REMOTE, ON-SITE, OR HYBRID WORK. A COMPARATIVE STUDY ON WORK ALIENATION, WORKPLACE LONELINESS, AND WORK ENGAGEMENT

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Abstract

The current study examines the possible differences regarding workplace alienation, workplace loneliness, and work engagement depending on three work settings: work from home, in a hybrid format, and on-site exclusively. Social relationships are very important in people's lives, and we have to be aware that we spend most of our time in the workplace. Therefore, if we fail to bear such relationships, we will be apt to feel loneliness and alienation, which might negatively affect a series of organizational outcomes such as work engagement, role conflict, role ambiguity, and job performance. The study is based on a cross-sectional design, with data being collected from a convenience sample of 78 participants (8 males, 70 females), aged between 21 and 53 years old (M=30.88, SD=9.00) through the following structured questionnaires: Loneliness at Work, Work Alienation Scale, and The Utrecht Work Engagement Scale. Of those 78 participants, 23 work from home, 25 in a hybrid format, and 30 on-site exclusively. An analysis of variance (ANOVA) yielded significant variation among conditions for all the selected variables – work alienation (F(2, 75) = 111.04, p < .01), workplace loneliness (F(2, 75) = 4.219, p < .05), and work engagement (F(2, 75) = 6.740, p < .01). A post hoc Tukey test showed significant differences in work alienation levels between those working from home and those working in hybrid (p<.01) or on-site (p<.01). Similar results were obtained also for the work engagement. Thus, those working from home showed lower levels of work engagement compared with those working in a hybrid format (p<.01) or on-site only (p<.05). Moreover, workplace loneliness showed significant differences only between those working from home and those working on-site only (p<.05). Practical implications of the recent study are discussed as well as some directions for future research in the area. Future studies can include new variables such as perceived social support, organizational commitment, or organizational citizenship behavior.

Keywords

hybrid work; on-site work; remote work; work alienation; work engagement; workplace loneliness.

Introduction

Over the past decade, particularly in the last two to three years, we have witnessed a series of profound social changes that have significantly impacted the workplace and job-related activities, as noted by Guo in 2020. Some of these transformations have substantially altered social relationships and interpersonal dynamics. For instance, the emergence of the COVID-19 pandemic has sparked a growing demand for a remote or a hybrid workplace model. As mentioned by Iqbal et al. (2021), while certain countries have eased their lockdown measures, businesses are cautiously establishing more robust work arrangements; "many are already operating the hybrid system while others are running fully remote" (p.45).

According to Cook et al. (2020), hybridity combines the physical work arrangement and the remote work systems (Cook et al., 2020). Cook and colleagues (2020, p. 1156) argued that "people connect and interact through a hybrid network of physical and technology-mediated encounters to co-construct knowledge and effectively engage in positioning practices necessary for their work." Furthermore, Iqbal et al. (2021) mentioned that "the hybrid system is an initiative introduced to cater to the specific needs of a system or organization's active parties. If existing in a situation of unique requirements, a hybrid arrangement should serve as a solution to the challenges of location, distance, cost, availability, and management" (p.29).

As outlined by Abiddin and colleagues in 2022, individuals participating in remote work experience increased flexibility in managing their daily work schedules, allowing them to balance their professional and personal lives better. Moreover, previous studies on the work-from-home effects focused on work performance and productivity (Barrero et al., 2021). To begin with, the survey conducted by Bloom et al. (2015) demonstrated that remote work led to an average 13% increase in productivity among Chinese call center employees, as observed in randomized control trials. Furthermore, implementing a "work-from-anywhere" strategy resulted in a 4% improvement in productivity, as evidenced in a natural experiment involving employees at the U.S. Patent Office, as reported by Choudhury and colleagues in 2021.

However, the rise of work-from-home, hybrid, and on-site work arrangements with fewer colleagues has contributed to the prevalence of workplace loneliness. Furthermore, the advent of virtual teams and technology tools such as Teams, Webex, Zoom, and others has placed employees in a situation where they no longer need to physically leave their locations, making it challenging to maintain interactions among members of the organization.

Literature review

Workplace loneliness

Defined as a prevalent adverse emotion in the workplace (Guo, 2020), workplace loneliness typically manifests as a sorrowful sentiment stemming from the dearth of interpersonal communication among employees in their work environment, as discussed by Wright in 2005. Subsequently, Wright and colleagues (2006) expanded this definition to encompass individuals' feelings of non-membership and emotional deprivation within the organization. Emotional deprivation arises from the unmet

attachment needs of employees due to insufficient quality and quantity of interpersonal relationships. Loss of the sense of membership relates to the disengagement from organizational connections and a feeling of estrangement from other members of the respective organization, as detailed by Wright et al. in their 2006 study.

Prior research has indicated that workplace loneliness is detrimental at both the individual and organizational levels, as Ozcelik and Barsade (2018) and Peng et al. (2017) noted. Ernst and Cacioppo (1998) pointed out that loneliness is associated with a range of effects, including depression, hostility, withdrawal, and even alienation. In the realm of organizational studies, similar effects, such as anxiety, anger, depression, and heightened sensitivity, have been observed at the individual level. Additionally, various organizational-level effects encompass job satisfaction, turnover intentions, attachment, and commitment (Peplau & Perlman, 1982; Wright, 2005).

Work alienation

In this context, interest in the phenomenon of work alienation has been resurgent, as indicated by previous studies (Kanungo, 1982; Wegner, 1975). Work alienation occurs when employees perceive their work environment as incompatible with their needs, values, and overall well-being. Additionally, Kanungo (1979) and Schacht (1970) have emphasized that the essence of work alienation lies in individuals' sense of disconnection from some aspects of their organizational surroundings.

Various variables can predict employees' experience of work alienation, with some related to environmental or organizational factors, as noted by Özer and colleagues (2017). In a meta-analysis conducted by Chiaburu and his team in 2014, observed predictors of work alienation included job design, personality traits, supportive leadership, and the nature of the job itself. Furthermore, Mottaz (1981) found that a lack of meaningful work potently predicted alienation. Other researchers (Santas et al., 2016; Tummers & Den Dulk, 2013) have identified various effects of work alienation, encompassing various employee attitudes and behaviors. These effects include job satisfaction, organizational commitment, absenteeism, turnover intention, burnout, task, contextual performance, and counterproductive work behavior. Additionally, Brender-Ilan (2012) discovered that alienation is inversely related to controlling activities, self-regulation regarding job functions, work engagement, and effective organizational commitment.

More recent empirical studies conducted in the past decade have established that this state of work alienation is associated with poor job performance (Kartal, 2018), diminished commitment (Tummers & den Dulk, 2013), reduced career satisfaction (Chiaburu et al., 2013), substance abuse, particularly alcohol (Isralowitz et al., 2012), and heightened turnover intentions (Du Plooy & Roodt, 2010). Therefore, as emphasized by Vanderstukken and Caniëls (2021), it is imperative to take every measure to prevent work alienation and "should therefore be avoided at any cost" (p.640).

Work engagement

Work engagement is commonly characterized as a self-sustaining, all-encompassing, constructive, and gratifying emotional and cognitive state related to work, as outlined by Schaufeli and colleagues (2002). This description aligns with numerous research studies that define work engagement as a motivational and psychological state featuring three key dimensions: vigor, dedication, and absorption, as presented by Bakker and Demerouti (2008) and Salanova and Schaufeli (2008).

The first dimension, referred to as "vigor," represents the vitality and mental resilience of employees, as well as their eagerness to invest effort in their work and maintain resilience when confronted with challenging tasks or tight deadlines (González-Romá et al., 2006). The second dimension, "dedication," measures an employee's profound involvement in their work and psychological connection to it. This dimension encompasses strong feelings of significance, enthusiasm, inspiration, pride, and a sense of challenge. The third facet of engagement, termed "absorption," characterizes an employee's deep immersion, intense concentration, and profound engagement in their work to the extent that they lose track of time and encounter difficulties in disengaging from their tasks (González-Romá et al., 2006).

The fundamental aspects of work engagement, specifically vigor and dedication (González-Romá et al., 2006), are often considered antithetical to exhaustion and cynicism, which are the well-established dimensions of burnout. Furthermore, a body of research (Salanova, Agut, & Peiro, 2005) has demonstrated that work engagement positively correlates with task and contextual performance (Bakker, Demerouti, & Verbeke, 2004). Additional studies (Bakker & Demerouti, 2008; Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004) have indicated that a high level of work engagement is also associated with a reduced likelihood of employee turnover and intentions to quit.

Starting from the previous findings in similar studies related to different work settings, we have developed the following research questions:

- ✓ RQ1: Are there any differences between those *working from home, those* in *hybrid work,* and those working *on-site* regarding work alienation
- ✓ RQ2: Are there any differences between those working from home, those in *hybrid work*, and those working *on-site* regarding workplace loneliness
- ✓ RQ3: Are there any differences between those *working from home, those* in *hybrid work,* and those working *on-site* regarding work engagement

Methodology

In this study, we aim to examine the possible differences regarding workplace alienation, workplace loneliness, and work engagement depending on three work settings: work from home, in a hybrid format, and on-site exclusively.

Sample and procedure

The sample consisted of 78 participants (8 men and 70 women). The age range of the participants was between 21 and 53 years old (M=30.88, SD=9.00). Of those 78 participants, 23 work from home, 25 in a hybrid format, and 30 on-site exclusively. For data collection, a purposive convenience sampling technique was used. A self-reported

data collection technique was employed. The questionnaire was implemented in the Google Forms platform together with the informed consent. The study meets all the criteria established within the ethical guidelines of the faculty.

Measures

All participants were ensured about the confidentiality of the data and that it would be only used for research purposes. They were invited to fill in a set of questionnaires compiling the following measures: Work Alienation Scale (Nair & Vohra, 2009), Loneliness at Work Scale (Wright, Burt, & Strongman, 2006), and The Utrecht Work Engagement Scale (Schaufeli & Bakker, 2004).

The Work Alienation Scale (Nair & Vohra, 2009) consists of 8 items. The answers are distributed on a seven-option Likert scale from 1 (total disagreement) to 7 (total agreement). The internal consistency coefficient (Cronbach's Alpha) was α =.936.

Loneliness at Work Scale (Wright, Burt, & Strongman, 2006) is a questionnaire that comprises 16 items structured on two dimensions: emotional deprivation and social companionship. Each item consisted of a 5-point Likert Scale with different statements that inquired the extent to which the respondent agreed or disagreed. A response of 1 indicated strongly disagree, and 5 indicated strongly agree. The internal consistency coefficient of the composite score was α =.933.

The Utrecht Work Engagement Scale (Schaufeli & Bakker, 2004) is a 17-item scale distributed on three dimensions: vigor, dedication, and absorption. All items were scored on a seven-point rating scale ranging from 0 ('never') to 6 ('always'). The reliability was very good for the composite score (α = .957) and individual subdimensions (Vigor α = .868, Dedication α = .943, Absorption α = .889).

Results and discussion

Data analyses were performed in SPSS 26.0 (IBM Corporation, 2019). Because the present study is based on self-report questionnaires, Harman's single-factor test was performed to verify common method bias (Tehseen, Ramayah, & Sajilan, 2017). Following the guidance of Podsakoff and colleagues (2003), an exploratory factor analysis was conducted on all items associated with the selected variables. The outcome revealed that the initial factor explained only 27.24% of the variance, indicating that common method bias is not a widespread concern in this study.

The ANOVA and Tukey HSD multiple comparisons were performed to respond to the previously stated research questions. The results are presented in Tables 1 to 4. As can be observed, all ANOVA results show significant variation among conditions (type of work) for the selected variables – work alienation (F(2, 75) = 111.04, p < .01), workplace loneliness (F(2, 75) = 4.219, p < .05), and work engagement (F(2, 75) = 6.740, p < .01).

Table 1. Analysis of variance (Source: Authors' own research results)

		Sum of				
		Squares	df	Mean Square	F	Sig.
Work	Between	2636.645	2	1318.322	11.04	.000
alienation	Groups				0	
	Within Groups	8956.240	75	119.417		
	Total	11592.885	77			
Loneliness	Between	1375.137	2	687.569	4.219	.018
at work	Groups					
	Within Groups	12222.657	75	162.969		
	Total	13597.795	77			
Work	Between	3809.866	2	1904.933	6.740	.002
engagement	Groups					
	Within Groups	21197.019	75	282.627		
	Total	25006.885	77			

In the following a series of multiple comparisons were computed using Tukey HSD test (Tables 2, 3, and 4) to identify possible differences between different work settings regarding work alienation, workplace loneliness, and work engagement, thus answering the previously stated research questions (RQ1: Are there any differences between those working from home, those in hybrid work, and those working on-site regarding work alienation; RQ2: Are there any differences between those working from home, those in hybrid work, and those working on-site regarding workplace loneliness; RQ3: Are there any differences between those working from home, those in hybrid work, and those working on-site regarding work engagement).

Table 2. Tukey HSD Multiple Comparisons – Work alienation (Source: Authors' own research results)

	m	m	Manage			95% Confidence Interval		
Dependen t Variable	(I) work_ type	(J) work_ type	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Work	1.00	2.00	13.32000*	3.15732	.000	5.7705	20.8695	
alienation		3.00	12.20000*	3.02863	.000	4.9582	19.4418	
	2.00	1.00	-13.32000*	3.15732	.000	-20.8695	-5.7705	
		3.00	-1.12000	2.95926	.924	-8.1959	5.9559	
	3.00	1.00	-12.20000*	3.02863	.000	-19.4418	-4.9582	
		2.00	1.12000	2.95926	.924	-5.9559	8.1959	

^{*.} The mean difference is significant at the 0.05 level.

Table 2 reveals significant differences in the levels of work alienation between those working from home and those in hybrid work (p<.01) as well as between those working from home and those working on-site (p<.01). Furthermore, no significant difference was observed between those in hybrid work and those working on-site (p>.05).

Table 3. Tukey HSD Multiple Comparisons – Loneliness at Work (Source: Authors' own research results)

	(I)	(I)	Mean			95% Confidence Interval	
Dependent Variable	work_ type	work_ type	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Loneliness	1.00	2.00	5.17217	3.68841	.345	-3.6472	13.9916
at work		3.00	10.25217*	3.53806	.014	1.7923	18.7121
	2.00	1.00	-5.17217	3.68841	.345	-13.9916	3.6472
		3.00	5.08000	3.45703	.311	-3.1861	13.3461
	3.00	1.00	-10.25217*	3.53806	.014	-18.7121	-1.7923
		2.00	-5.08000	3.45703	.311	-13.3461	3.1861

^{*.} The mean difference is significant at the 0.05 level.

The results obtained for the loneliness at work levels are slightly different (Table 3). Thus, no significant difference was observed between those working from home and those in hybrid work (p>.05) or between those in hybrid work and those working onsite (p>.05). The only significant difference was identified between those working from home an those working on-site (p<.05).

Table 4. Tukey HSD Multiple Comparisons – Work engagement (Source: Authors' own research results)

	(I)	(I)	Mean	-		95% Confidence Interval		
Dependent Variable	work _type	work_ type	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Work	1.00	2.00	-17.23478*	4.85728	.002	-28.8491	-5.6205	
engagement		3.00	-12.66812*	4.65929	.022	-23.8090	-1.5272	
	2.00	1.00	17.23478*	4.85728	.002	5.6205	28.8491	
		3.00	4.56667	4.55258	.577	-6.3191	15.4524	
	3.00	1.00	12.66812*	4.65929	.022	1.5272	23.8090	
		2.00	-4.56667	4.55258	.577	-15.4524	6.3191	

^{*.} The mean difference is significant at the 0.05 level.

The last series of multiple comparisons was performed to identify the differences between work settings for the work engagement levels. The results presented in Table 3 show significant differences in the levels of work engagement between those working from home and those in hybrid work (p<.01) as well as between those working from home and those working on-site (p<.05). No significant difference was observed between those in hybrid work and those working on-site (p>.05).

Conclusions

This study aimed to investigate potential variations in workplace alienation, workplace loneliness, and work engagement across three distinct work settings: remote work, a hybrid arrangement, and on-site employment. Given the significance of social connections in individuals' lives and the substantial time spent in the workplace, it is crucial to acknowledge that a deficit in these relationships may lead to loneliness and alienation. These emotions can, in turn, have adverse implications for various

organizational outcomes, including work engagement, role conflict, role ambiguity, and job performance.

The analysis of variance (ANOVA) revealed significant variation among conditions for all selected variables – work alienation (F(2, 75) = 111.04, p < .01), workplace loneliness (F(2, 75) = 4.219, p < .05), and work engagement (F(2, 75) = 6.740, p < .01). Subsequent post hoc Tukey tests demonstrated substantial differences in work alienation levels between individuals working from home and those working in a hybrid format (p < .01) or solely on-site (p < .01). Similar findings were observed for work engagement, indicating that individuals working from home exhibited lower levels of work engagement in comparison to those in a hybrid format (p < .01) or exclusively on-site (p < .05). Furthermore, workplace loneliness exhibited significant differences only between those working from home and those working exclusively on-site (p < .05).

Previous studies mirror those results (Lagios et al., 2023), which revealed that employees experienced higher levels of work alienation during the COVID-19 pandemic compared to the period before it, likely due to the significant alterations in work conditions, namely working from home (Rudolph et al., 2021). These findings align with Guo et al.'s (2021) assertion that the changes in work dynamics brought about by the COVID-19 pandemic and the work-from-home work settings would heighten employees' sense of work alienation.

Certainly, the pandemic and the following years brought a shift in many work-related aspects. With the predominance of physical distancing and the growing reliance on digital platforms as the primary mode of communication, employees found themselves with fewer opportunities for social interactions. Consequently, this reduction in social engagement heightened their sense of professional isolation and feelings of loneliness. This sense of isolation and loneliness, in turn, was discovered to be associated with an increased feeling of work alienation. This observation aligns with prior research indicating that work alienation tends to emerge due to social isolation and weakened interpersonal relationships (Conway et al., 2020; Nair & Vohra, 2010). Lastly, our results are also consistent with Wax and colleagues' (2022) findings, who found that the interaction between workplace loneliness and remote work affects both affective organizational commitment and perceptions of coworker support.

While this study has notable strengths, it is important to recognize and address certain limitations. First and foremost, our reliance exclusively on self-reported measures introduces the possibility of common method variance and social desirability bias influencing the results. This was addressed by performing Harman's single-factor test analysis. Furthermore, our sample may have issues of generalizability due to the low number of participants in each type of work setting.

Subsequent studies could enhance our findings by embracing a more comprehensive approach. Given the observed blurring of boundaries between work and home life, as indicated by research (Rudolph et al., 2021), an intriguing avenue for exploration would involve delving into the cross-domain determinants of both work alienation and workplace loneliness. For example, contrary to Abiddin et al. (2022) findings, other scholars highlighted that many employees have reported increased challenges in balancing work and family responsibilities (Rudolph et al., 2021), which can ultimately

contribute to the development of work alienation (Fedi et al., 2016). Additionally, future studies could also delve into the potential "side effects" of work alienation, such as their influence on employees' drinking behaviors (Chiaburu et al., 2014).

References

Abiddin, N. Z., Ibrahim, I., & Abdul Aziz, S. A. (2022). A Literature Review of Work From Home Phenomenon During COVID-19 Toward Employees' Performance and Quality of Life in Malaysia and Indonesia. *Frontiers in Psychology, 13,* 819860. https://doi.org/10.3389/fpsyg.2022.819860

Bakker, A. B., & Demerouti, E. (2008). Towards a Model of Work Engagement, *Career Development International*, *13*(3), 209–223. https://doi.org/10.1108/13620430810870476

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources Model to Predict Burnout and Performance, *Human Resource Management*, 43(1), 83–104. https://doi.org/10.1002/hrm.20004

Barrero, J. M., Bloom, N., & Davis, S. J. (2021). Why working from home will stick (No. w28731). National Bureau of Economic Research.

Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment, *Quarterly Journal of Economics*, 130(1), 165-218.

Brender-Ilan, Y. (2012). How Do Income and Its Components and Perception Relate to Alienation?, *Journal of Applied Social Psychology*, 42(2), 440-470.

Chiaburu, D. S., Diaz, I., & De Vos, A. (2013). Employee alienation: Relationships with careerism and career satisfaction. *Journal of Managerial Psychology*, 28(1), 4-20.

Chiaburu, D. S., Thundiyil, T., & Wang, J. (2014). Alienation and its correlates: A meta-analysis. *European Management Journal*, 32(1), 24-36.

Choudhury, P., Foroughi, C., & Larson, B. Z. (2021). Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, *42*(4), 655-683.

Conway, E., Monks, K., Fu, N., Alfes, K., & Bailey, K. (2020). Reimagining alienation within a relational framework: Evidence from the public sector in Ireland and the UK. *The International Journal of Human Resource Management, 31*(21), 2673–2694. https://doi.org/10.1080/09585192.2018.1460859

Cook, J., Mor, Y., & Santos, P. (2020). Three cases of hybridity in learning spaces: Towards a design for a Zone of Possibility. *British Journal of Educational Technology*, *51*(4), 1155–1167. https://doi.org/10.1111/bjet.12945

Du Plooy, J., & Roodt, G. (2010). Work engagement, burnout and related constructs as predictors of turnover intentions. *SA Journal of Industrial Psychology. 36*(1), #910. https://doi.org/10.4102/sajip.v36i1.910

Ernst, J., & Cacioppo, J. (1998). Lonely Hearts: Psychological perspectives on loneliness. *Applied & Preventative Psychology*, *8*, 1-22.

Fedi, A., Pucci, L., Tartaglia, S., & Rollero, C. (2016). Correlates of work-alienation and positive job attitudes in high- and low-status workers, *Career Development International*, *21*(7), 713-725. https://doi.org/10.1108/CDI-03-2016-0027

González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 62, 165–174. https://doi.org/10.1016/j.jvb.2005.01.003

Guo, L. (2020). The Effect of Workplace Loneliness on Silence Behavior – The Role of Team-Member Exchange and Psychological Capital, *Psychology*, *11*, 467-479.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*(6), 495–513. https://doi.org/10.1016/j.jsp.2005.11.001

IBM Corp. Released 2019. IBM SPSS Statistics for Macintosh, Version 26.0. IBM Corp

Iqbal, K. M., Khalid, F. A., & Barykin, S. Y. (2021). Hybrid Workplace: The future of work, in K. M. Iqbal, F. A. Khalid, & S. Y. Barykin (Eds.), *Handbook of Research on Future Opportunities for Technology Management Education*, (pp. 28-48). ICI Global.

Isralowitz, R., Reznik, A., & Belhassen, Y. (2012). Work alienation, patterns of substance use and country of origin among male hospitality workers in Israel. *International Journal of Mental Health and Addiction*, 10(6), 923-926.

Kanungo, R. N. (1979). The Concept of Alienation and Involvement Revisited. *Journal of Applied Psychology*, 86, 119-138. https://doi.org/10.1037/0033-2909.86.1.119

Kanungo, R. N. (1982). Work alienation: An integrative approach. Praeger Publishers.

Kartal, N. (2018). Evaluating the relationship between work engagement, work alienation and work performance of healthcare professionals. *International Journal of Healthcare Management*, 11(3), 251-259.

Lagios, C., Lagios, N., Stinglhamber, F., & Ceasens, G. (2023). Predictors and Consequences of Work Alienation in Times of Crisis: Evidence from Two Longitudinal Studies During the COVID-19 Pandemic. *Current Psychology*, *42*, 22866–22880. https://doi.org/10.1007/s12144-022-03372-9

Mottaz, C. J. (1981). Some determinants of work alienation. *Sociological Quarterly*, 22(4), 515-529.

Nair, N., & Vohra, N. (2009). Developing a new measure of work alienation. *Journal of Workplace Rights*, 14(3), 293-309.

Nair, N., & Vohra, N. (2010). An exploration of factors predicting work alienation of knowledge workers. *Management Decision*, 48(4), 600–615. https://doi.org/10.1108/00251741011041373

Ozcelik, H., & Barsade, S. (2018). No Employee an Island: Workplace Loneliness and Job Performance. *Academy of Management Journal*, 2015, 1066. https://doi.org/10.5465/amj.2015.1066

Özer, Ö., Uğurluoğlu, Ö., Saygılı, M., & Sonğur, C. (2017). The impact of work alienation on organizational health: A field study in health sector. *International Journal of Healthcare Management*, 12(1), 18-24.

Peng, J., Chen, Y., Xia, Y., & Ran, Y. (2017). Workplace Loneliness, Leader-Member Exchange and Creativity: The Cross-Level Moderating Role of Leader Compassion. *Personality and Individual Differences, 104,* 510-515. https://doi.org/10.1016/j.paid.2016.09.020

Peplau, L., & Perlman, D. (1982). *Loneliness: A source book of current theory, research and therapy.* John Wiley & Sons.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879 - 903. https://doi.org/10.1037/0021-9010.88.5.879

Rudolph, C. W., Allan, B., Clark, M., Hertel, G., Hirschi, A., Kunze, F., Shockley, K., Shoss, M., Sonnentag, S., & Zacher, H. (2021). Pandemics: Implications for research and practice in industrial and organizational psychology. *Industrial and Organizational Psychology: Perspectives on Science and Practice, 14*(1-2), 1–35. https://doi.org/10.1017/iop.2020.48

Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking Organizational Resources and Work Engagement to Employee Performance and Customer Loyalty: The Mediation of Service Climate. *Journal of Applied Psychology*, *90*(6), 1217–1227. https://doi.org/10.1037/0021-9010.90.6.1217

Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *The International Journal of Human Resource Management*, 19(1), 116–

131. https://doi.org/10.1080/09585190701763982

Santas, G., Isik, O., & Demir, A. (2016). The effect of loneliness at work; work stress on work alienation and work alienation on employees' performance in Turkish health care institution. *South Asian Journal of Management Sciences*, *10*(2), 30-38.

Schacht, R. (1970). *Alienation,* Psychology Press. https://doi.org/10.4324/9781315712703

Schaufeli, W., & Bakker, A. (2004). *UWES Utrecht Work Engagement Scale. Preliminary Manual*. Utrecht University, Occupational Health Psychology Unit. Retrieved from http://www.schaufeli.com

Schaufeli, W., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *The Journal of Happiness Studies, 3,* 71–92. https://doi.org/10.1023/A:1015630930326

Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and Controlling for Common Method Variance: A Review of Available Methods. *Journal of Management Sciences*, 4(2), 146-175. https://doi.org/10.20547/jms.2014.1704202

Tummers, L. G., & den Dulk, L. (2013). The effects of work alienation on organisational commitment, work effort and work-to-family enrichment. *Journal of Nursing Management*, *21*(6), 850-859.

Vanderstukken, A., & Caniëls, M. C. J. (2021). Predictors of work alienation: differences between hierarchical levels. *Career Development International*, *26*(5), 640-656.

Wax, A., Deutsch, C., Lindner, C., Lindner, S. J., & Hopmeyer, A. (2022). Workplace Loneliness: The Benefits and Detriments of Working From Home. *Frontiers in Public Health*, 10, 903975. https://doi.org/10.3389/fpubh.2022.903975

Wegner, E. (1975). The concept of alienation: A critique and some suggestions for a context-specific approach. *Pacific Sociological Review*, *18*(2), 171-193.

Wright, S. L. (2005). *Loneliness in the workplace*, Doctoral Thesis, University of Canterbury.

Wright, S. L., Burt, C. D. B., & Strongman, K. T. (2006). Loneliness in the Workplace: Construct Definition and Scale Development. *New Zealand Journal of Psychology*, *35*, 59-68.