O Boletim de Conjuntura (BOCA) publica ensaios, artigos de revisão, artigos teóricos e empíricos, resenhas e vídeos relacionados às temáticas de políticas públicas.

O periódico tem como escopo a publicação de trabalhos inéditos e originais, nacionais ou internacionais que versem sobre Políticas Públicas, resultantes de pesquisas científicas e reflexões teóricas e empíricas.

Esta revista oferece acesso livre imediato ao seu conteúdo, seguindo o princípio de que disponibilizar gratuitamente o conhecimento científico ao público proporciona maior democratização mundial do conhecimento.



BOCA

Ano V | Volume 15 | Nº 45 | Boa Vista | 2023 http://www.ioles.com.br/boca ISSN: 2675-1488

https://doi.org/10.5281/zenodo.8377343

IMPACT OF CONSTANT CONNECTIVITY TO MOBILE WORK DEVICES ON WORKERS' WELL-BEING: A COMPARISON BETWEEN BRAZIL AND THE USA

Isabel de Sá Affonso da Costa¹ Elaine Tavares² Otávio Henrique dos Santos Figueiredo³

Abstract

This article aims to contribute to understanding the relations between constant connectivity and well-being, especially on the impact of organizational antecedents of constant connectivity among workers who intensively use mobile work devices (MWDs) to carry out their tasks. For that purpose, we expanded the Structural Equation Model proposed by Büchler, Hoeven and Zoonen (2020) to encompass variables that allow to measure the impact of job insecurity (JI) on constant connectivity. Job insecurity is considered one of the most relevant work stressors and may trigger coping mechanisms that make employees act in ways they believe can prevent job loss. The research sample encompasses 420 American and 289 Brazilian workers, and data was treated on Smart PLS. The main results point that (i) JI influences constant connectivity; (ii) the alignment between MWD connectivity perception and occupational identity had the strongest association with constant connectivity, both in the present and in previous research, and (iii) well-being could not be explained by the model, suggesting that this complex construct may have other relevant variables to account for its measuring. The main contribution is to provide information to organizational practitioners and policymakers regarding contemporary work challenges.

Keywords: Comparative Research; Connectivity; Job Insecurity; Mobile Work Devices; Well-Being.

Resumo

Este artigo tem como objetivo contribuir para a compreensão das relações entre a conectividade constante e o bem-estar do trabalhador, especialmente no que diz respeito ao impacto de antecedentes organizacionais da conectividade constante entre trabalhadores que utilizam intensivamente dispositivos móveis de trabalho (DMTs) para realizar suas tarefas. Para esse fim, expandimos o Modelo de Equações Estruturais proposto por Büchler, Hoeven e Zoonen (2020) para abranger variáveis que permitam medir o impacto da insegurança no emprego (IE) na conectividade constante. A insegurança no emprego é considerada um dos estressores laborais mais relevantes e pode desencadear mecanismos de enfrentamento que levam os funcionários a agir de maneira acreditam poder prevenir a perda do emprego. A amostra de pesquisa abrange 420 trabalhadores americanos e 289 trabalhadores brasileiros, e os dados foram tratados no Smart PLS. Os principais resultados indicam que (i) a IE influencia a conectividade constante; (ii) o alinhamento entre a percepção de conectividade dos DMTs e a identidade ocupacional teve a associação mais forte com a conectividade constante, tanto no presente quanto em pesquisas anteriores, e (iii) o bem-estar não pôde ser explicado pelo modelo, sugerindo que esse construto complexo pode ter outras variáveis relevantes para explicar sua mensuração. A principal contribuição é fornecer informações aos profissionais e formuladores de políticas públicas sobre os desafios contemporâneos do trabalho.

Palavras-chave: Bem-estar; Conectividade; Dispositivos Móveis de Trabalho; Insegurança no Emprego; Pesquisa Comparativa.

¹ Professor at the School of Business and Insurance (ENS). Doctor in Management from the Getúlio Vargas Foundation (FGV). E-mail: isabelsaacosta@hotmail.com

² Professor at the Federal University of Rio de Janeiro (UFRJ). Doctor in Management from Getúlio Vargas Foundation (FGV). E-mail: elaine.tavares@coppead.ufri.br

³ Professor at the Federal University of Rio de Janeiro (UFRJ). Doctor in Management from the Federal University of Rio de Janeiro (UFRJ). E-mail: otavio@coppead.ufrj.br



INTRODUCTION

The increasing adoption of Information and Communication Technologies (ICTs) is a phenomenon with multiple impacts on organizations, workers society. The use of ICTs significantly enhances flexibility, agility, and autonomy while raising its demands and potentially blurring the boundaries between work and non-work, leading to depersonalization of work relationships and a lack of clarity in work roles.

In the current context, constant connectivity – employees' availability and connectedness to the organization through work-related communication media – are an acknowledged reality intrinsic to knowledge-intensive work.

Unleashed by the massification of mobile work devices (MWDs), constant connectivity is gaining increasing attention from researchers due to the recognition of its potential negative impacts on the well-being of workers. Recently, the COVID-19 pandemic made home office pervasive, deepening these effects since the boundaries of work and non-work became even more unclear.

Although there is a growing body of studies acknowledging the adverse effects of constant connectivity on workers' well-being, there is a vast field to explore regarding the variables influencing this relation. Since studies so far tend to focus on individual attributes – such as job involvement or boundary management preferences – research is needed to address this issue and foster adequate management practices. In 2020, Büchler, Hoeven and Zoonen proposed a model to measure the impact of organizational antecedents on constant connectivity and its relation to well-being – notably some related to social norms and practices of groups. Focusing on aspects of the organizational context, not on individual psychological traits, the authors point to the factors associated with organizations' scope and responsibility in properly managing human resources.

Job insecurity, the perception that the stability and continuity of one's current employment, in the current organization, is under threat, is considered one of the most relevant work stressors, with significant impacts on well-being.

Job insecurity may trigger coping mechanisms that make employees to act in ways they believe can prevent job loss. Among such strategies, employees may make concessions such as accepting lower pay and working longer hours. We could not find studies specifically focused on the relation between job insecurity and constant connectivity, but it could be assumed that even knowledge workers may respond to job insecurity by intensifying work, and that constant connectivity may be influenced by that perception. Thus, although job insecurity is a complex construct influenced by factors beyond the specific organizational context, organizational communication of management practices and principles



can facilitate the alignment of expectations and contribute to mitigating the adverse effects on constant connectivity and employee well-being.

This article aims to contribute to understanding the impact of organizational variables on the constant connectivity of workers who intensively use MWDs to carry out their work tasks and their well-being. For that, we expanded the Structural Equations Model proposed by Büchler, Hoeven e Zoonen (2020) to encompass variables that allow to measure the impact of job insecurity on constant connectivity. The research was carried out with American and Brazilian workers, in order to verify the influence of economic and cultural environment as a relevant context variable. Data collection was conducted online using the Amazon Mechanical Turk platform for both samples – Brazil (289 workers) and USA (420 workers). We used SmartPLS 4 for partial least squares (PLS) analysis.

Considering the expected trend of increased telework/mobile work in the coming years, understanding the challenges and impacts of constant connectivity is relevant for organizations, workers, and society as a whole. Moreover, Brazil does not prominently feature in cross-cultural research in the field of Management, especially concerning the topic of constant connectivity – a cutting-edge subject in research within the field. Building upon a tested model, refining it, and highlighting the effect of cultural context on group interactions and perceptions about work can contribute to positioning Brazil in high-impact academic discussions.

The main contribution of this paper is to foster scientific knowledge that supports the development of more effective management practices in the Brazilian context. Also, by working with samples from diverse cultural contexts within the same time frame, the research provides a rigorous basis for cross-cultural comparisons. Furthermore, the results can also serve as a significant source of data on the antecedents and impacts of excessive connectivity for policymakers dealing with telework/mobile work, aiming to ensure well-being in the workplace.

This paper is organized as follows: first, on the theoretical background, we disscuss the main concepts applied on this research and the model that we expanded. Then, the methodological procedures are described. Data analysis and results brings the measurement and the structural model of our Structural Equations Model. Continuing, discussions and findings comment hypothesis tests. Finally, limitations, contributions, and conclusion are presented.

THEORETICAL BACKGROUND

This article is part of the scientific debate on the conceptions of digital technologies and their uses in contemporary society (ROCHA; NAKAMOTO, 2023), which take place in processes of social



constructions (VIEIRA, 2021). It is also aligned with discussions about work and its new dynamics, between public and private environments (GAMA, 2023).

The recent work by Büchler, Hoeven, and Zoonen (2020) proposes a model that enables the measurement of the impact of organizational antecedents on constant connectivity, notably those related to group social norms and practices, namely perceptions associated with MWDs and employees' occupational roles; susceptibility to social pressure; visibility of colleagues' communication practices; and visibility of supervisors' communication practices.

The authors present an adaptable and replicable model, paving the way for the systematization of knowledge focused on aspects of organizational context and perception rather than individual psychological traits, pointing to corporate responsibilities in adequately managing human resources.

The "electronic leash" represented by MWDs (BÜCHLER; HOEVEN; ZOONEN, 2020), which keeps individuals constantly available for work demands, both in the workplace and in personal life spaces, hinders psychological detachment from work (BOSWELL; OLSON-BUCHANAN, 2007; DERKS *et al.*, 2014) – a fundamental mechanism for the recovery process that results in greater employee well-being (DERKS *et al.*, 2014; HIRSCHLE; GONDIM, 2020; SONNENTAG; KUTLER; FRITZ, 2010).

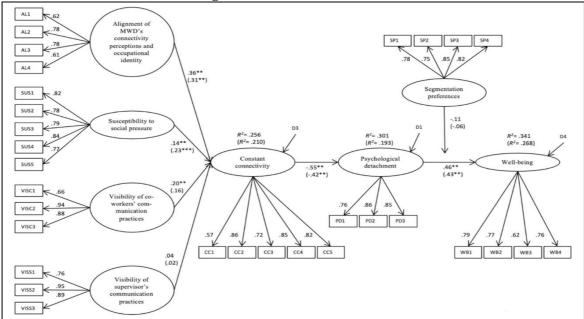
Although a growing body of literature recognizes the adverse effects of constant connectivity on well-being, there is still much to explore about the factors influencing this relationship. On this point, studies predominantly focus on individual attributes, such as boundary management or work engagement (BOSWELL; OLSON-BUCHANAN, 2007; BOSWELL *et al.*, 2016; PARK; JEX, 2011). As for organizational factors, those over which managers can directly act, there are few studies thereby identifying a significant knowledge gap in the field of Administration.

No published scientific studies were found for Brazil, making this gap even more significant. The recent work by Büchler, Hoeven, and Zoonen (2020) proposes a model that enables the measurement of the impact of organizational antecedents on constant connectivity, notably those related to group social norms and practices, namely perceptions associated with MWDs and employees' occupational roles; susceptibility to social pressure; visibility of colleagues' communication practices; visibility of supervisors' communication practices.

The study, conducted with 661 employees, confirms the hypothesis that constant connectivity is negatively related to employees' well-being. This relationship is mediated by psychological detachment - which refers to "switching off" from work mentally during the off-job time (SONNENTAG; BAYER, 2005).



Figure 1 – Structural Model



Source: Büchler; Hoeven; Zoonen (2020).

The relation between well-being and psychological detachment was supposed to be mediated by segmentation preferences, which refers to boundary theory (ASHFORTH; KREINER; FUGATE, 2000), that posits that employees erect 'mental fences' (boundaries) to manage the segmentation and integration of their work- and home roles physically, psychologically, and behaviorally (KREINER, 2006). However, this mediation was not confirmed in their model.

Four organizational antecedents explain constant connectivity: (1) the alignment between the connectivity perceptions of MWDs and occupational identity; (2) Susceptibility to social pressure; (3) the visibility of coworkers' communication practices; and (4) the visibility of supervisor's communication practices.

The alignment between the connectivity perceptions of MWDs and occupational identity refers to the perception of "what an MWD provides the user in terms of functional, physical and symbolic aspects, and an employee's occupational identity, referring to self-perceptions regarding personal interests, abilities, goals and values related to work (HIRSCHI, 2012).

Susceptibility to social pressure refers to people's perception of their relevance to the organization. So, some job positions may be perceived as minor contributors to results, leaving their holders vulnerable to internal and external pressures. Extending availability demonstrates commitment and value to the organization (MURRAY; ROSTIS, 2007). Compliance with such perceived expectations can be interpreted as being susceptible to social pressure.



The last two dimensions concern the visibility of others' communication practices when using an MWD. Constant connectivity practices, for example, may be visible by frequently copying co-workers on messages. This makes people able to see how others use their MWDs and probably assume those practices to be appropriate - so over time, employees' perceptions of proper communication practices may change in the direction of increasing responsiveness and availability expectations, resulting in everyone being constantly connected to work (BÜCHLER; HOEVEN; ZOONEN, 2020).

Along the same line, it can be hypothesized that the same may apply to the supervisors' communication practices since the relevance of leaders as role models, shaping organizational norms and shared values is recognized in management literature.

In sum, the authors proposed an adaptable and replicable model, paving the way for the systematization of knowledge with a focus on organizational context and perception aspects rather than individual psychological traits. This points towards factors of corporate responsibility in the proper management of human resources.

Despite a broad sample, it is worth noting that the model was tested in a cultural context significantly different from that of Brazil, Switzerland, and Liechtenstein. Brazil is a relational culture with significant power distance, traits acknowledged in management studies (MOTTA; CALDAS, 1997). It can be assumed that culture affects antecedent variables of the proposed model as they relate to the social interaction context of groups.

Lastly, the economic context that directly impacts the job market, regulating the power dynamics between organizations and employees, has implications for organizational practices and significant aspects of employee behavior within organizations. The structural uncertainty of the job market, partly stemming from technological changes, results in precariousness and a trend towards more volatile employment relationships. However, diverse social and institutional contexts can influence organizational practices and workers' perceptions and expectations regarding their job security or insecurity (KALLEBERG, 2018).

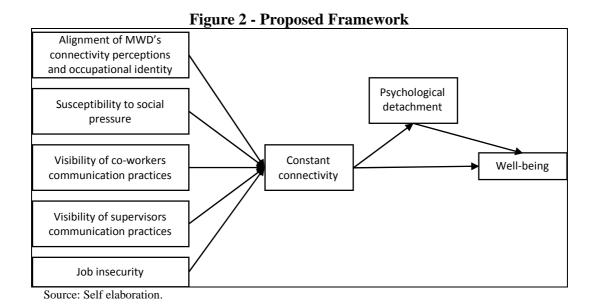
Job insecurity understood as the perception that "the stability and continuity of current employment – specifically, current employment within the current organization" is threatened (SHOSS, 2017, p.6), is considered one of the most relevant stressors in the workplace (WITTE, 1999; KINNUNEN *et al.*, 2010), with negative repercussions on employee well-being. Job insecurity triggers various coping mechanisms, including job preservation motivation, which prompts employees to take actions that could lead to job preservation. These actions include concessions, such as accepting lower pay and working more hours (SHOSS, 2017). Although direct studies investigating the impact of job insecurity on connectivity are not readily available, it can be assumed that even knowledge workers in

technologically advanced roles might respond to potential insecurity by intensifying their work, potentially affecting their constant connectivity. Hence, while job insecurity is a complex construct influenced by factors beyond the specific organizational context, organizational communication of management practices and principles can aid in aligning expectations and mitigate the negative impacts on constant connectivity and employee well-being.

METHOD

This research is an exploratory quantitative research regarding its ends and a survey regarding its means (VERGARA, 2016). The Structural Equations Model based on Partial Least Squase technique (SEM-PLS) explores theory for its development and explanation of variance with construct prediction. (HAIR JR. *et al.*, 2021).

We adapted the Structural Equations Model introduced by Büchler, Hoeven, and Zoonen (2020) to encompass the impact of cultural context, as well as to measure the potential influence of job insecurity (added variable) on constant connectivity (Figure 2). Furthermore, this research used samples from Brazil and the United States. This choice was driven by the fact that the explanatory value of potential cultural differences will become more evident when comparing Brazilian samples with samples from other cultural contexts within the same timeframe.



Data collection was conducted online using the Amazon Mechanical Turk platform. This allowed for the formation of two samples in Brazil and the United States.

The sample consisted of employees from private organizations, where the adoption of mobile technologies has been swifter and more intensive within the Brazilian context. Additionally, the working



environments in Brazil – marked by stability and lack of competitive pressure, among other factors – present distinct work experiences that warrant separate treatment in an initial approach. Similarly, the research will focus on employees who maintain a direct employment relationship with their respective organizations, excluding outsourced workers and informal workers whose precarious working conditions can potentially result in differing experiences and perceptions.

The demographic variables collected were gender, business sector, hierarchical level, company size, and nationality.

To calculate minimal sample size, we used G^* Power 3.1.9.6, considering the power of the test (Power = 1- B err prob) of 0.8, effect size |p| 0,15, an error probability 0,05, as proposed by Cohen (1988) and Hair *et al.*, (2021). It calculated a minimum sample size required of 270 responses per country sub-sample to detect a small effect.

The Brazilian final sample was 289 workers. We deleted 11 responses for non-Brazilian respondents or incomplete questionnaires. We also excluded three inconsistent answers. The USA's final sample was 420 workers. We deleted 30 responses for non-American respondents or incomplete questionnaires. We also excluded 16 inconsistent answers.

The consistence of answers was checked by the application of reverse scales for some items, in order to check if the respondent was answering the survey with attention. The survey was based on Büchler, Hoeven and Zoonen's (2020) instrument and on Vander Elst, Witte and Cuyper (2014) for job insecurity measurement. We used SmartPLS 4 for partial least squares (PLS) analysis in this research. PLS is widely accepted as a method for early-stage theory testing (FORNELL; BOOKSTEIN, 1982). Similar to prior research (MA; AGARWAL, 2007; XU *et al.*, 2011), we chose PLS as the statistical technique because of the exploratory nature of this study - not all models used as the base for the theoretical model proposed were tested on SNSs. Additionally, PLS is well-suited for highly complex predictive models (CHIN; MARCOULIDES, 1998). Prior studies that applied PLS (KIM; BENBASAT, 2006) have found that PLS is best suited for testing complex relationships by avoiding inadmissible solutions and factor indeterminacy. This makes PLS suitable for accommodating the presence of many constructs and relationships in current research. PLS also can assess the measurement model within the context of the structural model, allowing for a more complete analysis of inter-relationships.

DATA ANALYSIS AND RESULTS

Measurement model

We evaluated the measurement model by checking the instrument's internal consistency reliability, convergent validity, and discriminant validity-(GEFEN, STRAUB, BOUDREAU, 2000;



STRAUB, BOUDREAU, GEFEN, 2004). Table 2 summarizes the results of the measurement model. Internal consistency reliability was used to ensure that each item on a test was related to the topic they were researching. As shown in Column 3, items were kept in the model when they presented factor loadings greater than 0.6, indicating solid loadings for all the items. Two items were removed from boundary ownership, and two were removed from boundary permeability since they did not follow this condition.

We run two tests - composite reliability of constructs and average variance extracted (AVE) by constructs - to determine the convergent validity of measured reflective constructs in a single instrument. Convergent validity refers to how closely the new scale relates to other variables and measures of the same construct. The construct should correlate with related variables and not connect with dissimilar, unrelated ones. After the item exclusions, composite reliabilities of constructs with multiple indicators exceeded Nunnally's (1978) criterion of 0.7. The average variances extracted (AVE) for the constructs were above 50 percent. We checked Cronbach's alphas, finding all of them greater than 0.7. (HAIR *et al.*; 2021, p.111).

We also used the variance inflation factors (VIF) to detect multicollinearity among the measurement items. It is recommended to have VIF values that are ten or lower to avoid multicollinearity among the measurement items (JOHNSON; WICHERN, 1988). The VIF values in Table 1 for all the survey items are shallow, suggesting that the multicollinearity is not an issue with our measurement instrument.

Considering this, the results of these tests indicated that our model demonstrates an acceptable level of measurement validity.

Next, we analyzed discriminant validity, observing factor cross-loadings (CHIN; MARCOULIDES, 1998; FORNELL; LARCKER, 1981). A discriminant validity is the validity that contributes toward demonstrating the distinction of one construct from another. First, we ensured that items measuring each construct loaded more highly on their intended construct than others. As shown in Table 2, all the intended factor loadings exceed their respective cross-loadings. Then, each item should correlate more highly with other items measuring the same construct than those measuring other constructs. This was determined by checking whether the square root of the variance shared between a construct and its measures was more significant than the correlation between the construct and any other construct in the model.

BOLETIM DE CONJUNTURA

www.ioles.com.br/boca

Table 1 - Measurement model results - Brazil and USA combined dataset

Construct	Item	Loadings (L)	Composite Reliability	AVE	Cronbach's Alpha	VIF	\mathbb{R}^2
	al1	0.779	•		•	1.573	
Alignment of MWD's connectivity	al2	0.812	0.056	0.598	0.776	1.568	•
perceptions and occupational identity	al3	0.783	0.856			1.634	1
	al4	0.716				1.385	
	sus1	0.842				2.306	
	sus2	0.777		0.680		1.860	
Susceptibility to social pressure	sus3	0.857	0.914		0.890	2.451	
	sus4	0.760				1.715	
	sus5	0.880				2.631	
Visibility of asympulsons	vic1	0.887	0.907			2.201	
Visibility of coworkers communicartion practices	vic2	0.850	0.907	0.764	0.846	1.800	
communication practices	vic3	0.885				2.253	
Visibility of supervisor's	vis1	0.883		0.756	0.843	2.121	
Visibility of supervisor's communicartion practices	vis2	0.887	0.903			2.117	
communication practices	vis3	0.838				1.783	
	ji1	0.914		0.834	0.915	3.433	
Job insecurity	ji2	0.028	0.938			-	
l lisecurity	ji3	0.878	0.936			2.245	
	ji4	0.946				3.998	
	cc1	0.782				1.831	
	cc2	0.847	0.895	0.633	0.854	2.392	
Constant connectivity	сс3	0.658				1.312	0.441
	cc4	0.830				2.199	
	cc5	0.846				2.260	
	pd1	0.730	0.880	0.711	0.845	1.462	
Psychological detachment	pd2	0.902				2.159	0.169
	pd3	0.887				1.956	
	wb1	0.895	0.931	0.770	0.914	2.845	
Well-being	wb2	0.869				2.490	0.047
wen-being	wb3	0.896	0.931	0.770		2.685	0.047
	wb4	0.849				2.391	

Source: Self elaboration.

Table 2 - Cross-loadings

	Alignment	Constant connectivity	JI	Psychological detachment	Susceptibility	Visibility cw	Visibility sup	Well-being
al1	0.779	0.462	0.103	-0.083	0.132	0.349	0.218	0.170
al2	0.812	0.566	0.013	-0.225	0.107	0.305	0.182	0.092
al3	0.783	0.441	-0.023	-0.121	0.188	0.279	0.189	0.067
al4	0.716	0.428	0.112	-0.175	0.117	0.330	0.221	0.156
cc1	0.460	0.781	0.170	-0.286	0.148	0.403	0.268	0.145
cc2	0.478	0.847	0.138	-0.353	0.169	0.378	0.231	0.125
сс3	0.594	0.658	0.042	-0.204	0.134	0.299	0.204	0.122
cc4	0.456	0.830	0.135	-0.398	0.187	0.333	0.231	0.083
cc5	0.478	0.846	0.132	-0.380	0.195	0.358	0.266	0.057
ji1	0.043	0.128	0.914	0.218	0.307	0.154	0.075	0.061
ji3	0.073	0.135	0.878	0.155	0.390	0.093	0.060	-0.038
ji4	0.057	0.160	0.946	0.196	0.324	0.162	0.079	0.062
pd1	-0.099	-0.224	0.084	0.730	0.047	0.009	-0.012	0.154
pd2	-0.202	-0.402	0.172	0.902	0.011	-0.109	-0.018	0.160
pd3	-0.185	-0.380	0.240	0.887	-0.035	-0.066	-0.050	0.231
su1	0.155	0.177	0.266	-0.056	0.842	0.190	0.121	-0.143
su2	0.164	0.150	0.229	0.017	0.777	0.143	0.163	-0.187
su3	0.115	0.176	0.338	-0.019	0.857	0.170	0.139	-0.113
su4	0.101	0.159	0.414	0.077	0.760	0.147	0.098	-0.152
su5	0.175	0.200	0.293	0.001	0.880	0.168	0.152	-0.125
vic1	0.363	0.402	0.115	-0.109	0.186	0.887	0.519	0.154
vic2	0.371	0.387	0.121	-0.040	0.160	0.850	0.481	0.219
vic3	0.331	0.380	0.158	-0.047	0.175	0.885	0.520	0.184
vis1	0.205	0.267	0.084	-0.066	0.161	0.511	0.883	0.023
vis2	0.232	0.277	0.061	-0.030	0.146	0.476	0.887	0.015
vis3	0.241	0.244	0.059	0.011	0.117	0.529	0.839	0.117
wb1	0.134	0.113	0.055	0.196	-0.161	0.173	0.028	0.895
wb2	0.151	0.124	0.065	0.185	-0.116	0.211	0.043	0.869
wb3	0.115	0.096	0.029	0.220	-0.197	0.174	0.064	0.896
wb4	0.151	0.143	-0.048	0.153	-0.116	0.192	0.066	0.849

Source: Self elaboration.



Continuing the discriminant validity test, Table 3 reports the results for Fornell and Larcker criteria, which may be seen by comparing the bolded diagonal to the non-diagonal elements. In sum, all items in our study fulfilled the requirement of discriminant validity.

Table 3 - Fornell and Larcker (1981) discrimination validity analysis

	Alignment	Constant connectivity	JI	Psychological detachment	Visibility cw	Susceptibility	Visibility sup	Well-being
Alignment	0.773							
Constant connectivity	0.620	0.796						
JI	0.063	0.156	0.913					
Psychological detachment	-0.200	-0.411	0.207	0.843				
Visibility cw	0.406	0.446	0.150	-0.075	0.874			
Susceptibility	0.173	0.211	0.372	0.002	0.199	0.825		
Visibility sup	0.260	0.303	0.078	-0.034	0.580	0.163	0.870	
Well-being	0.154	0.133	0.033	0.218	0.212	-0.172	0.057	0.878

Source: Self elaboration.

Finally, we addressed the threat of common method bias, as Podsakoff *et al.* (2003) recommended. We guarantee the anonymity of respondents and ensure that there were no right or wrong answers, reducing the likelihood of bias caused by social desirability or respondent acquiescence. Method bias was checked through VIF values. Two exceeded the 3.3 reference value but are still below the 5.0 high tolerance value (KOCK, 2015). The results showed that none of the twelve emergent factors explained the majority of the covariance; the largest one explained 15% of the covariance. The correlation matrix was also examined for highly correlated factors (see Appendix B). Common method bias exists when extremely high correlations (r>.9) exist, which was not present in our data.

Structural model

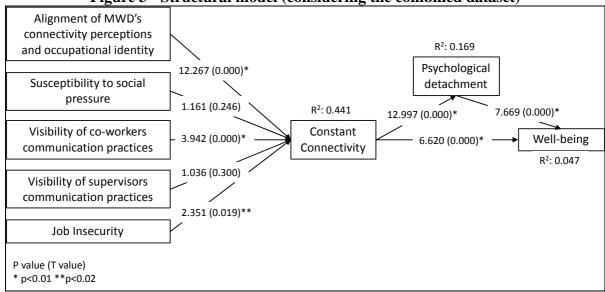
To assess the significance of the paths of the structural model, we used the standard bootstrap resampling procedure in SmartPLS using 5,000 resamples. A useful interpretation of the results of this study can be made through two analytical lenses. One is based on the results of the combined dataset - all the respondents - and the other is based on the variance of the coefficients across the different cultural contexts.

In the first phase, we analyzed R2 coefficients. R-Squared (R²) is a statistical measure used to determine the proportion of variance in a dependent variable that can be predicted or explained by an independent variable. In other words, R-Squared shows how well a (independent variable) predicts the outcome of observed data (dependent variable). For social science, Cohen (1988) suggests that R2=2% must be classified as low effect, R2=13% must be classified as medium effect and R2=26% must be

classified as high effect. R2 value is high for constant connectivity (44,1%), medium for psychological detachment (16,9%), and low for well-being (4,7%).

Figure 3 shows the model results with the variance explained (R2) and the standardized path coefficients of the structural model. Each path is represented by its p-value and T-value (the last one in parentheses). When assuming a significance level of 1%, the p-value must be smaller than 0.01. To be significant the Student T measure should be greater (in absolute terms) to 2.58 (the null hypothesis probability is then lower or equal to 0.01) and greater (in absolute terms) than 1.96 the null hypothesis probability is then lower or equal to 0.05). The * symbol after the T-Value expresse the significance considering different significance levels.

Figure 3 - Structural model (considering the combined dataset)



Source: Self elaboration.

As the results in Figure 2 indicate, we received support for most of the hypothesized relationships in the model. Two of the eight hypotheses were not supported. We should also consider that H5 can be supported, assuming a significance level of 2%. The 4b hypothesis (visibility of supervisors' communication practices is positively related to constant connectivity) was also not supported by Büchler, Hoeven AND Zoonen (2020). If we consider the samples of Brazil and the USA separately, hypothesis 5 (Job insecurity - constant connectivity) was not supported either.

These results are summarized in Table 4, along with the comparison between Brazil and U.S. sub-samples. Considering the combined dataset, we achieved a medium-high *explainabilit* for psychological detachment and a high explainability for constant connectivity. In the Brazilian sample, psychological detachment and constant connectivity were highly explained. Finally, regarding the American subsample, we found a low-medium explainability for psychological detachment and a

high explainability for constant connectivity. Well-being was not adequately explained in any subsample or the combined dataset, suggesting a complex phenomenon unable to be explained by these variables. All Q2 values were larger than zero, except for Psychological detachment in the US Sample, indicating the path model's predictive relevancy (HAIR *et al.*, 2021).

Table 4 - Structural model – T Statistics and P Value

	Combined dataset n= 649		Sample 1 - Brazil		Sample 2 - US	
			n=27	5	n=374	
	T Statistics	<i>p</i> -values	T Statistics	<i>p</i> -values	T Statistics	<i>p</i> -values
H1a: Constant connectivity → well-being	6.620*	0.000*	3.307*	0.001*	4.811*	0.000*
H1b: Constant connectivity →psychological detachment	12.997*	0.000*	13.112*	0.000*	6.435*	0.000*
H1c: Psychological detachment → well-being	7.669*	*0000	3.628*	0.000*	5.320*	0.000*
H2: Alignment of MWD connectivity perceptions and occupational identity → constant connectivity	12.267*	0.000*	8.079*	0.000*	9.397*	0.000*
H3: Susceptibility to social pressure → constant connectivity	1.161	0.246	0.832	0.405	0.655	0.513
H4a: Visibility of co-workers' communication practices → constant connectivity	3.942*	0.000*	4.173*	0.000*	0.756	0.450
H4b: Visibility of supervisors' communication practices → constant connectivity	1.036	0.300	0.781	0.435	2.343***	0.019***
H5: Job insecurity → constant connectivity	2.351***	0.019***	0.818	0.413	2.850*	0.004*
Construct	\mathbb{R}^2	\mathbf{Q}^2	\mathbb{R}^2	\mathbf{Q}^2	\mathbb{R}^2	\mathbf{Q}^2
Well-being	0.047	0.021	0.049	0.010	0.0139	0.053
Psychological detachment	0.169	0.007	0.291	0.067	0.098	0.000
Constant connectivity	0.441	0.427	0.370	0.334	0.540	0.512

Source: Self elaboration. Note: *p<0.01; ***p.<0.05.

DISCUSSION AND RESULTS

This study analyzed how constant connectivity and psychological detachment influence well-being. We extended the Büchler, Hoeven and Zoonen (2020) model, including job insecurity and its effects on constant connectivity. We included this since job insecurity is considered one of the most relevant work stressors, significantly impacting well-being (WITTE, PIENAAR; CUYPER, 2016).

We tested the theoretical model in Figure 1 using a sample of Brazilian and American workers. We conducted this research from a multicultural perspective because cultural context can influence workers' perceptions of social interactions and job insecurity.

Our model was partially validated: most of the hypotheses were supported (6 out of 8 – Table 5), and the R2 values are low to moderate, considering the combined dataset. Although well-being could not be explained by the model, probably this complex construct has many more variables that account for its measure. We must also ponder the heterogeneity of respondents while considering their perceptions of well-being. The results showed that the proposed model accounted for 44% of the variance in constant connectivity and 17% in psychological detachment.

Compared to Büchler, Hoeven and Zoonen (2020) findings, we attained a greater explanation of constant connectivity -44% compared to the 25% previously obtained in their study. We got a reduced explanation of psychological detachment than Büchler and her colleagues, who reported a R^2 of 30% for this construct, whereas ours was 17%.

Considering the combined dataset, as Büchler, Hoeven and Zoonen (2020), we could not reject the influence of constant connectivity on well-being. Both researches rejected the influence of the visibility of supervisors' communication practices on constant connectivity. As they did, we could support the influence of alignment of connectivity perceptions on constant connectivity and of visibility of co-workers' communication on constant connectivity. Nevertheless, we could not support the influence of social pressure on constant connectivity. This may suggest that the context of remote work and social isolation, extended even after the pandemic, may have changed that perception.

Job insecurity, a new variable we introduced to the model, was supported as influencing constant connectivity in the combined dataset.

Considering the two samples obtained in different cultural contexts, some issues must be highlighted. In the American sample, the visibility of co-workers' communication practices' impact on constant connectivity was not supported. On Büchler *et al.* (2020), the same occurred only in the Liechtenstein sample. However, for Brazil and the combined dataset, this H4a hypothesis was supported. This may be explained also by Brazil's low level of individualism. Being a Collectivist society, Brazilians are more likely to form larger 'in groups' and trust one another in their relationship with co-workers.

American sample supported the visibility of supervisors' communication practices as impacting constant connectivity, which did not occur in the Brazilian sample, the combined dataset, and the samples of Büchler and colleagues. These results indicate that supervisors' opinions mean more for Americans than their co-workers' approval.

A curious finding was that, in Brazil, the impact of job insecurity was not supported as influencing constant connectivity. We attribute these results to a probable perception among Brazilians that they will not prevent job loss by being constantly available. The economic uncertainty may be greater in Brazil, which can influence Brazilian strategies to keep their jobs.

All R² values were similar among all samples, except for Psychological detachment, which was low for the combined dataset, moderate to the Brazilian one, and unacceptable for the American sample.

A summary of hypothesis testing is presented in Table 5.



Table 5 - Summary of hypothesis testing.

	Combined dataset	Brazil	US
H1a: Constant connectivity is negatively related to well-being	Supported	Supported	Supported
H1b: Constant connectivity is negatively related to psychological Detachment	Supported	Supported	Supported
H1c: Psychological detachment is positively related to well-being	Supported	Supported	Supported
H2: Alignment of MWD connectivity perceptions and occupational identity are positively related constant connectivity		Supported	Supported
H3: Susceptibility to social pressure is positively related to constant connectivity	Not supported	Not supported	Not supported
H4a: Visibility of co-workers' communication practices is positively related to constant connectivity	Supported	Supported	Not supported
H4b: Visibility of supervisors' communication practices is positively related to constant connectivity	Not supported	Not supported	Supported
H5: Job insecurity is positively related to constant connectivity	Supported (at 0.02 <i>p</i> -value)	Not supported	Supported

Source: Self elaboration.

CONCLUSION, LIMITATIONS AND CONTRIBUTIONS

This article aimed to contribute to understanding the relations between constant connectivity and well-being, especially on the impact of organizational antecedents of constant connectivity among workers who intensively use MWDs to carry out their tasks. We improved the model proposed by Büchler, Hoeven and Zoonen (2020) to measure the impact of job insecurity (JI) on constant connectivity.

Since well-being could not be explained by the model, probably this complex construct has many more variables that account for its measure. The results showed that the proposed model accounted for 44% of the variance in constant connectivity and 17% in psychological detachment.

We received support for a majority of the hypothesized relationships in the model. Two of the eight hypotheses were not supported (susceptibility to social pressure being positively related to constant connectivity and visibility of supervisors' communication practices being positively associated with constant connectivity). The same hypotheses were not supported on the Brazilian sample, and the first one was not supported on the USA sample. The Brazilian sample did not support the influence of job insecurity on constant connectivity, and the American one did not support the visibility of coworkers' communication practices' influence on constant connectivity.

Job insecurity, a new variable we introduced to the model, was supported as influencing constant connectivity in the combined dataset.

Some limitations of this study present valuable opportunities for further research. First, replicating the model in other contexts should contribute to understanding the impact of economic and cultural environments on constant connectivity and well-being. Longitudinal studies should also add to



the understanding of this phenomenon since the perception of work based on MWDs may change as workers gain experience and develop coping strategies, and the institutional and economic contexts vary. It is also essential that further studies better explore new variables that better explain well-being in different social contexts since this and previous research suggested that we are dealing with a complex construct.

Despite these limitations, this study was the first to empirically test an integrated view of the impact of constant connectivity on workers' well-being in a comparative study between Brazil and the USA, which adds to the evidence provided by Büchler, Hoeven and Zoonen (2020), revealed on the context of Switzerland and Liechtenstein.

This paper also contributed to the understanding of constant connectivity by introducing job insecurity as a new variable in the model of Büchler, Hoeven and Zoonen (2020). Including this variable seems to enhance the explanation of constant connectivity, at least in the social contexts explored. As for well-being, the whole model showed a limited explanation in both samples.

It is interesting to notice that the alignment between MWD connectivity perception and occupational identity had the strongest association with constant connectivity, as in the Switzerland and Liechtenstein contexts. In other words, if employees feel that the properties of the MWD are useful in helping them live up to their occupational identity, this results in increased availability and responsiveness. The second strongest association with constant connectivity was the visibility of communication practices of co-workers, both in Büchler, Hoeven and Zoonen (2020) research and in our findings. People's perception of their relevance to the organization did not influence constant connectivity in the USA or the Brazilian samples. In the Brazilian sample, workers seem not concerned about supervisors' communication practices but are worried about colleagues' communication practices. Maybe it is because colleagues' practices are more related to group interactions, such as competition and cooperation, and supervisors' communication practices may be considered personal style. As indicated by Büchler, Hoeven and Zoonen (2020), the relationship between the visibility of co-workers' communication behavior and constant connectivity could also indicate mechanisms of conservative control. Conservative control refers to co-workers explicitly or implicitly setting norms and expectations among themselves regarding certain behaviors and reprimanding those who do not conform.

From the managerial perspective, this work indicates relevant factors that influence constant connectivity and psychological detachment that can inform organizational practices and, in a broader view, policymakers to develop work-related policies.



REFERENCES

ASHFORTH, B. E.; KREINER, G. E.; FUGATE, M. "All in a day's work: Boundaries and micro role transitions". **Academy of Management Review**, vol. 25, n. 3, 2000.

BOSWELL, W. R. *et al.* "Managing 'after hours' electronic work communication". **Organizational Dynamics**, vol. 45, n. 4, 2016.

BOSWELL, W. R.; OLSON-BUCHANAN, J. B. "The use of communication technologies after hours: The role of work attitudes and work-life conflict". **Journal of Management**, vol. 33, n. 4, 2007.

BÜCHLER, N.; TER HOEVEN, C. L.; VAN ZOONEN, W. "Understanding constant connectivity to work: How and for whom is constant connectivity related to employee well-being?". **Information and Organization**, vol. 30, n. 3, 2020.

COHEN, J. Statistical power analysis for the behavioral sciences. Cambridge: Academic Press, 2013.

DERKS, D. *et al.* "A diary study on work-related smartphone use, psychological detachment and exhaustion: examining the role of the perceived segmentation norm". **Journal of Occupational Health Psychology**, vol. 19, n. 1, 2014.

FORNELL, C.; BOOKSTEIN, F. L. "Two structural equation models: LISREL and PLS applied to consumer exit-voice theory". **Journal of Marketing Research**, vol. 19, n. 4, 1982.

FORNELL, C.; LARCKER, D. F. "Evaluating structural equation models with unobservable variables and measurement error". **Journal of Marketing Research**, vol. 18, n. 1, 1981.

GAMA, C. F. P. S. "O futuro do trabalho e o coronavírus". **Boletim de Conjuntura (BOCA)**, vol. 2, n. 5, 2020.

GEFEN, D.; STRAUB, D.; BOUDREAU, M.-C. "Structural equation modeling and regression: Guidelines for research practice". **Communications of the Association for Information Systems**, vol. 4, n. 1, 2000.

HAIR JR, J. *et al.* **A primer on partial least squares structural equation modeling (PLS-SEM)**. London: Sage Publications, 2021.

HIRSCHI, A. "Callings and work engagement: moderated mediation model of work meaningfulness, occupational identity, and occupational self-efficacy". **Journal of Counseling Psychology**, vol. 59, n. 3, 2012.

HIRSCHLE, A. L. T.; GONDIM, S. M. G. "Stress and well-being at work: a literature review". **Ciência e Saúde Coletiva**, vol. 25, 2020.

JOHNSON, R. A.; WICHERN, D.W. **Applied multivariate statistical analysis**. Englewood Cliffs, N.J.: Pearson Prentice Hall, 2002.

KALLEBERG, A. L. **Precarious lives**: Job insecurity and well-being in rich democracies. New York: John Wiley and Sons, 2018.



KIM, D.; BENBASAT, I. "The effects of trust-assuring arguments on consumer trust in Internet stores: Application of Toulmin's model of argumentation". **Information Systems Research**, vol. 17, n. 3, 2006.

KINNUNEN, U. et al. "Job insecurity, recovery and well-being at work: Recovery experiences as moderators". **Economic and Industrial Democracy**, vol. 31, n. 2, 2010.

KOCK, N. WarpPLS 5.0 user manual. Laredo: ScriptWarp Systems, 2015.

KREINER, G. E. "Consequences of work-home segmentation or integration: A person-environment fit perspective". **Journal of Organizational Behavior**, vol. 27, n. 4, 2006

MA, M.; AGARWAL, R. "Through a glass darkly: Information technology design, identity verification, and knowledge contribution in online communities". **Information Systems Research**, vol. 18, n. 1, 2007.

MOTTA, F.; CALDAS, M. (coords.). Cultura organizacional e cultura brasileira. São Paulo: Editora Atlas, 1997.

MURRAY, W. C.; ROSTIS, A. "Who's running the machine? A theoretical exploration of work stress and burnout of technologically tethered workers". **Journal of Individual Employment Rights**, vol. 12, n. 3, 2007.

NUNNALLY, J. **Psychometric theory**. New York: McGraw-Hill, 1978.

PARK, Y.; JEX, S. M. "Work-home boundary management using communication and information technology". **International Journal of Stress Management**, vol. 18, n. 2, 2011.

PODSAKOFF, P. M. *et al.* "Common method biases in behavioral research: a critical review of the literature and recommended remedies". **Journal of Applied Psychology**, vol. 88, n. 5, 2003.

ROCHA, R. S.; NAKAMOTO, P. T. "Tecnologias digitais de informação e comunicação na sociedade contemporânea: um estudo teórico-crítico sobre sua utilização na educação". **Boletim de Conjuntura** (**BOCA**), vol. 14, n. 40, 2023.

SHOSS, M. K. "Job insecurity: An integrative review and agenda for future research". **Journal of Management**, vol. 43, n. 6, 2017.

SONNENTAG, S.; BAYER, U.-V. "Switching off mentally: predictors and consequences of psychological detachment from work during off-job time". **Journal of Occupational Health Psychology**, vol. 10, n. 4, 2005.

SONNENTAG, S.; KUTTLER, I.; FRITZ, C. "Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment". **Journal of Vocational Behavior**, vol. 76, n. 3, 2010.

STRAUB, D.; BOUDREAU, M. C.; GEFEN, D. Validation guidelines for IS positivist research. **Communications of the Association for Information Systems**, vol. 13, n. 1, 2004.



VANDER ELST, T.; WITTE, H.; CUYPER, N. "The Job Insecurity Scale: A psychometric evaluation across five European countries". **European Journal of Work and Organizational Psychology**, vol. 23, n. 3, 2014.

VERGARA, S. C. **Projetos e relatórios de pesquisa em Administração**. São Paulo: Editora Atlas, 2016.

VIEIRA, L. A. "Tecnologias de informação no século XXI: uma discussão em torno dos determinismos social e tecnológico". **Boletim de Conjuntura (BOCA)**, vol. 8, n. 22, 2021.

WITTE, H. "Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues". **European Journal of Work and Organizational Psychology**, vol. 8, n. 2, 1999.

WITTE, H.; PIENAAR, J.; DE CUYPER, N. "Review of 30 years of longitudinal studies on the association between job insecurity and health and well-being: Is there causal evidence?". **Australian Psychologist**, vol. 51, n. 1, 2016.

XU, H. *et al.* "Information privacy concerns: Linking individual perceptions with institutional privacy assurances". **Journal of the Association for Information Systems**, vol. 12, n. 12, 2011.



BOLETIM DE CONJUNTURA (BOCA)

Ano V | Volume 15 | Nº 45 | Boa Vista | 2023 http://www.ioles.com.br/boca

Editor chefe:

Elói Martins Senhoras

Conselho Editorial

Antonio Ozai da Silva, Universidade Estadual de Maringá

Vitor Stuart Gabriel de Pieri, Universidade do Estado do Rio de Janeiro

Charles Pennaforte, Universidade Federal de Pelotas

Elói Martins Senhoras, Universidade Federal de Roraima

Julio Burdman, Universidad de Buenos Aires, Argentina

Patrícia Nasser de Carvalho, Universidade Federal de Minas Gerais

Conselho Científico

Claudete de Castro Silva Vitte, Universidade Estadual de Campinas

Fabiano de Araújo Moreira, Universidade de São Paulo

Flávia Carolina de Resende Fagundes, Universidade Feevale

Hudson do Vale de Oliveira, Instituto Federal de Roraima

Laodicéia Amorim Weersma, Universidade de Fortaleza

Marcos Antônio Fávaro Martins, Universidade Paulista

Marcos Leandro Mondardo, Universidade Federal da Grande Dourados

Reinaldo Miranda de Sá Teles, Universidade de São Paulo

Rozane Pereira Ignácio, Universidade Estadual de Roraima