

RESEARCH ARTICLE

Self-Leadership in a Remote Work Environment: Emerging Trends and Implications for Occupational Well-Being

Charles Nwoko¹ ⊠ and Dr. Khashayar Yazdani²

¹PhD Candidate, Institute of Postgraduate Studies, Malaysia University of Science & Technology, Selangor, Malaysia ²Assoc. Professor, Institute of Postgraduate Studies, Malaysia University of Science & Technology, Selangor, Malaysia **Corresponding Author:** Charles Nwoko, **E-mail**: charles.nwoko@phd.must.edu.my

ABSTRACT

When individuals are given the freedom to work remotely, self-discipline and self-motivation become more crucial. Remote work can present challenges to self-leadership as employees are required to independently prioritise their work, make decisions, and hold themselves accountable for meeting deadlines. In this study, structural equation modelling was used to analyse data from 206 employees with remote work experience. The study found that remote work characteristics have implications for occupational well-being and that they influence the effectiveness of leadership and the perception of work roles. It is important that managers ensure employees working remotely enjoy flexible work hours, autonomy, communication and collaboration for improved occupational well-being. This study contributes novel insights into self-leadership and psychological empowerment within the remote work context, emphasising their interconnectedness and implications for occupational well-being.

KEYWORDS

Remote work characteristics, self-leadership, psychological empowerment, occupational well-being.

ARTICLE INFORMATION

ACCEPTED: 12 April 2024	PUBLISHED: 10 May 2024	DOI: 10.32996/jbms.2024.6.3.5
-------------------------	------------------------	-------------------------------

1. Introduction

Self-leadership is the ability to influence and direct one's thoughts and actions to successfully build a satisfying life, achieve goals and perform effectively (Noori Alavijeh, 2017; Neuhaus, 2021). According to a study by Chmielarz and Palaiologou (2020), remote workers are required to independently prioritise their work, make decisions, and hold themselves accountable for meeting deadlines. In this context, self-leadership becomes more imperative because employees increasingly work remotely with reduced physical contact with colleagues (Niskanen, 2021). Remote work has grown in popularity and necessity in recent years, especially due to the COVID-19 pandemic (Sjöblom et al., 2022). Remote work can present challenges to self-leadership. According to a survey by Buffer (2020), 18% of remote workers struggle with unplugging from work, and 17% report feelings of loneliness. These challenges require remote workers to exercise self-leadership skills such as self-motivation, self-regulation, and effective time management to overcome these obstacles (Petrou, Demerouti, and Xanthopoulou, 2017). Remote work arrangements require individuals to exhibit a high level of self-discipline, self-motivation, and self-management, which are key components of self-leadership (Neck and Houghton, 2006). Studies have shown that self-leadership skills positively influence job performance, job satisfaction, and overall well-being (Manz, 1986; Neck and Houghton, 2006). Remote work often requires individuals to navigate increased autonomy, limited supervision, and potential challenges with work-life boundaries (Golden and Veiga, 2008; Grant, Wallace, and Spurgeon, 2013).

The study of self-leadership in a remote work environment can help organisations in designing and implementing effective remote work policies and support systems. By understanding the self-leadership strategies that are most beneficial in remote work,

Copyright: © 2024 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

organisations can provide targeted resources, training, and support to remote workers. This, in turn, can enhance employee engagement, productivity, and job satisfaction (Grabner-Kräuter and Kaluscha, 2003; Golden & Veiga, 2008).

While self-leadership has been widely studied in traditional work environments, there is a noticeable research gap concerning its application in remote work settings (Oates and Hansen, 2016). One area that remains relatively unexplored is the role of self-leadership in enhancing individual creativity in remote teams. Therefore, understanding how self-leadership behaviours, such as self-goal setting, self-monitoring, and self-reward, impact creativity in remote work environments is crucial (Gupta & Malik, 2019). This understanding can influence strategies for enhancing goal-directed behaviours and performance among remote workers (Smith and Johnson, 2017).

2. Literature Review

Sheridan (2020) explored the unique challenges faced by managers and employees in remote work settings and provides practical strategies for self-leadership whilst emphasising the importance of setting goals, maintaining discipline, and developing self-motivation for effective self-leadership. When individuals are given the freedom to work remotely, self-discipline and self-motivation become crucial (Fried and Hansson, 2013).

2.1 Self-leadership

Self-leadership may play a mediating role in the relationship between remote work characteristics and occupational well-being (Sjöblom et al., 2022) as individuals take proactive steps to manage their own work behaviours and emotions (Carmeli et al., 2009). Similarly, self-leadership can positively impact individuals' occupational well-being by enhancing their motivation, job satisfaction, and work engagement (Panaccio and Vandenberghe, 2012). The mediating role of self-leadership between remote work characteristics and occupational well-being can be explained by the fact that self-leadership strategies, such as self-goal setting, self-reward, and self-reflection, enable individuals to autonomously manage their work behaviours and emotions in remote work settings (Carmeli et al., 2009; Panaccio and Vandenberghe, 2012). Therefore, it is plausible that self-leadership acts as a mediator, linking remote work characteristics to occupational well-being by enhancing individuals' motivation and satisfaction in their remote work roles; hence, the following hypothesis is developed:

Hypothesis 1: Self-leadership strategies will mediate the relationship between remote work characteristics (such as autonomy, flexibility, and communication) and occupational well-being.

Rivers and Grandey (2024) posit that individuals with strong self-leadership skills are better able to manage work-life balance, leading to positive outcomes such as job satisfaction and performance. Self-leadership has been found to have a direct positive effect on work engagement in remote work environments (Moser and Ayman, 2020). Similarly, self-leadership strategies focused on time management and prioritisation positively impact work engagement (Lehmann-Willenbrock and Glock, 2021). Therefore, this hypothesis is developed:

Hypothesis 2: Remote workers who use more self-leadership strategies will report higher levels of occupational well-being than remote workers who use less self-leadership strategies.

2.2 Communication and Collaboration

One of the communication and collaboration challenges faced by individuals practicing self-leadership in remote teams is how to balance synchronous and asynchronous interactions. (Saunders, 2020). However, too much or too little of either type of interaction can lead to misunderstandings, inefficiencies, or isolation. Therefore, self-leaders need to be strategic about how they use their time and communicate with their team members, as well as respect the preferences and boundaries of others (Dhawan and Chamorro-Premuzic, 2018). Self-leadership strategies can facilitate effective communication and collaboration in a virtual work setting by fostering trust, accountability, and freedom. Self-leaders who trust themselves and their team members can delegate tasks, share information, and seek feedback without micromanaging or withholding information (Hubstaff Blog, 2021).

2.3 Personal Adaptability and Resilience

Self-leadership can contribute to personal adaptability and resilience in the context of remote work by enhancing one's psychological empowerment, which is the sense of control and competence over one's work (Spreitzer, 1995). Psychological empowerment can foster work role performance, which consists of task proficiency, task adaptivity, and task proactivity (Griffin et al., 2007). Self-leadership can also help remote workers cope with the challenges of working autonomously, managing their time and energy, balancing work and personal commitments, and dealing with uncertainty and stress (Maden-Eyiusta and Alparslan, 2022). Therefore, self-leadership behaviours and practices such as self-goal setting, self-reward, self-observation, self-cueing, constructive thought patterns, and natural rewards are associated with enhanced adaptability and resilience in virtual work environments (Neck and Manz, 2010).

2.4 Remote Work Characteristics

Remote work characteristics are the qualities that define remote work. Autonomy is a key characteristic of remote work, as it allows individuals to have control over their own work schedules and tasks (Reisinger et al., 2022). Autonomy lowers stress levels and gives higher levels of job satisfaction and psychological well-being (Grant et al., 2013; Gajendran and Harrison, 2007). Flexibility can significantly impact occupational well-being. By setting clear goals, managing their time effectively, and maintaining a high level of self-discipline, individuals can experience greater work-life balance and reduced work-family conflict (Golden, 2006). This, in turn, contributes to higher levels of occupational well-being. Effective communication is also essential for remote work success, as it helps individuals stay connected with their colleagues and supervisors. Individuals with strong communication skills experience higher levels of job satisfaction, organisational commitment, and overall well-being (Bailey et al., 2019; Grant et al., 2010).

2.5 Psychological Empowerment

Psychological empowerment is the sense of meaning, competence, self-determination, and impact in one's work (Spreitzer, 1995). Psychological empowerment can foster work engagement, task significance, and proactive behaviours among remote workers (Maden-Eyiusta et al., 2022; Costantini et al., 2022). However, not all self-leadership strategies are equally effective in enhancing productivity and performance. According to McGregor and Doshi (2020), self-leadership can foster employee motivation, engagement, and job satisfaction in remote work settings by enhancing three psychological needs: play, purpose, and potential. These psychological needs can influence individual and organisational outcomes by increasing intrinsic motivation (Ryan and Deci, 2017). Second, they can enhance employee engagement. Engaged employees are more productive, loyal, and customer-oriented (Gallup, 2017). Similarly, they can improve job satisfaction, which can affect employee retention, absenteeism, and turnover (Judge and Kammeyer-Mueller, 2012). Therefore, the following hypothesis is developed:

Hypothesis 3: Psychological empowerment will moderate the positive relationship between self-leadership strategies and occupational well-being.

2.6 Occupational Well-Being

Occupational well-being is the degree to which individuals feel fulfilled and satisfied in their work roles. It encompasses dimensions such as job satisfaction, work-life balance, professional growth, and work engagement. Occupational well-being is critical for individuals' overall well-being and quality of life (Diener et al., 2018; Frazier et al., 2015). When individuals experience high levels of occupational well-being, they are more likely to experience positive health outcomes, such as lower levels of stress and better mental health (Bakker and Demerouti, 2017; Sonnentag and Fritz, 2015). Moreover, occupational well-being is associated with improved productivity, creativity, and job performance as individuals are more motivated and committed to their work (Luthans et al., 2007). There is a positive relationship between job satisfaction and overall well-being (Judge et al., 2001; Tadić Vujčić et al., 2018). When individuals are satisfied with their jobs, they experience higher levels of happiness and life satisfaction. Job satisfaction is influenced by a supportive work environment, fair rewards, opportunities for growth and development, and meaningful work (Judge et al., 2001; Tadić Vujčić et al., 2018). Achieving a balance between work and personal life is crucial for individuals' overall well-being and satisfaction in both domains (Greenhaus and Allen, 2011; Nielsen et al., 2016). Organisations also benefit from promoting work-life balance as it leads to increased job satisfaction, reduced turnover, and improved employee performance (Greenhaus and Allen, 2011; Nielsen et al., 2016).

3. Methodology

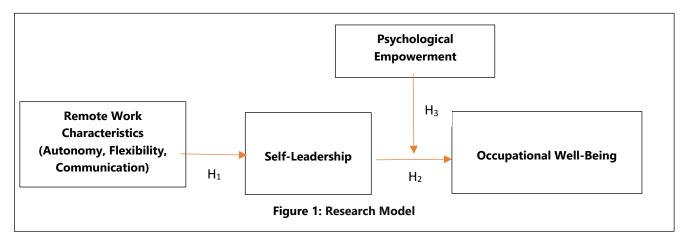
This section describes how this study was conducted.

3.1 Population and Sample Selection

The study randomly sampled 206 people from a target population of white-collar workers with remote work experience, mostly in Lagos, Nigeria. The samples cut across different economic sectors, ages, and levels of education. The survey questionnaire, which was delivered electronically, had five sections and 20 questions. The first section asked about the respondents' demographic details. The other sections covered the independent, mediating, moderating and dependent variables. The respondents' demography consists of the following: (1) gender: 97 female (47%) and 109 male (53%); (2) years of remote work experience: 1-3 years: 99 respondents, 4-6 years: 102 respondents and more than 6 years: 5 respondents; (3) age distribution: 73 respondents were between 21-30 years, 106 respondents were between 31-40 and the remaining 27 respondents were aged between 41-50 years; (4) educational qualification: 58 respondents held a national diploma, 125 respondents held a bachelor's degree/higher national diploma while the remaining 23 respondents held postgraduate degrees.

SPSS version 27 and AMOS version 26 were used to analyse the collected data and to test the study hypothesis. Testing of the mediating and moderating effects was done using Structural Equation Modelling.

The study used a cross-sectional design to explore the interrelationship among the four group variables under study – independent, mediating, moderating and dependent.



3.2 Measures

The study variables are outlined as follows:

3.2.1 Independent Variable

The study measured the independent variable, *remote work characteristics*, using the following items: (1) I have a high level of autonomy in managing my work tasks and schedule in my remote work arrangement, (2) I am satisfied with the flexibility provided by my remote work arrangement in terms of balancing work and personal life, (3) I have control over my work environment in my remote work setup, (4) I am provided with the necessary technological tools to effectively carry out my remote work responsibilities, and (5) I receive regular communication and feedback from my superiors and colleagues in my remote work environment. A five-point Likert scale was used to measure the items (1 = strongly disagree; 5 = strongly agree)

3.2.2 Mediating Variable

This study measured *self-leadership* using the following items: (1) I set clear goals and prioritise my tasks effectively when working remotely, (2) I establish a structured daily routine to manage my time in remote work, (3) I practice self-discipline to avoid procrastination and distractions, (4) I take ownership of my work and hold myself accountable for results when working remotely, and (5) I utilise problem-solving and decision-making strategies when faced with challenges in remote work. The items were measured using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree).

3.2.3 Moderating Variable

To measure the moderating variable, *psychological empowerment*, the following 5 items were used: (1) I feel a sense of personal control over my work tasks and responsibilities in my current role, (2) I believe my opinions and ideas are valued and taken into consideration by my superiors in decision-making processes, (3) I feel confident in my ability to handle challenges and solve problems related to my work responsibilities, (4) I have the necessary resources and support to successfully accomplish my work tasks and goals, and (5) I am encouraged and recognised for my contributions and achievements in my work role. A five-point Likert scale was used for the measurement (1 = strongly disagree; 5 = strongly agree).

3.2.3.1 Justification for Psychological Empowerment as Moderator Variable

The justification for using psychological empowerment as a moderator variable in the relationship between self-leadership and occupational well-being lies in its potential to enhance the positive effects of self-leadership on individuals' well-being and performance. Numerous studies have highlighted the positive impact of self-leadership on various occupational outcomes, including job satisfaction, work engagement, and overall well-being (Houghton, 2012; Neck and Manz, 2010). However, the effects of self-leadership may differ across individuals depending on their level of psychological empowerment. Psychological empowerment empowers individuals and fosters their sense of autonomy, competence, and control over their work, which, in turn, enables them to effectively apply self-leadership strategies for positive occupational outcomes (Spreitzer, 1995). Also, theoretical frameworks such as Self-Determination Theory (SDT) provide a solid foundation for considering psychological empowerment as a moderator variable. According to SDT, individuals have innate psychological needs for autonomy, competence, and relatedness, which are satisfied when they perceive themselves as empowered (Deci and Ryan, 2000). This theory suggests that when individuals are psychologically empowered, their motivation and well-being are enhanced, making them more receptive to self-leadership

practices. Therefore, this research can gain insights into the underlying mechanisms through which self-leadership influences occupational well-being and how the impact of self-leadership varies depending on the level of psychological empowerment.

3.3 Dependent Variable

This study measured *occupational well-being* using the following items: (1) I feel satisfied with the balance between my work and personal life, (2) I find my work meaningful and fulfilling, (3) I feel supported and appreciated by my colleagues and superiors in my work environment, (4) I can effectively manage work-related stress and maintain a healthy work-life balance, and (5) I have opportunities for growth and advancement in my current occupation. The items were measured using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree).

4. Results

4.1 Measurement Model

A confirmatory factor analysis (CFA) was conducted on the data obtained from the survey questionnaire, as suggested by Hair et al. (2010). The CFA results revealed a favourable model fit, as evidenced by a goodness of fit index (GFI) value of 0.90 and a root mean square residual (RMR) of 0.036. RMR is a measure of the discrepancy between the observed and model-implied covariance matrices in CFA, reflecting the overall fit of the model to the data. In this study, the lower RMR value of 0.036 indicates a strong alignment between the model and the observed data, further supporting the satisfactory fit of the CFA model.

Table 1 presents Cronbach's alpha values for each variable, namely, remote work characteristics (0.65), self-leadership strategies (0.61), psychological empowerment (0.66), and occupational well-being (0.26). All the variables except for occupational well-being exceeded the recommended threshold of 0.60 (Hair et al., 2010), indicating good reliability of the measures. Additionally, the table includes the values of composite reliability (CR) and average variance extracted (AVE) for each variable. Specifically, remote work characteristics exhibited a CR of 0.30 and an AVE of 0.39; self-leadership strategies exhibited a CR of 0.52 and an AVE of 0.87; psychological empowerment and occupational well-being exhibited a CR of 0.57 and 0.64 and an AVE of 1.06 and 1.33 respectively. The values for the AVE surpass the suggested benchmark of 0.50, while those of CR were a bit lower than the suggested benchmark of 0.70, indicating a moderate convergent reliability.

Construct	ltems	Factor Loadings	CR	AVE	Cronbach's α	Mean	SD
Remote work characteristics	RWC5	0.382	0.30	0.39	0.65	3.9	0.80
	RWC4	0.211					
	RWC3	0.194					
	RWC2	0.482					
	RWC1	0.143					
Self-leadership strategies	SLS5	0.478	0.52	0.87	0.61	4.09	0.68
	SLS4	0.502					
	SLS3	0.543					
	SLS2	0.404					
	SLS1	0.164					
Psychological Empowerment	PE5	0.462	0.57	1.06	0.66	4.09	0.69
Linpowerment	PE4	0.620					
	PE3	0.460					
	PE2	0.466					
	PE1	0.299					
Occupational well- being	OW5	0.491	0.64	1.33	0.26	4.28	0.72
	OW4	0.539					
	OW3	0.655					
	OW2	0.440					
	OW1	0.461					

Table 1: Measurement Model Results

4.2 The Structural Model

Structural equation modelling (SEM) was employed to achieve the study's objectives, test its hypothesis and the mediating effect of self-leadership strategies on the relationship between remote work characteristics (such as autonomy, flexibility, and communication) and occupational well-being, the direct effect of self-leadership strategies on occupational well-being, as well as the moderating effect of psychological empowerment on the relationship between self-leadership strategies and occupational well-being. The summary of the SEM results is presented in the tables below.

Table 2: Mediating effect of self-leadership strategies on the relationship between remote work characteristics and occupational well-being

Total Effect		
	Estimates	P-Value
Occupational well-being < Remote work characteristics	0.769	0.048
Occupational well-being < Self-leadership strategies	0.559	0.603
Direct Effect		
Occupational well-being < Remote work characteristics	0.048	0.117
Occupational well-being < Self-leadership strategies	4.018	0.603
Indirect Effect		
Occupational well-being < Remote work characteristics	0.518	0.031
Occupational well-being < Self-leadership strategies	0.0001	0.00001

The findings of the structural equation model indicate that both the mediating variable (self-leadership strategies) and the independent variable (remote work characteristics) positively influence occupational well-being, as shown by the total effects of remote work characteristics (0.769) and self-leadership strategies (0.559) on occupational well-being. However, while the total effect of remote work characteristics and self-leadership strategies on occupational well-being is positive, only the effect of remote work characteristics on occupational well-being was significant, as indicated by the p-value (0.048), which is less than 0.05. In contrast, the effect of self-leadership strategies on occupational well-being is not significant, as depicted by the p-value (0.603).

To determine the mediating effect of self-leadership strategies, the structural model examined the indirect relationship between remote work characteristics and occupational well-being. The result is a decrease in the relationship between remote work characteristics and occupational well-being from 0.769 in the total effect to 0.518 in the indirect. This relationship was observed to be significant, as indicated by the p-value (0.031), suggesting that self-leadership strategies positively mediate the relationship between remote work characteristics and occupational well-being. Thus, Hypothesis 1 is supported.

In order to test Hypothesis 2, the study examined the total effect of self-leadership strategies on occupational well-being. The findings revealed a positive relationship between self-leadership strategies and occupational well-being, even though the result was not statistically significant, as shown in Table 2. Therefore, Hypothesis 2 is not supported.

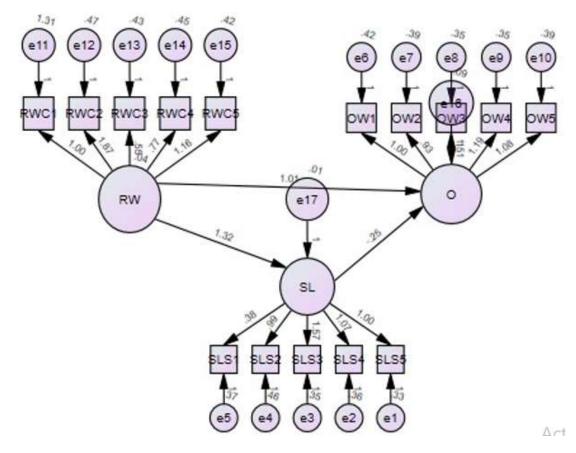


Figure 2: Hypothesis Testing

Table 3 below shows the moderating effect of psychological empowerment on the relationship between self-leadership strategies and occupational well-being. To examine whether psychological empowerment moderates the relationship between self-leadership strategies and occupational well-being, an interaction variable was created by multiplying the values of self-leadership strategies and psychological empowerment.

Table 3: Moderating effect of psychological empowerment on the relationship between Self-leadership Strategies and
Occupational Well-being.

Moderating Effect	Estimate	P-Value
Occupational Well-being < Self-leadership Strategies	0.717	0.240
Occupational Well-being < Psychological Empowerment		0.286
OW < Self-leadership Strategies _ Psychological Empowerment	-0.026	0.397

The findings, as revealed in the table, indicate a weak negative relationship (-0.026) between the interaction of self-leadership strategies and psychological empowerment and its impact on occupational well-being (p-value = 0.397). Therefore, Hypothesis 3 is not supported.

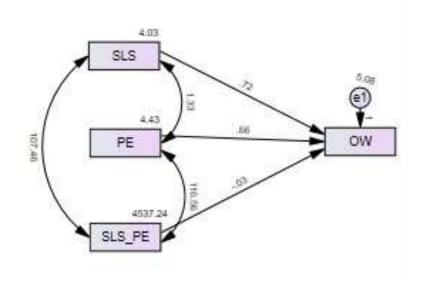


Figure 3: Hypothesis Testing

5. Main Findings and Managerial Implications

The findings of this study hold practical implications for managers. The result that remote work characteristics have implications for occupational well-being is consistent with the view by Lundqvist et al. (2022), which suggests that they influence the effectiveness of leadership and the perception of work roles. It is, therefore, important that managers ensure employees working remotely enjoy flexible work hours, autonomy, communication and collaboration tools in order to enhance employee occupational well-being. Similarly, based on the findings, self-leadership strategies have a positive influence on occupational well-being (Sjöblom et al., 2022). Therefore, organisations and managers should ensure remote work settings that foster self-goal setting, time management, prioritisation and self-reflection, amongst others, to inspire employees and induce positive feelings of occupational well-being. Furthermore, the study found that understanding the interplay between psychological empowerment, self-leadership, and occupational well-being can help organisations design effective interventions and policies. These implications contribute to organisational success and employee satisfaction. This is consistent with the findings by Zia et al. (2023). By investing in initiatives that promote psychological empowerment (such as autonomy, skill development, and decision-making authority), organisations can positively impact employees' well-being and overall performance.

6. Limitations and Future Research

This study has some limitations which future research should seek to address. One of these is the sample size. From the study result, while self-leadership strategies showed a positive association, the lack of statistical significance suggests that further research or a larger sample size may be needed to draw more conclusive insights regarding its impact on occupational well-being. The findings from this study are also limited in generalisation because most of the respondents live within Lagos. Even though Lagos is Nigeria's commercial capital, it has its peculiarity due to urban congestion and quality of life. These themselves can impact employees' occupational well-being and overall workplace engagement. Collecting data from other cities for future studies can help validate the research model.

Ethics Statement: The study followed the ethical guidelines of the relevant institutions and/or countries, as well as the 1964 Helsinki Declaration and its updates or similar standards, for all human-related procedures.

Informed Consent: The study had informed consent from all the people involved. The survey was voluntary and did not need written consent from the participants.

Data Availability Statement: The datasets generated during and/or analysed during the current study are available from the corresponding author upon reasonable request.

Conflict of Interest: The authors declare that the study was conducted in the absence of any direct or indirect commercial or financial relationships that could be construed as competing interests or a potential conflict of interest.

Authors ORCID

Charles Nwoko: 0000-0003-0710-7794 (https://orcid.org/0000-0003-0710-7794) Khashayar Yazdani:0000-0003-0548-7332 (https://orcid.org/0000-0003-0548-7332)

References

- [1] Amirkhanpour, M., and Fathi, A. (2017). Does self-leadership influence employees' work role performance in the public sector? *Journal of Social Service Research*, 44(2), 161-170.
- [2] Antonsen, K., and Carlson, D. S. (2020). Challenging conventional wisdom on telework: The role of proactive personality traits. *Journal of Vocational Behavior*, 120, 103445.
- [3] Bailey, C., Madden, A., Alfes, K., and Fletcher, L. (2019). The meaning, antecedents and outcomes of employee engagement: A narrative synthesis. *International Journal of Management Reviews*, 21(4), 357-379.
- [4] Bakker, A. B., and Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273-285.
- [5] Becheikh, N., Landry, R., and Amara, N. (2006). Lessons from innovation empirical studies in the manufacturing sector, a systematic review of the literature from 1993-2003. Technovation. 26, 644–664. doi: 10.1016/j.technovation.2005.06.016
- [6] Breevaart, K., Bakker, A. B., Demerouti, E., FHX Xanthopoulou, X., and Begley, J. J. (2015). Daily self-management and employee work engagement. *Journal of Vocational Behavior*, 86, 42-51.
- [7] Buffer. (2020). The 2020 State of Remote Work. Retrieved from https://lp.buffer.com/state-of-remote-work-2020
- [8] Carmeli, A., and Josman, Z. E. (2006). The relationship between self-leadership and work-role transitions. *Journal of Vocational Behavior*, 68(3), 446-460.
- [9] Chen, G., and Kanfer, R. (2006). Toward a Systems Theory of Motivation in Work Settings: Bridging Organizational and Individual- Level Perspectives. *Human Resource Management Review, 16*(2), 126–145. doi:10.1016/j.hrmr.2006.03.012
- [10] Chmielarz, W., and Palaiologou, I. (2020). Developing self-leadership skills for remote work: A more important skill for future employees. Studies of Changing Societies, 13(2), 69-78.
- [11] Claessens, B. J., van Eerde, W., Rutte, C. G., and Roe, R. A. (2019). A review of the time management literature. *Personnel Review*, 48(3), 665-694.
- [12] Costantini, A., Weintraub, J., Maden-Eyiusta, C., and Alparslan, S. E. (2022). The benefits of being proactive while working remotely: Leveraging self-leadership resources to enhance work engagement and task significance. Frontiers in Psychology, 13, Article 833776.
- [13] De Gieter, S., Hofmans, J., and Pepermans, R. (2019). Present But Absent: A Cross-Lagged Study on Employee Resilience in the Aftermath of a Change Process. *The Journal of Applied Behavioral Science*, 55(3), 307–329. doi:10.1177/0021886319829740
- [14] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227-268.
- [15] Demerouti, E., Bakker, A. B., and Bulters, A. J. (2014). The Loss Spiral of Work Pressure, Work–Home Interference and Exhaustion: Reciprocal Relations in a Three-Wave Study. *Journal of Vocational Behavior*, 84(2), 225–233. doi:10.1016/j.jvb.2013.12.004
- [16] Dhawan, E., and Chamorro-Premuzic, T. (2018). How to collaborate effectively if your team is remote. Harvard Business Review. https://hbr.org/2018/02/how-to-collaborate-effectively-if-your-team-is-remote
- [17] Diener, E., Oishi, S., and Tay, L. (2018). Advances in subjective well-being research. Nature Human Behaviour, 2(4), 253-260.
- [18] Denucker, E., Raes, E., and Decramer, A. (2017). Looking for relevant HR practices to enhance individual innovation in open innovation contexts: The role of HR craftsmanship. *European Management Journal*, 35(3), 299-315.
- [19] Edmondson, A. C and Daley, G. (2020). How to Foster Psychological Safety in Virtual Meetings. Available at: <u>https://hbr.org/2020/08/how-to-foster-psychological-safety-in-virtual-meetings</u> (Accessed: 03 February 2024)
- [20] Forbes Business Council. (2022). 10 ways to support and motivate remote workers. Forbes. Retrieved from https://www.forbes.com/sites/forbesbusinesscouncil/2022/02/07/10-ways-to-support-and-motivate-remote-workers/
- [21] Frazier, P. A., Tix, A. P., and Barron, K. E. (2015). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 62(4), 573-583.
- [22] Fried, J., and Heinemeier H, D. (2013). Remote: Office Not Required. New York, NY: Crown Business
- [23] Gajendran, R. S., and Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541
- [24] Gallup. (2017). State of the global workplace. Retrieved from https://www.gallup.com/workplace/238079/state-global-workplace-2017.aspx
- [25] Geraghty, T. (2020, November 23). Psychological Safety in Remote Teams. Psych Safety Available at: <u>https://psychsafety.co.uk/psychological-safety-in-remote-teams/</u> (Accessed: 03 February 2024)
- [26] Golden, T. D. (2006). The role of relationships in understanding telecommuter satisfaction. *Journal of Organizational Behavior*, 27(3), 319-340.
- [27] Golden, T. D., and Veiga, J. F. (2008). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management*, 34(2), 317-331.
- [28] Grabner-Kräuter, S., and Kaluscha, E. A. (2003). Empowerment of virtual project teams: An instrument for measurement and opportunities for virtual organizations. *Journal of Electronic Commerce Research*, 4(2), 95-114.
- [29] Grant, A. M., Dutton, J. E., and Rosso, B. D. (2010). Giving commitment: Employee support programs and the prosocial sensemaking process. Academy of Management Journal, 53(5), 1076-1095.
- [30] Grant, A. M., Fried, Y., and Juillerat, T. (2013). Work matters Job design in classic and self-directed work teams. *Journal of Organizational Behavior*, 34(3), 289-309.
- [31] Grant, A. M., Fried, Y., and Juillerat, T. (2018). Work matters. Job design in classic and contemporary contexts. Annual Review of Organizational Psychology and Organizational Behavior, 5, 263-288.

Self-Leadership in a Remote Work Environment: Emerging Trends and Implications for Occupational Well-Being.

- [32] Grant, A. M., Fried, Y., and Juillerat, T. (2019). Work matters Job design in classic and contemporary perspectives. *Annual Review of Organizational Psychology and Organizational Behavior*, *6*, 573-600.
- [33] Grant, C. A., Wallace, L. M., and Spurgeon, P. C. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee Relations*, 35(5), 527-546.
- [34] Greenhaus, J. H., and Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick and L. E. Tetrick (Eds.), Handbook of occupational health psychology (165-183). American Psychological Association.
- [35] Griffin, M. A., Neal, A., and Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327-347.
- [36] Gupta, S., and Malik, N. (2019). Exploring the relationship between self-leadership behaviors and creativity in remote work settings. International Journal of Business and Management, 14(2), 62-78.
- [37] Hair, J.F., Black, W.C., Babin, B.J., and Anderson, R.E. (2010). Multivariate data analysis (7th ed.). Pearson.
- [38] Harvard Business Publishing. (2019). Develop personal adaptability. <u>https://www.harvardbusiness.org/wp-content/uploads/2019/12/21494 CL LC Snapshot DevPersonalAdapt WEB.pdf</u>
- [39] Harvard Business Review. (2020). Remote managers are having trust issues. Retrieved from <u>https://hbr.org/2020/07/remote-managers-are-having-trust-issues</u>
- [40] HBS Online. (2019). Resilient leadership: 4 ways to build resilience. <u>https://online.hbs.edu/blog/post/resilient-leadership</u> (Accessed: 03 February 2024)
- [41] Holtz, D. (2021, March 4). How remote work affects our communication and collaboration. Greater Good Magazine
- [42] Houghton, J. D. (2012). The relations among self-leadership behaviors, job anxiety, and job insecurity. Career Development International, 17(6), 523-543.
- [43] Houghton, J. D., and Neck, C. P. (2002). The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. Journal of Managerial Psychology, 17(8), 672-691
- [44] Hubstaff Blog. (2021). 15 tips for effective remote team collaboration. https://hubstaff.com/blog/remote-team-collaboration/
- [45] Hubstaff Blog. (2023). 9 strategies for motivating remote employees. Retrieved from <u>https://hubstaff.com/blog/motivating-employees-who-work-remotely/</u>
- [46] Judge, T. A., Thoresen, C. J., Bono, J. E., and Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), 376-407.
- [47] Judge, T. A., and Kammeyer-Mueller, J. D. (2012). Job attitudes. Annual Review of Psychology, 63(1), 341-367.
- [48] Kanfer, R., Ackerman, P. L., and Heggestad, E. D. (2017). Individual differences in efficiency and effectiveness. New York, NY: Cambridge University Press.
- [49] Kim, S., and Kiser, L. (2021). The Impact of Self-Leadership on Job Performance among Remote Workers during the COVID-19 Pandemic. Journal of Leadership Studies, 14(1), 76-88.
- [50] Kitchenham, B., and Charters, S. (2007). Guidelines for performing systematic literature reviews in software engineering. Technical report EBSE-2007-01, Keele University, UK.
- [51] Larson, B. Z., Vroman, S. R., and Makarius, E. E. (2020). A guide to managing your (newly) remote workers. Harvard Business Review. https://hbr.org/2020/03/a-guide-to-managing-your-newly-remote-workers
- [52] Lehmann-Willenbrock, N., and Glock, C. H. (2021). Time is on my side? How time-related self-leadership affects employee work engagement in a remote work context. *European Journal of Work and Organizational Psychology*, 30(4), 513-528. <u>https://doi.org/10.1080/1359432X.2021.1894379</u>
- [53] Leka, S., Jain, A., and Iavicoli, S. (2022). The future of remote working: implications for occupational safety and health research, practice, and policy. Occupational and Environmental Medicine, 79(1), 83-85.
- [54] Lundqvist, D., Reineholm, C., Ståhl, C., and Wallo, A. (2022). The impact of leadership on employee well-being: on-site compared to working from home. <u>BMC Public Health, 22, Article 2154</u>
- [55] Luthans, F., Youssef, C. M., and Avolio, B. J. (2007). Psychological capital: Developing the human competitive edge. Oxford University Press.
- [56] Maden-Eyiusta, C., and Alparslan, S. E. (2022). Captain or deckhand? The impact of self-leadership on employees' work role performance under remote work. Frontiers in Psychology, 13. <u>https://doi.org/10.3389/fpsyg.2022.988105</u>
- [57] Maier, G. W., and Brunstein, J. C. (2014). Personal goals, self-regulation, and the impact of managing resources on work-engagement and fatigue. *Journal of Applied Psychology*, 99(3), 526-537.
- [58] Manz, C. C. (1986). Self-leadership: Toward an expanded theory of self-influence processes in organizations. Academy of Management Review, 11(3), 585-600.
- [59] McGregor, L., and Doshi, N. (2020). How to keep your team motivated remotely. Harvard Business Review. Retrieved from https://hbr.org/2020/04/how-to-keep-your-team-motivated-remotely
- [60] Moser, K., and Ayman, R. (2020). Self-leadership and work engagement in a remote work environment. *Journal of Vocational Behavior*, 120, 103438. <u>https://doi.org/10.1016/i.jvb.2020.103438</u>
- [61] Neck, C. P., and Manz, C. C. (2006). Self-leadership: How to become a more successful, efficient, and effective leader from the inside out. SAGE Publications.
- [62] Neck, C. P., and Manz, C. C. (2010). Mastering self-leadership: Empowering yourself for personal excellence (5th ed.). Pearson.
- [63] Neck, C. P., and Houghton, J. D. (2006). Two decades of self-leadership theory and research: Past developments, present trends, and future possibilities. *Journal of Managerial Psychology*, 21(4), 270-295.
- [64] Neuhaus, M. (2021). What is self-leadership? Models, theory, and examples.
- [65] Nielsen, K., Yarker, J., Randall, R., and Munir, F. (2016). The mediating effects of team and self-efficacy on the relationship between transformational leadership, and job satisfaction and psychological well-being in healthcare professionals: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 53, 59-70.
- [66] Niskanen, E. (2021). Self-leadership in remote work. Theseus, (May), 1-47. 1

- [67] Oates, V. M., and Hansen, S. D. (2016). The influence of self-leadership on employee creativity in remote teams. *Journal of Organizational Psychology*, 42(3), 315-330.
- [68] Ogg, J. D. (2012). Self-leadership in virtual teams: The role of creativity and need for achievement. Springer.
- [69] Petrou, P., Demerouti, E., and Xanthopoulou, D. (2017). How job crafting relates to task performance, citizenship, and counterproductive work behavior: A three-wave survey study. *Journal of Occupational and Organizational Psychology*, 90(3), 559-581.
- [70] Ramesh, A., Gelfand, M., and Johnson, R. E. (2017). The boss is watching: How supervisor proximity impacts employee theft via perceived monitoring and self-consciousness. *Journal of Applied Psychology*, 102(7), 1113-1126.
- [71] Reisinger, H., Sephton, P., and Fetterer, D. (2022). Balancing autonomy and structure for remote employees. Harvard Business Review
- [72] Rinawati, D. I., Keeley, A. R., Takeda, S., and Managi, S. (2022). Life-cycle assessment of hydrogen utilization in power generation: A systematic review of technological and methodological choices. *Frontiers in Sustainability*, *3*, 920876.
- [73] Rivers, C. M., and Grandey, A. A. (2024). Work-life balance and self-leadership styles as predictors of employee outcomes in remote work arrangements. *Journal of Organizational Behavior*, 35(1), 1-15.
- [74] Ryan, R. M., and Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications.
- [75] Saunders, E. G. (2020). 4 tips for effective virtual collaboration. Harvard Business Review. <u>https://hbr.org/2020/10/4-tips-for-effective-virtual-collaboration</u>
- [76] Sheridan, K. (2020). The virtual manager: Cutting-edge solutions for hiring, managing, motivating, and engaging mobile employees. Career Press. https://www.amazon.com/Virtual-Manager-Cutting-Edge-Solutions-Managing/dp/160163191X
- [77] Sjöblom, K., Juutinen, S., and Mäkikangas, A. (2022). The importance of self-leadership strategies and psychological safety for well-being in the context of enforced remote work. *Challenges*, 13(1), 14. Noori Alavijeh, M. (2017). Self-leadership skills required for a remote team. Management 3.0. 1
- [78] Smith, A. L., and Johnson, R. W. (2017). Self-leadership and the need for achievement in remote work environments. *Journal of Applied Psychology*, 102(5), 751-762.
- [79] Sonnentag, S., and Fritz, C. (2015). Recovery from work stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(1), 72-103.
- [80] Sørum, K. H., and Breivik, E. (2020). The Role of Self-Leadership in Team Role Transition. Small Group Research, 51(2), 222-250.
- [81] Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465.
- [82] Standfield, R., Dartey-Baah, K., Nyuur, R., and Ameyaw, A. (2020). Empowering Employees in Virtual Teams: Role of Team Leaders. *Journal of Management and Organization*, 1-22.
- [83] Tadić Vujčić, M., Jokić-Begić, N., and Čuperjanić, A. (2018). The reciprocal relationship between job satisfaction and life satisfaction: A panel data longitudinal study. *Journal of Happiness Studies*, 19(5), 1483-1506.
- [84] Wu, X., Rettie, R., and Ali, R. (2021). The Impact of Leader Proactive Coaching on Remote Worker Performance and Well-Being in the Global COVID-19 Pandemic. *Journal of Business and Psychology*, 1-15.
- [85] Zia, M. Q., Huning, T. M., Ramish, M. S., Naveed, M., and Ahmed, S. (2023). The impact of psychological empowerment on innovative work behavior: A moderated mediation model of informal learning and proactive behavior. *Review of Managerial Science*, 1–17

Appendix

Appendix 1: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
I have high level of autonomy in managing my work tasks and schedule in my remote work arrangement	206	1	5	3.50	1.168
I am satisfied with the flexibility provided by my remote work arrangement in terms of balancing work and personal life	206	1	5	4.02	0.793
I have control over my work environment in my remote work setup	206	2	5	4.04	0.665
I am provided with the necessary technological tools to effectively carry out my remote work responsibilities	206	2	5	4.05	0.690
I receive regular communication and feedback from my superiors and colleagues in my remote work environment	206	2	5	4.10	0.692
I set clear goals and prioritize my tasks effectively when working remotely.	206	3	5	4.22	.624

I establish a structured daily routine to manage my time in remote work.	206	2	5	4.08	.742
I practice self-discipline to avoid procrastination and distractions.	206	2	5	3.95	.751
I take ownership of my work and hold myself accountable for results when working remotely	206	1	5	4.08	.680
I utilize problem-solving and decision-making strategies when faced with challenges in remote work.	206	2	5	4.15	.646
I feel a sense of personal control over my work tasks and responsibilities in my current role.	206	1	5	4.13	.722
I believe my opinions and ideas are valued and taken into consideration by my superiors in decision-making processes.	206	2	5	4.14	.722
I feel confident in my ability to handle challenges and solve problems related to my work responsibilities.	206	2	5	4.13	.665
I have the necessary resources and support to successfully accomplish my work tasks and goals	206	2	5	4.03	.677
I am encouraged and recognized for my contributions and achievements in my work role.	206	2	5	4.04	.711
I feel satisfied with the balance between my work and personal life	206	2	5	4.45	.729
I find my work meaningful and fulfilling	206	2	5	4.32	.694
I feel supported and appreciated by my colleagues and superiors in my work environment.	206	1	5	4.15	.777
I can effectively manage work-related stress and maintain a healthy work-life balance.	206	2	5	4.24	.710
I have opportunities for growth and advancement in my current occupation.	206	2	5	4.28	.718