.7%)
A space used for other home-related purposes	53 (18.1%)
An open space shared with colleagues working for the same company/client	11 (3.8%)
An open space shared with other people working for other company/client	6 (2.0%)
At the same coffeeshop or public location	4 (1.4%)
I do not have a dedicated workstation and work from a different place every time	27 (9.2%)
The boundaries you set between your work and personal life	
Not clear at all	77 (26.6%)
A little unclear	101 (34.8%)
Somewhat clear	74 (25.5%)
Very clear	38 (13.1%)
Feeling that work intrudes on the personal time	
Rarely	35 (12.0%)
Sometimes	58 (19.9%)
Usually	86 (29.6%)
Often	112 (38.5%)
People/family sharing the living/working space	
Source of distraction	
Almost never	60 (21.0%)
Sometimes	161 (56.3%)
Often	41 (14.3%)
Most of the times	24 (8.4%)
Are supportive and make me more productive	
Almost never	12 (4.2%)
Sometimes	57 (19.8%)
Often	102 (35.4%)
Most of the times	117 (40.6%)
Bring me comfort	
Almost never	14 (4.9%)
Sometimes	71 (25.0%)
Often	97 (34.2%)
Most of the times	102 (35.9%)
Increase my stress levels	
Almost never	102 (35.5%)
Sometimes	128 (44.6%)
Often	39 (13.6%)
Most of the times	18 (6.3%)
Decrease my productivity	
Almost never	99 (34.5%)
Sometimes	135 (47.0%)
Often	42 (14.6%)
Most of the times	11 (3.8%)

Make me feel less lonely	
Almost never	18 (6.3%)
Sometimes	59 (20.6%)
Often	87 (30.3%)
Most of the times	123 (42.9%)

Bivariate analysis: Correlated of the well-being total scale

The mean of the general well-being scale was 33.39 ± 10.19 with a median of 33.00 (Max=56, Min=2) and when considering the average percentage of mean, the well-being is found in 47.7% of participants. The bivariate analysis taking the well-being total scale as the dependent variables are displayed in Table 3. A significantly higher mean well-being total scale was found among participants with an age over 45 years as compared to the other group, being married or living with partner, having a monthly income more than 5,000USD, doing a leisure activity more than once a day and have a very secure job as compared to the other groups. Also, a significantly higher mean well-being total scale was found among participants who set somewhat clear / Very clear the boundaries between work and personal life and stated that the people around are often/ most of the time supportive, bring them comfort and make them feel less lonely as compared to the other groups. Also, a significantly higher mean well-being total scale was found among participants who almost never / sometimes feels that the people around increase their stress level and decrease their productivity.

Table 3: Bivariate analysis taking the well-being total scale as the dependent variable.

	Well-being total scale	p-value
	Mean \pm SD	
Age		
< 25 years	25.78 ± 13.56	0.016
25 to 35 years	31.74 ± 9.77	
35 to 45 years	34.41 ± 9.27	
>45 years	35.27 ± 12.71	
Gender		
Male	34.39 ± 10.17	0.142
Female	32.62 ± 10.19	
Education level		0.115
School/Technical/vocational training	30.14 ± 8.39	
Bachelor degree	31.03 ± 10.33	
Masters degree	34.11 ± 10.24	
Doctorate	34.90 ± 9.47	
Nationality		
Lebanese	33.35 ± 10.03	0.787
Non-Lebanese	34.17 ± 13.85	
Residence		
Lebanon	32.38 ± 10.60	0.055
Other	34.68 ± 9.51	
Physical activity		
Less active	31.88 ± 9.91	0.074

Moderate active	33.02 ± 9.82	
More active	35.14 ± 10.65	
Marital status		
Living alone	34.86 ± 9.45	0.038
Married or living with a partner	36.83 ± 10.21	
Married with children	32.25 ± 9.67	
Living with parents and siblings	32.02 ± 11.15	
Living with roommates or friends	33.33 ± 10.25	
Monthly income		
<1,000USD	21.59 ± 11.42	<0.001
1,000 to 2,000USD	33.27 ± 9.48	
2,001 to 5,000USD	33.47 ± 9.52	
>5,000USD	34.96 ± 9.84	
Leisure activity		
None	30.95 ± 9.47	0.035
Less than one a week	32.64 ± 10.09	
A few times a week	34.19 ± 9.70	
Once a day	37.03 ± 10.73	
Job security		
Not secure at all	24.67 ± 13.27	<0.001
A little insecure	29.14 ± 9.33	
Somewhat secure	32.90 ± 9.74	
Very secure	35.91 ± 10.09	
Level of remote working		
<50%	33.02 ± 9.69	0.208
>50%	32.26 ± 10.18	
100%	34.76 ± 10.58	
Specialty		
Technical roles	33.14 ± 9.10	0.085
Business function	34.62 ± 9.79	
Creative roles	29.66 ± 10.11	
Other	33.19 ± 10.79	
Years of experience		
0 to 3 years	33.41 ± 10.16	0.261
3 to 6 years	33.57 ± 9.28	
6 to 10 years	29.07 ± 9.69	
>10 years	36.50 ± 12.02	
Workstation description		
A dedicated desk at home in a room with a door that can be closed	32.89±10.01	0.458
A dedicated desk at home in a common living area	34.79±10.14	
Other spaces used for other telework-related purposes	32.99±9.17	
I do not have a dedicated workstation and work from a different place every time	31.89±13.35	
Often / Most of the times	34.20±10.57	

The boundaries you set between your work and personal life		0.004
Not clear at all / A little unclear	31.95 ± 9.46	
Somewhat clear / Very clear	35.44 ± 10.98	
Often / Most of the times	34.20±10.57	
Feeling that work intrudes on the personal time		0.346
Rarely / Sometimes	34.15 ± 10.91	
Usually / often	32.94 ± 9.85	
People/family sharing the living/working space		
Source of distraction		
Almost never / Sometimes	33.63 ± 10.15	0.414
Often / Most of the times	32.45 ± 10.54	
Are supportive and make me more productive		
Almost never / Sometimes	30.14±9.29	0.002
Often / Most of the times	34.41±10.29	
Bring me comfort		
Almost never / Sometimes	29.49±9.92	<0.001
Often / Most of the times	34.92±9.96	
Increase my stress levels		
Almost never / Sometimes	34.16±9.84	0.010
Often / Most of the times	30.28±11.20	
Decrease my productivity		
Almost never / Sometimes	34.17±9.89	0.007
Often / Most of the times	29.96±11.05	
Make me feel less lonely		
Almost never / Sometimes	31.18±8.93	0.027
Often / Most of the times	34.20±10.57	

Multivariable analysis

A linear regression model was performed taking the well-being total scale as the dependent variable. The results showed that setting a somewhat clear / very clear boundaries between work and personal life (Beta=2.46), and declaring that the people around often/ most of the time bring them comfort (Beta=4.46) were significantly associated with higher well-being total score.

Also, engaging in leisure activity at least once a day (Beta=3.85), being married or living with partner (Beta=3.67), aged between 35 – 45 years (Beta=3.16) and being more physically active (Beta=2.88) were significantly associated with higher well-being total score (Table 4).

Table 4: Multivariable linear regression taking the well-being total score as the dependent variable.

	Unstandardized Beta	Standardized Beta	p-value	Confidence interval	
				Lower Bound	Upper Bound
Bring me comfort (Often / Most of the times vs Almost never / Sometimes*)	4.463	0.200	0.001	1.908	7.017

Leisure engagement (Once a day vs none*)	3.853	0.127	0.029	0.396	7.310
Marital Status (Married or living with partner vs single)	3.670	0.145	0.013	0.779	6.560
Age (35 -45 vs less than 25)	3.166	0.155	0.008	0.851	5.482
Physical activity (More active vs less active*)	2.885	0.133	0.021	0.439	5.331
Boundaries set between work and personal life (Somewhat clear / Very clear vs Not clear at all / A little unclear*)	2.467	0.117	0.048	0.027	4.907
Variables entered: physical activity, leisure activity, People/family sharing the living/working space, boundaries set between work and personal life, gender, marital status, Age, residence, monthly income Adjusted R ² =0.127					
*Reference group					

Discussion

Findings from the current study emphasized the pivotal role of a conducive work environment, supportive relationships, and effective boundary management in shaping remote workers well-being. Our results show a systematic positive associations between clarity of boundaries and comfort in living and working spaces on one hand, an on the other personal characteristics, leisure and physical activity, with overall higher well-being scores. This underscores the importance of a balanced personal and professional life, optimized at both ends, to improve employee wellness.

Our first and foremost shows that almost half of remote worker have a good well-being. Limited studies have been done in the literature that have used the 14-SGWB scale. According to research conducted by Longo et al. with 446 US residents, who created the measure, have found that the actual scores on the 14-item scale varied from 1.29 to 5 (M = 3.64, SD = 0.84) (15). A study done among 113 students in a post professional occupational science or occupational therapy program and occupational therapists have found a mean item score of 3.83 ± 0.55 (16). Another study done by Holland et al. among 543 non clinical participants in UK and using the 14-SGWB scale have found a scale mean of 49.08 ± 9.78 (17). When considering the assessment of general well being among teleworker, a study done in Spain among 462 teleworkers have found that remote working was associated with lower well-being (18). A cohort study done in Australia among 163 participants have found that mental health /well-being negatively affected during remote work (19). A study done in Lebanon among 162 managers from the Lebanese Labor Market have found that the overall agreement average of psychological well-being was 65.87% for satisfaction level at work (20).

We mostly evidence the positive predictors identified, such as engagement in leisure activities, further reinforce the holistic approach needed to enhance remote workers' overall well-being. These results resonate with the work published by the University of Illinois (2020), who emphasizes the impact of physical surroundings on remote workers' mental health and underscores the significance of a dedicated workspace and clear boundaries for remote worker well-being. The positive impact of supportive living/working arrangements on well-being is consistent with research by Toniolo-Barrio (2020), who emphasized the importance of social support in remote work settings (21).

The analysis of bivariate and multivariate data sheds light on the intricate dynamics influencing the well-being of remote workers. In the contemporary landscape where remote work has become a pervasive mode of employment, understanding these nuances is crucial for both individuals and the organizations that employ them. The bivariate analysis explored relationships between well-being and various factors such as age, marital status, income, work situation, and more. The multivariate analysis delved deeper into the interconnected web of factors influencing well-being. Among the findings a clear boundary set between work and personal life that have an effect on well-being. The living space dynamics, acknowledge the impact of the home environment on well-being, participants specified the complexities of sharing living spaces. The home, once a haven, became a multifunctional space, blurring the lines between personal and professional domains. Living space dynamics exposes the intricate negotiation remote workers undertake within the domestic sphere. Setting boundaries between personal and professional life emerges as a theme resonating with the broader discourse on work-life integration. This result resonates with existing literature on the challenges of boundary management in contemporary work scenarios.

The correlations found between well-being and the support provided by partners, children or other family members sharing the living and working space of the remote worker all depict the crucial role that these play in improving well-being for remote workers. Their ability to bring them comfort, support to make them more productive and reduce their stress levels making them feel less lonely is significantly related to the well-being of the remote workers. Another critical aspect of the balance between personal and professional life that is correlated with higher well-being is the clarity of the boundaries set between work and personal life. In fact, less than 14% of respondents affirm that the boundaries are clear enough (no mail checking after hours, setting alarm for breaks or family time, no interruption of weekend for unurgent work-related tasks, etc.). Taken together, the findings related to the contextual factors of remote working that positively impact well-being indicate that an individual who sets clear boundaries between their personal and professional life, who is physically active and engages in leisure activities once a day (including working out, walking, gardening, reading, crafting, gaming, watching TV, internet surfing, socializing, etc.), have a higher chance of elevating their well-being.

Practical Implication

By integrating insights from diverse remote work experiences, organizations can also develop nuanced strategies that address individual needs, foster a supportive work environment, and enhance their employees' overall remote work experience, nurturing a supportive remote work environment. Creating a dedicated and well-defined workspace at home is crucial for remote workers. Setting clear boundaries between work and personal life helps maintain a healthy balance, reducing the risk of overworking and burnout. Remote workers are encouraged to work alongside their organization to establish healthy mechanisms that allow them to respect these boundaries. Actively seek social support and engage with family members to create a supportive living/working environment. Open communication and shared responsibilities within the household can positively impact well-being, especially for married workers with children. Remote workers should collaborate with organizations that can support them in embracing autonomy in managing their schedules and exploring opportunities for professional development. Engaging in online courses or training can enhance skills and job satisfaction.

Limitations

While this study contributes valuable insights into the intricate relationship between remote work and well-being, several limitations must be acknowledged. Firstly, the study's cross-sectional design limits the establishment of causation and temporal relationships between variables. The findings highlight associations rather than causal links. Second, the study's sample is drawn from a specific demographic, potentially limiting the generalizability of findings. Generalizability is constrained by the sample characteristics, primarily comprising respondents with remote work experience. While this restricts broad generalization, it enhances the study's specificity to the remote work context. Also, this study heavily relies on self-reported data, including the online survey questions. This introduces a limitation pertaining to the subjective nature of the well-being measures from one side and the other independent variables in another side. The use of self-reported well-being scores might introduce bias, as various factors, including mood, personal circumstances, and individual resilience can influence respondents' perceptions. The potential for response bias and social desirability could have driven respondents to provide answers they would perceive as socially acceptable rather than reflecting their authentic experiences.

Conclusion

The current study found that factors such as dedicated workstations, clear boundaries, and support from cohabitants positively impact well-being. These results underscored the importance of clear boundaries between work and personal life, supportive living/working environments, and the provision of training and development programs by organizations. Overall, this study contributes to a nuanced understanding of the factors influencing the well-being of remote workers in Lebanon's digital industry. It provides a holistic perspective that can inform organizational policies and practices aimed at fostering employee well-being in remote work settings. It is recommended that organizations prioritize the implementation of supportive measures such as training programs, flexible work arrangements, and clear communication channels to enhance the well-being of their remote workforce.

List of abbreviations

14-SGWB: 14-item Scale of General Well-Being; SPSS: Statistical Package for Social Sciences; USD: United States Dollar; SD: Standard Deviation; US: United States; UK: United Kingdom

Declarations

Ethical Committee Approval

Before any respondent was contacted for data collection, the research project was presented to the ethical committee of the Université Saint-Joseph. The ethical committee at the University granted these data collection approaches and tools the approval to be disseminated among the target population without any restrictions or concerns on the respondent's mental, physical or emotional health. The approval in question bears the code USJ-2021-178 dated May 21st, 2021. A declaration statement was joined to all documents or links shared with potential respondents, informing them of their rights, certifying the anonymity of the respondents, preservation of personal data as private for use solely and explicitly requesting their approval to participate in the study. This study was conducted in accordance with the ethical principles of the Declaration of Helsinki.

Consent for publication

Not applicable

Competing interests

The author declare that they have no competing interests.

Availability of data and materials

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request

Funding

No funding was received for conducting this study.

Authors' contribution

SK designed and drafted the manuscript. The author reviewed and approved the final version of the manuscript.

Acknowledgments

The authors would like to thank all those who participated in this study by filling up and spreading the web-based online survey.

References

1. Allen TD, Golden TD, Shockley KM. How effective is telecommuting? Assessing the status of our scientific findings. *Psychological science in the public interest*. 2015;16(2):40-68.
2. Huppert FA, So TT. Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social indicators research*. 2013;110:837-61.
3. Chida Y, Steptoe A. Positive psychological well-being and mortality: a quantitative review of prospective observational studies. *Psychosomatic medicine*. 2008;70(7):741-56.
4. Knapp M, McDaid D, Parsonage M. Mental health promotion and mental illness prevention: The economic case. 2011.
5. Chen JK, Sriphon T. Perspective on COVID-19 pandemic factors impacting organizational leadership. *Sustainability*. 2021;13(6):3230.
6. Fonner KL, Roloff ME. Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research*. 2010;38(4):336-61.
7. Huppert FA. Psychological well-being: Evidence regarding its causes and consequences. *Applied psychology: health and well-being*. 2009;1(2):137-64.
8. Golden T. Co-workers who telework and the impact on those in the office: Understanding the implications of virtual work for co-worker satisfaction and turnover intentions. *Human relations*. 2007;60(11):1641-67.
9. Bloom N, Liang J, Roberts J, Ying ZJ. Does working from home work? Evidence from a Chinese experiment. *The Quarterly journal of economics*. 2015;130(1):165-218.
10. Hartig T, Kylin C, Johansson G. The telework tradeoff: Stress mitigation vs. constrained restoration. *Applied Psychology*. 2007;56(2):231-53.

11. Kniffin KM, Narayanan J, Anseel F, Antonakis J, Ashford SP, Bakker AB, et al. COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American psychologist*. 2021;76(1):63.
12. Grant CA, Wallace LM, Spurgeon PC. An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee relations*. 2013;35(5):527-46.
13. Khoury-Malhame E, Harajli DA, Reykowska D, Jakubowska M, Ohme R. Can the Phoenix still rise? Traumatic effect of Beirut port explosion on Lebanese people's experiences. *Psychological trauma: theory, research, practice, and policy*. 2024.
14. Raj R, Kumar V, Sharma NK, Singh S, Mahlawat S, Verma P. The study of remote working outcome and its influence on firm performance. *Social Sciences & Humanities Open*. 2023;8(1):100528.
15. Longo Y, Coyne I, Joseph S. Development of the short version of the scales of general well-being: The 14-item SGWB. *Personality and Individual Differences*. 2018;124:31-4.
16. Espiritu EW, Yeatts PE, Evetts CL. Predictors of General Well-Being in Postprofessional Students of Occupational Science and Occupational Therapy. *The Open Journal of Occupational Therapy*. 2024;12(1):1-11.
17. Holland J, Murphy D, Joseph S. Assessment of well-being in the clinic: Using the state version of the short Scale of General Well-Being as a clinical outcome measure. *Journal of Clinical Psychology*. 2021;77(7):1629-43.
18. Escudero-Castillo I, Mato-Díaz FJ, Rodriguez-Alvarez A. Furloughs, teleworking and other work situations during the COVID-19 lockdown: Impact on mental well-being. *International Journal of Environmental Research and Public Health*. 2021;18(6):2898.
19. Chapman DG, Thamrin C. Scientists in pyjamas: characterising the working arrangements and productivity of Australian medical researchers during the COVID-19 pandemic. *Medical Journal of Australia*. 2020;213(11):516-20.
20. Hejase HJ, El Dirani A, Haidar Z, Alawieh L, Ahmad ZA, Sfeir N. The Impact of Employee Well-Being on Organizational Effectiveness: Context of Lebanon. *International Journal of Human Resource Studies*. 2024;14(2):1554-.
21. Toniolo-Barrios M, Pitt L. Mindfulness and the challenges of working from home in times of crisis. *Business horizons*. 2021;64(2):189-97.