Disconnected in a Connected World: Exploring Employee Loneliness in Digital Workplace

Sukhmeet Kaur[1]* , **Manu Shukla[2], Shaurya Srivastava[3]**

[1] Faculty of Business and Communication
INTI International University, Malaysia

[2] Independent Researcher, Zurich, Switzerland
shuklamanu82@gmail.com

[3] United World Institute of Management,
Karnavati University, Gujarat, India
shauryas.research@gmail.com

Abstract

Purpose - Modern organizations embrace remote work, a digital workplace, and Information and Communication Technology tools to shift their traditional workplace boundaries, leading to unintended adverse outcomes on individual mental and emotional well-being. The study investigates the emerging threat of loneliness in the digitized workplace.

Design/methodology/approach - The paper analyzed and combined the Conservation of Resources (COR) theory and the Regulatory Loop of Loneliness theory to comprehend loneliness in a digitalized workplace. Furthermore, the study analyzed existing theories and literature on loneliness and the digital workplace to propose the displacement and stimulation hypothesis.

Findings and Conclusion - A supportive workplace, emotional intelligence, social support, self-awareness, self-identity goals, and value well-being can foster engagement and prevent social threats. The study suggests that organizations should foster a balance between organizational resources and outcomes to ensure and prevent loneliness at the workplace. The study is grounded in the theoretical framework of conservation of resources and the loop of loneliness theory, both applicable in the digital workplace.

Implications - Even though one cannot separate the physical world from a digitalized work setting, the individual should sense the need for the right resources and practice. The proposed framework applies to virtual settings where humans use electronic resources to connect, communicate, and collaborate.

Originality/value - The proposed digitalized workplace loneliness model articulates the original understanding of electronic resources in modern-day loneliness.

Keywords - Conservation of resource (COR), Digitalised workplace, Isolation, Loneliness, Regulatory loop

* Corresponding Author:
Faculty of Business and Communication
INTI International University, Malaysia
sukhmeetkaur9686@gmail.com

How to cite this paper:

Kaur, S., Shukla, M., & Srivastava, S. (2025). Disconnected in a Connected World: Exploring Employee Loneliness in Digital Workplace. *Journal of Emerging Management Studies, 3*(1), 36-48. https://doi.org/10.3126/jems.v3i1.78634

1. Introduction

Loneliness is a distressing feeling that arises when social interactions do not justify social needs (Cacioppo & Hawkley, 2009). It is mostly endured by employees who relocate globally for work. This is stated as 'situational loneliness', which is usually caused by environmental factors such as technology availability, work environment, role conflicts, and relocation (Cacioppo & Hawkley, 2009). Scholars in management literature have explored how digital work environments contribute to loneliness, generating a negative emotional dynamic (Zhu et al., 2023). New technologies have contributed to an increased information overload and greater immediacy of response to emails and the internet. This wave of IT threatens the employees with the demand for more digital competencies and increased availability, learning new equipment or software to compete and survive. The more individual value a resource has, the more stress it experiences when that resource is threatened (Halbesleben et al., 2014). Consistent with the idea of COR that loss is more noticeable than gain, resource loss is evident in digital environments. The COVID-19 pandemic further intensified the societal trend toward increased loneliness (Li & Wang, 2020). With restrictions on social interactions, flexible and remote work policies became the norm in an increasingly digitalized workplace. Information and communication technology (ICT) has disrupted daily work-life patterns and organizational culture. In contrast, many academicians and policy experts have admired ICT for its positive impact on productivity and organizational effectiveness (Gharti, 2023).

Many companies quickly reacted and adapted ICT to the workplace, especially amid COVID-19 (Bertello et al., 2021). Technology-driven applications, such as digital surveillance, are used to observe, inspect, and record employee behavior and performance at their workplace (Tweedie, 2013). However, while the physical inspection by the supervisors of employees still exists, its virtual complement has expanded substantially with more power in the post-pandemic era (Bentotahewa et al., 2021). The digitalization of the workplace has deepened the need to study employee loneliness, as digital resources often reduce the quality of social resources. According to the Conservation of Resources (COR) theory (Hobfoll, 1989), reduced social support in an online workplace threatens valuable emotional resources and increases disengagement and burnout. Simultaneously, the Regulatory Loop of Loneliness theory (Cacioppo & Hawkley, 2009) posits that loneliness can heighten social threat and further isolation. Therefore, the present study examines how technological workspace influences loneliness and resource loss, ultimately impacting employee well-being. Furthermore, the study aims to develop new arguments to explore the understudied phenomenon of tech-induced loneliness in the digital age.

The increasing digitization of the workplace, characterized by remote work, virtual collaboration tools, and reduced face-to-face interaction, has raised critical concerns about its psychological and social impact on employees (Cho et al., 2024). Among these concerns, loneliness has emerged as a significant issue, potentially affecting well-being, job satisfaction, and productivity (Basit & Nauman, 2023). Despite the growing adoption of digital work environments, there is limited empirical understanding of how such settings influence feelings of loneliness among employees. Specifically, it remains unclear what kind of relationship exists between working in a digitized workplace and the experience of loneliness. The purpose of this study is to address these gaps by assessing the relationship between loneliness and working in a digitized workplace, as well as examining how social resources within these environments may be associated with or influence experiences of loneliness.

2. Literature Review

Loneliness

Technostress has been instigating loneliness, burnout, fatigue, loss of social life, lack of motivation, and decreased employee social interaction. MacDonald and Schermer (2021) assessed a negative association between loneliness and smartphone pickups and communication application use. However, loneliness is positively associated with social media platforms, application usage, screen time, and nomophobia. Nomophobia, commonly referred to as no-mobile-phobia, is a fear or threat attributed to being detached or unable to use mobile services (Yildirim & Correia, 2015). Loneliness is commonly perceived with social isolation, rather than actual physical isolation. Individuals can lead solitary lives without feeling lonely. On the other hand, individuals with a vibrant social life can experience loneliness. Nonetheless, it is a disconcerting feeling that accompanies when social needs and interactions are not met, either in terms of quantity or quality of one's social relationships (Wheeler et al., 1983). Golden et al. (2009) defined loneliness as a "subjective experience of social isolation, involving an assessment of whether one feels socially and emotionally supported".

Facets of Loneliness

Loneliness is an intricate phenomenon that comprises three dimensions: "intimate, relational, and collective loneliness"(Cacioppo et al., 2015). Intimate loneliness focuses on the perceived absence of a significant individual who provides mutual emotional support and value to a person. Relational loneliness refers to the perceived absence of family connections within one's relational space. Lastly, collective loneliness describes the absence of a person's valued social network, where an individual can connect with like-minded others from a distance in a shared space (Cacioppo et al., 2015).

Introduction to Conservation of Resources (COR) Theory

The motivational stress theory, presented by Hobfoll and Stokes (1988), known as the Conservation of Resources (COR) Theory, builds on the basic directive that individuals try to reach and protect their social and personal resources. They experience stress when these resources are threatened, lost, or result in loss states. Hobfoll (1998) defined resources as objects (e.g., house, phone), conditions (e.g., good salary, job security), or energies (e.g., financial, information) that people valued to serve the task.

The key principles of COR theory are that individuals vigorously participate in acquiring profit from resources and confronting their losses. They protect and preserve their resource for stressful circumstances. COR theory posits that resource loss is more strongly and significantly associated with stress than psychological distress in gaining resources. Personal and social resources are important aspects of individuals' identities. Social identity is inseparable from both the self and the social environment where we interact, and association takes place.

Social Resources: According to Hobfoll and Stokes (1988), social resources involve relationships, interaction, and support that help or cultivate a sense of attachment among groups or a team.

Emotional Resources: Empathy, positive relationships, emotional regulations, coping strategies, and skills within the people can take off their self. The study suggests that people with high emotional aptitude can recognize and manage their emotion and stress in a better way (Chaudhary et al., 2024).

Physical Resources: All objects or tangible assets, such as material possessions of the apartment, phone, and car, are used to manage well-being and goal attainment.

Electronic Resources: In the highly competitive digital workplace, employees' IT skills and knowledge resources are continuously developed to offset the risk of job loss if gains are not made or if they fail to achieve success. When resource loss potential is high, resource gains become more important – they increase or gain in value. Fostervold et al. (2024) found that work from home (WFH) has exacerbated loneliness among employees, and this was more intensified during the lockdown.

Self-Regulatory Loneliness Loop Theory

Hawkley and Cacioppo (2010) posit that perceived social isolation is synonymous with feeling insecure, which leads to excessive hypervigilance for any threats at the workplace. This unconscious thought of social threat creates intellectual biases, increases expectations of disagreeable social interactions, and remembers negative experiences only over positive experiences (Cacioppo et al., 2006). These negative experiences promote negative expectations and tend to distance them from the social world. They assume that social isolation is attributable to others' actions or perceptions, which are beyond their control. Therefore, this self-reinforcing loneliness loop is accompanied by feelings of stress, perceived threats, anxiety, emotional imbalance, low self-esteem, and pessimism. Cacioppo et al. (2006) state that this loneliness could contribute to neurobiological and behavioral changes over time.

3. Research Methods

The study is both exploratory and explanatory in design, as it attempts to establish a new perspective on the selected variables. Since the phenomenon of experiencing loneliness is subjective, the study extends the existing literature on the nature and relationships with loneliness. Therefore, this study is grounded on secondary data. The literature review was conducted by extracting books, reviews, articles, periodicals, and academic journals. The literature focuses on papers primarily based on loneliness with Digital technology. Here, digital technology usage could be any kind, say, for example use of social media, e-HRM, or the use of cameras, e-conferences, etc. The inclusion criterion of literature also includes empirical reviews and analytical papers from management, social sciences, and humanities domains. We excluded the paper based on the experimental research design from engineering, mathematical, and computer sciences. They are more focused on numerical problem-solving and abstract mathematical concepts, whereas management and social sciences studies primarily focus on human behavior and the application of knowledge within a business context.

To achieve objectives, we combined two theories of motivational stress, namely the Conservation of Resources (COR) theory (Hobfoll, 2000) and the Regulatory Loop of Loneliness theory (Cacioppo & Hawkley, 2009). COR principles enable us to get insight into reviewing the consequences of new advanced technology at the workplace and its related consequences. Nowland et al. (2018) proposed that loneliness is also influenced by how individuals interact on the digital platform. They further extended that while social technologies are used to escape social environments and withdraw from the pain of social interaction, feelings of loneliness are increased. The study employs two dominant theoretical perspectives to discuss the proposed framework. These perspectives can be applied bi-directionally and dynamic manner in framing the hypothesis.

Displacement Hypothesis

Loneliness is linked with digital technology use because individuals tend to replace physical social interactions and relationships with digital contacts (Kraut et al., 1998).

Stimulation Hypothesis

Online communication can help decrease loneliness by enhancing existing relationships and embracing new opportunities to form new social connections (Valkenburg & Peter, 2007).

4. Discussion

Digitalized Workplace

Digitalization of the workplace causes constant and evolutionary changes in job outcomes, job resources, social networks, and communication tools (Chatterjee et al., 2023; Micic et al., 2022). This change also demands that an employee be a knowledge worker, technically skilled, and completely available to the organization. This includes checking e-mails, system logging, smartphone apps, and keeping up with the range of updates with new versions of tasks. This technology-related stress and digital fatigue furnishes more technostress and technology-induced loneliness. In the business world, unlike traditional physical workplaces such as desks, telephones, chairs, and conference rooms, a digital workplace is more than miscellaneous technologies that enable job tasks to be done. However, both workplaces involve a complex set of management functions such as training and development, recruitment, leadership styles, decision-making, people interactions with peers, and coordination. Digitalized workplaces are walled with information and communication technologies (ICTs) that include business functions such as e-mail, instant messaging, HR technology for application tracking, automated HR Information systems, biometric systems, employee referral software, monitoring with cameras, etc., all of these are intended to upskill employee performance and goals.

Several findings recommend that the pandemic opened more time for using technology and social media, with an increase in addiction to internet use (Garfin, 2020; Li et al., 2020). Furthermore, studies also suggest that people tend to use online or social media more when face-to-face social connections are less. This compulsive digital media use can negatively affect job performance (Benson et al., 2019). According to Valkenburg and Peter (2007), "online communication reduces adolescents' well-being because it displaces time spent with existing friends, thereby reducing the quality of these friendships". Therefore, the theoretical model proposed the bidirectional and dynamic nature of social relationships and internet use. Nowland et al. (2018) advocated two hypotheses based on their findings on internet use and loneliness. The first is the stimulation/enhancement hypothesis, which states that the more individuals engage in online social interactions, the more social support they will receive. The second hypothesis is quoted as the replacement/displacement hypothesis, which states that more online social interactions would result in less physical interaction, a lack of social support, leading to greater loneliness. Recent research on the displacement hypothesis suggests that individuals use the internet for social, entertainment, and informational purposes, thereby displacing face-to-face social interaction. From a complementary hypothesis perspective, smartphones used for social interactions can help enhance or at least sustain social relationships.

Stimulation Hypothesis

Enhancement theory argues that technology may benefit individuals' offline relationships. For example, social media networks enable individuals with more opportunities to share information, activities, and achievements about themselves, as well as spend more time with friends. Working from home allows people to collaborate on tasks and improve performance (Abelsen et al., 2023; Haddock et al., 2022). Online courses, workshops, and information contribute to significant variances in social relationships ((Huang et al., 2022). Therefore, we propose the following stimulation hypothesis to explain loneliness in the digitalized workplace.

Figure 1

Proposed Stimulation Relationship

| Digitalized Workplace	→	Social and Physical Resources (+)	→	Loneliness Isolation (-)
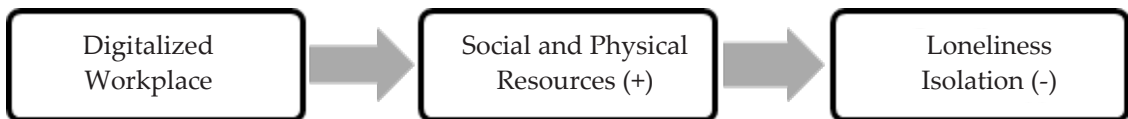
Displacement Proposition

The usage of digital technologies (e.g., social media networks, surveillance devices, smartphone apps, computers, laptops, interactive interfaces, and telecommunications) may harm individuals' social lives, social relationships, emotional resources, and cognitive resources. Consequently, physical, social, and emotional resources are replaced by digital resources and electronic energies in an automated environment. Over time, all activities related to online social connections replace real physical world social activities such as face-to-face meetings, reading books, social gatherings, and hobbies (Dredge & Schreurs, 2020; Yayan et al., 2019). Therefore, we put forward the following displacement hypothesis for digitalized workplace-induced loneliness.

Figure 2

Proposed Displacement Relationship

Digitalized Workplace	→	Social and Physical Resources (-)	→	Loneliness Isolation (+)
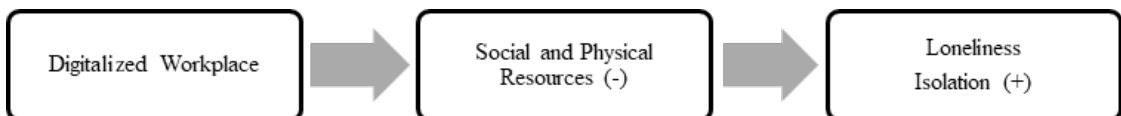
Negative Impact of Digitalized Workplace

Loneliness and Isolation

Loneliness does not discriminate between gender, age, or employment status. It can be experienced or perceived by anyone at any stage of life. Nowland et al. (2018) found evidence to support the problematic issues related to internet use and online social relationships. The displacement hypothesis or reduction hypothesis states that using digital devices substitutes for other more satisfying activities such as reading books, exercising, and meeting friends physically. In contrast, the stimulation hypothesis proposed that online interaction makes it easy to share bonds and feelings (Valkenburg & Peter, 2007). Cacioppo et al. (2006) and Cacioppo and Hawkley (2009) postulated that the pain of loneliness is equivalent to that of physical pain, hunger, and thirst. The same appetite motivates individuals to maintain and establish social acquaintances, which is necessary for the survival of our species.

Figure 3

Digitalized Workplace-Induced Loneliness Model
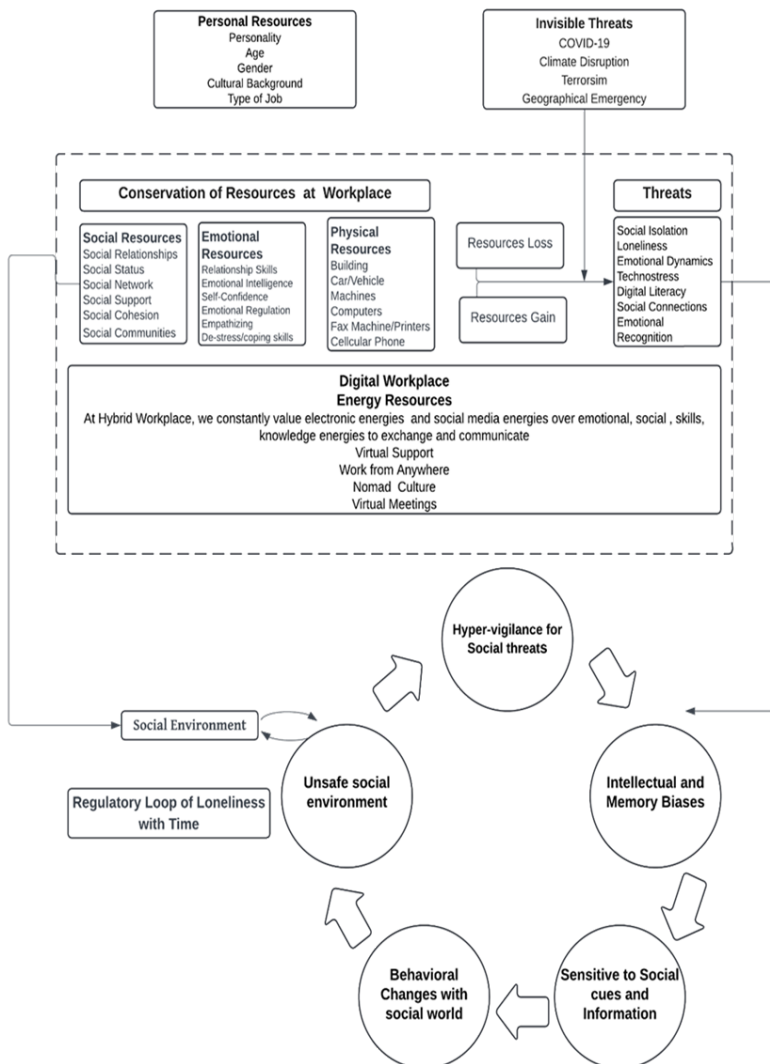
Source: (Cacioppo & Hawkley, 2009; Hobfoll, 1988, 2000)

COR theory has been significant in comprehending organizational stress because many stressors are refined and misperceived. COR theory is principally the opposite of stress-appraisal theory proposed by Lazarus and Folkman (1984). In brief, stress-appraisal theory posits that situations are not intrinsically good or bad; it is how they are perceived or interpreted that determines the situation as stressful. On the other hand, COR theory emphasizes that stress has a cascading effect. For instance, firing from a job is not an event, but a series of events such as not doing a job effectively or a lack of skills, which leads to a termination. COR theory further highlights that stress-inducing conditions are infrequent occurrence events and that resource loss is disproportionately more impactful than resource gain. This disproportionate effect of resource loss, both in terms of speed as well as time, is more salient compared to resource gain.

COR theory uniquely includes the momentum element. Interestingly, COR theory is not only powerful in magnitude but also tends to affect individuals more quickly and with increasingly high speed over time as compared to resource gain. Loss is fundamental to human systems, as individuals are governed by evolutionary forces. From an evolutionary perspective, even small losses are often critical, as they may be associated with survival-related failure. The process might be slow, but it is easily salient and can create major setbacks in life. Social support is linked with reduced loneliness (Fostervold et al., 2024). The most discussed context of loneliness includes its negative consequences. Feeling lonely is quite common and can be harmless to some extent; however, a frequent and chronic state of loneliness is considered deleterious to overall well-being. This can affect productivity at work. This impact applies to both individual loneliness (Hawkley & Cacioppo, 2010; Lim et al., 2020) and organizational or work-related loneliness (Lam & Lau, 2012; Mohapatra et al., 2023).

From a social understanding, the digitalized workplace induces loneliness. People who perceive loneliness do not willingly become lonely; rather, they find themselves at one edge of the spectrum of social connections (Cacioppo & Cacioppo, 2012). This perception increases the drive to connect with others but also adds a layer of hyper-vigilance towards social threats, which in return creates confirmatory biases, for instance, remembering information that aligns with one's favor or beliefs. Uncontrollable or invisible factors, such as the COVID-19 pandemic, increased the likelihood of loneliness (Shah et al., 2020), civil war (Doblas, 2023), workplace bullying and psychological fear occurrences (Pokhrel et al., 2022; Leymann, 1990), and terrorist attacks (Saleem & Malik, 2023) make social support weak and consequently cause occupational unfriendliness. Mitigation, social anxiety, future uncertainties, stress, and loss of loved ones could lead to perceived isolation and loneliness. In contrast, the stimulation hypothesis asserts that digital interaction enhances mental health by improving the time spent with current acquaintances and the worth of these interactions.

Loneliness is a negative emotional state of mind where an individual feels separated from social interactions and lacks emotional confidence in their interactions. It is imperative to understand that loneliness is different from social isolation; in the latter, individuals might feel lonely even if there is no social isolation. Past studies have shown that loneliness is related to many social and attitudinal changes. Hawkley and Cacioppo (2010) elaborated on an evolutionary model of loneliness, presuming that there are differences in the extent to which social pain is experienced. The greater sensitivity towards the pain of social disconnection could be advantageous to motivate individuals to communicate, cooperate, and defend themselves in the survival of genes. Conversely, the lower sensitivity can also be beneficial because it encourages extended periods of exploration. Furthermore, Loneliness increases with internet use (Yayan et al., 2019) and technostress (Taser et al., 2022).

Positive Impact of Digitalized Workplace

Sense of belongingness and security

Today's rapidly evolving world of digital technologies has transformed stereotypical isolated silo operations, fostering a culture of interconnectedness and inclusivity regardless of employee geographic location. This inclusivity ensures that every employee, whether working remotely, in a hybrid setup, or in-office, is valued and given a voice, thereby mitigating the feeling of isolation. Additionally, by embracing digital platforms, the organization ensures that both the organization and its employees remain resilient during challenges, contributing to a feeling of stability and improved mental health. Furthermore, the study reveals how reliance on digital technologies at work has facilitated the transition from traditional isolated silo operations (Lane et al., 2023) to a more cohesive, inclusive, collaborative, and connected environment. Thus, allowing both the organization and the employees to stay competitive and resilient.

Enhanced emotional regulation

Continuous navigating in immersive simulated scenarios, and virtual and cognitive behavioral therapy apps help employees build emotional agility, coping strategies, a supportive environment, and manage their stress and anxiety more effectively. A study conducted by (Jadhakhan et al., 2022) provides an extensive review of how the increasing intervention of digital tools, such as Virtual Reality (VR), Virtual Therapy Platforms, and Cognitive Behavioural Therapy (CBT), contributes to enhancing emotional regulation, ultimately improving overall well-being.

Improved work-life balance

The gig revolution has transformed the concept of work-life balance, fostering flexibility, connectivity, and cultivating a more empowered and motivated workforce. Furthermore, research by Healy et al. (2017) found that the rise of the gig economy, enabled by digital platforms, has redefined employee relations, offering more autonomy and flexibility, willing to engage and contributing to their mental well-being and fulfilment (Shilpakar et al., 2024) and hence, reshaping labor markets globally.

Increased social engagement and visibility

Digital platforms enable the creation of social networks and communities spanning geographical boundaries, helping employees to stay connected, engaged in knowledge sharing, share experiences, and offer support to different communities. Treem and Leonardi (2013) investigated the transformative impact of digital tools on visibility, persistence, and association, highlighting the importance of cutting-edge technologies in creating more empathetic and intentional connections and building stronger bonds and relationships.

5. Conclusion

To conclude, this research relies on various theoretical frameworks to explore potential associations between loneliness, emotional dynamics, and the digital workplace. The theoretical backbone of the present study includes the displacement hypothesis, the stimulation hypothesis, and the gardening theory. Stokes (1985) found that neurotic personality traits are positively correlated with anxiety and individuals with such traits tend to focus more on negative emotions, thereby seeking isolation and requiring additional support. While individuals with extraverted traits are inclined to seek out relationships and experience decreased levels of loneliness. Additionally, the phenomenon of nomophobia is also associated with loneliness. Hawkley and Cacioppo (2010) proposed four interventions for loneliness: (1) increasing social skills, (2) increasing social interaction opportunities, (3) providing social support, and (4) managing defective social perceptions. In general, social isolation is perceived when social interactions and opportunities exist, but we fail to capitalize on the power of social connectedness in our day-to-day lives. When the aforesaid perceived isolation surpasses the expected threshold, then it is marked by lower levels of intellectual, behavioral, and attention functioning. With the integration of AI, there has been an increasing number of interactions with machines as compared to humans (Case, 2023). The COVID-19 pandemic not only halted industries worldwide, disrupted logistics, and commuting of people but also significantly impacted human social interactions. The advent of Gen AI has disrupted human sentiments to a larger extent; people's fear of losing loved ones, losing tenure jobs, and the unavailability of resources have altered the wiring of human minds in such a way that people's sentiments are draining.

6. Limitations and Direction for Future Research

By understanding resource loss, protection may improve the social environment loop and prevent threats. However, there are also some limitations to COR theory; it may not completely

account for personal factors and workplace culture, which vary significantly from person to person and from organization to organization. In today's 21st century, the absence of a digital identity on social media platforms, such as Meta, LinkedIn, or X, can negatively impact one's perceived worth to an organization. Similarly, an organization's legitimacy on social media plays a crucial role in enhancing its brand value. Another limitation of COR theory is that every individual possesses different skills, abilities, and knowledge. Factors such as personality, mental resilience, age, and gender could be significantly important in getting rid of the regulatory loop of loneliness. Lastly, COR theory addresses only resource loss, not resource gain; for example, excessive resource gain may worsen negative outcomes. It has been advised that working from home in a hybrid workplace model provides optimal productivity and mental well-being. However, if this arrangement exceeds more than 3 days per week, it may overload work and the social support (Barrero et al., 2020). The present framework is based on theoretical literature, and future studies can be conducted empirically to explore personal factors, such as age, gender, personality, and workplace culture.

Conflict of Interest

Authors declare no conflict of interest while preparing this article.

References

Abelsen, S. N., Vatne, S. H., Mikalef, P., & Choudrie, J. (2023). Digital working during the COVID-19 pandemic: how task–technology fit improves work performance and lessens feelings of loneliness. *Information Technology and People*, *36*(5), 2063–2087. https://doi.org/10.1108/ITP-12-2020-0870

Barrero, J. M., Bloom, N., & Davis, S. J. (2020). Why Working From Home Will Stick. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3741644

Basit, A. A., & Nauman, S. (2023). How workplace loneliness harms employee well-being: A moderated mediational model. *Frontiers in Psychology*, *13*, 1086346.

https://doi.org/10.3389/fpsyg.2022.1086346

Bentotahewa, V., Hewage, C., & Williams, J. (2021). Solutions to Big Data Privacy and Security Challenges Associated With COVID-19 Surveillance Systems. *Frontiers in Big Data*, *4*. https://doi.org/10.3389/fdata.2021.645204

Bertello, A., Ferraris, A., Bresciani, S., & De Bernardi, P. (2021). Big data analytics (BDA) and degree of internationalization: the interplay between governance of BDA infrastructure and BDA capabilities. *Journal of Management and Governance*, *25*(4), 1035–1055. https://doi.org/10.1007/s10997-020-09542-w

Cacioppo, Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical Import and Interventions. *Perspectives on Psychological Science*, *10*(2), 238–249. https://doi.org/10.1177/1745691615570616

Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, *13*(10), 447–454. https://doi.org/10.1016/j.tics.2009.06.005

Cacioppo, J. T., Hawkley, L. C., Ernst, J. M., Burleson, M., Berntson, G. G., Nouriani, B., & Spiegel, D. (2006). Loneliness within a nomological net: An evolutionary perspective. *Journal of Research in Personality*, *40*(6), 1054–1085. https://doi.org/https://doi.org/10.1016/j.jrp.2005.11.007

Cacioppo, S., & Cacioppo, J. T. (2012). Decoding the invisible forces of social connections. *Frontiers in Integrative Neuroscience*, 6, 51.

Case, T. (2023, June 4). *There's an epidemic of loneliness: will AI make it worse? - WorkLife*. WorkLife. https://www.worklife.news/technology/theres-an-epidemic-of-loneliness-will-ai-make-it-worse/

Chatterjee, Chaudhuri, R., Vrontis, D., & Giovando, G. (2023). Digital workplace and organization performance: Moderating role of digital leadership capability. *Journal of Innovation & Knowledge*, 8(1), 100334. https://doi.org/https://doi.org/10.1016/j.jik.2023.100334

Chaudhary, M. K., Neupane, K., Dhungana, M., & Giri, B. (2024). Emotional Intelligence as a Strategic Driver of Competitive Advantage and Service Quality in the Banking Industry. *International Research Journal of MMC (IRJMMC), 5*(4), 134–146. https://doi.org/10.3126/irjmmc.v5i4.70826

Cho, S., Kim, S., Kim, S., & Lee, H. W. (2024). How remote workers manage loneliness and performance: Virtual social interaction as an alternative resource management strategy. *Human Resource Development Quarterly*. https://doi.org/10.1002/hrdq.21547

Doblas, J. L. (2023). From the Civil War to Loneliness : Vulnerability in the Lives of Older People De la Guerra Civil a la soledad : la vulnerabilidad en el curso vital de las personas longevas. *CENTRA Journal of Social Sciences*, 2(1), 63–82. https://doi.org/https://doi.org/10.54790/rccs.41

Dredge, R., & Schreurs, L. (2020). Social Media Use and Offline Interpersonal Outcomes during Youth: A Systematic Literature Review. *Mass Communication and Society*, 23(6), 885–911. https://doi.org/10.1080/15205436.2020.1810277

Fostervold, K. I., Ulleberg, P., Nilsen, O. V., & Halberg, A. M. (2024). The hidden costs of working from home: examining loneliness, role overload, and the role of social support during and beyond the COVID-19 lockdown. *Frontiers in Organizational Psychology*, 2. https://doi.org/10.3389/forgp.2024.1380051

Gharti, A. (2023). Information and Communication Technology (ICT) and Employee Performance : Relationship. *Nepal Journal of Multidisciplinary Research (NJMR)*, 6(2), 84–96.

Golden, J., Conroy, R. M., Bruce, I., Denihan, A., Greene, E., Kirby, M., & Lawlor, B. A. (2009). Loneliness, social support networks, mood, and well-being in community-dwelling elderly. *International Journal of Geriatric Psychiatry: A Journal of the Psychiatry of Late Life and Allied Sciences*, 24(7), 694–700.

Haddock, A., Ward, N., Yu, R., & O'Dea, N. (2022). Positive Effects of Digital Technology Use by Adolescents: A Scoping Review of the Literature. *International Journal of Environmental Research and Public Health*, 19(21). https://doi.org/10.3390/ijerph192114009

Halbesleben, J., Neveu, J.-P., Paustian-Underdahl, S., & Westman, M. (2014). Getting to the "COR": Understanding the Role of Resources in Conservation of Resources Theory. *Journal of Management*, 40(5), 1334–1364. https://doi.org/10.1177/0149206314527130

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine*, 40(2), 218–227. https://doi.org/10.1007/s12160-010-9210-8

Healy, J., Nicholson, D., & Pekarek, A. (2017). Should we take the gig economy seriously? *Labour \& Industry: A Journal of the Social and Economic Relations of Work*, *27*(3), 232–248.

Hobfoll, S. E. (1988). The ecology of stress. *NY: Hemisphere Publishing Corporation*.

Hobfoll, S. E. (2000). Conservation of resources theory: Applications to stress and management in the workplace. *Handbook of Organization Behavior (2nd Revised Edition)/Dekker*.

Hobfoll, S. E., & Stokes, J. P. (1988). The process and mechanics of social support. In *Handbook of personal relationships: Theory, research and interventions.* (pp. 497–517). John Wiley & Sons.

Huang, S., Lai, X., Zhao, X., Dai, X., Yao, Y., Zhang, C., & Wang, Y. (2022). Beyond Screen Time: Exploring the Associations between Types of Smartphone Use, Content, and Adolescents' Social Relationships. *International Journal of Environmental Research and Public Health*, *19*(15). https://doi.org/10.3390/ijerph19158940

Jadhakhan, F., Blake, H., Hett, D., & Marwaha, S. (2022). Efficacy of digital technologies aimed at enhancing emotion regulation skills: Literature review. *Frontiers in Psychiatry*, *13*, 809332. https://doi.org/10.3389/fpsyt.2022.809332

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox. A social technology that reduces social involvement and psychological well-being? *The American Psychologist*, *53*(9), 1017–1031. https://doi.org/10.1037//0003-066x.53.9.1017

Lam, L. W., & Lau, D. C. (2012). Feeling lonely at work: investigating the consequences of unsatisfactory workplace relationships. *The International Journal of Human Resource Management*, *23*(20), 4265–4282. https://doi.org/10.1080/09585192.2012.665070

Lane, J. N., Leonardi, P. M., Contractor, N. S., & DeChurch, L. A. (2023). Teams in the Digital Workplace: Technology's Role for Communication, Collaboration, and Performance. *Small Group Research*, *55*(1), 139–183. https://doi.org/10.1177/10464964231200015

Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping.* Springer Publishing Company. https://books.google.nl/books?id=i-ySQQuUpr8C

Leymann, H. (1990). Mobbing and psychological terror at workplaces. *Violence and Victims*, *5*(2), 119–126.

Li, L. Z., & Wang, S. (2020). Prevalence and predictors of general psychiatric disorders and loneliness during COVID-19 in the United Kingdom. *Psychiatry Research*, *291*, 113267. https://doi.org/10.1016/j.psychres.2020.113267

Lim, M. H., Holt-Lunstad, J., & Badcock, J. C. (2020). Loneliness: contemporary insights into causes, correlates, and consequences. In *Social psychiatry and psychiatric epidemiology* (Vol. 55, Issue 7, pp. 789–791). https://doi.org/10.1007/s00127-020-01891-z

Micic, L., Khamooshi, H., Raković, L., & Matkovic, P. (2022). Defining the digital workplace: A systematic literature review. *Strategic Management*, *27*, 29–43. https://doi.org/10.5937/StraMan2200010M

Mohapatra, M., Madan, P., & Srivastava, S. (2023). Loneliness at Work: Its Consequences and Role of Moderators. *Global Business Review*, *24*(3), 433–450. https://econpapers.repec.org/RePEc:sae:globus:v:24:y:2023:i:3:p:433-450

Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and Social Internet Use: Pathways to Reconnection in a Digital World? *Perspectives on Psychological Science*, *13*(1), 70–87. https://doi.org/10.1177/1745691617713052

Pokhrel, L., Bista, B., & Giri, B. (2022). Workplace Bullying and Turnover Intention: Moderating Role of Abusive Supervision among Employees of Nepali Commercial Banks. *Quest Journal of Management and Social Sciences, 4*(2), 260–272. https://doi.org/10.3126/qjmss.v4i2.50321

Saleem, F., & Malik, M. I. (2023). Exposure to Terrorism, Post-Traumatic Stress Disorder and University Teachers' Performance: Underpinning the Role of Social Support. *Behavioral Sciences (Basel, Switzerland), 13*(6). https://doi.org/10.3390/bs13060517

Shah, S. G. S., Nogueras, D., van Woerden, H. C., & Kiparoglou, V. (2020). The COVID-19 Pandemic: A Pandemic of Lockdown Loneliness and the Role of Digital Technology. *Journal of Medical Internet Research*, *22*(11). https://doi.org/10.2196/22287

Shilpakar, N., Giri, B., & Pokhrel, S. K. (2024). Flexible Working Arrangements and Employee Turnover Intention: Mediating Role of Employee Engagement. *SAIM Journal of Social Science and Technology*, *1*(1), 27–39. https://nepjol.info/index.php/sjsst/article/view/72514

Stokes, J. P. (1985). The relation of social network and individual difference variables to loneliness. In *Journal of Personality and Social Psychology* (Vol. 48, Issue 4, pp. 981–990). American Psychological Association. https://doi.org/10.1037/0022-3514.48.4.981

Taser, D., Aydin, E., Torgaloz, A. O., & Rofcanin, Y. (2022). An examination of remote e-working and flow experience: The role of technostress and loneliness. *Computers in Human Behavior*, *127*(May 2021), 107020. https://doi.org/10.1016/j.chb.2021.107020

Treem, J. W., & Leonardi, P. M. (2013). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association*, *36*(1), 143–189.

Tweedie, D. (2013). Is call centre surveillance self-developing? Capacities and recognition at work. *Travailler*, *30*(2), 87–104. https://doi.org/10.3917/trav.030.0087

Valkenburg, P. M., & Peter, J. (2007). Online communication and adolescent well-being: Testing the stimulation versus the displacement hypothesis. *Journal of Computer-Mediated Communication*, *12*(4), 1169–1182. https://doi.org/10.1111/j.1083-6101.2007.00368.x

Wheeler, L., Reis, H., & Nezlek, J. (1983). Loneliness, social interaction, and sex roles. *Journal of Personality and Social Psychology*, *45*(4), 943–953. https://doi.org/10.1037//0022-3514.45.4.943

Yayan, E. H., Suna Dağ, Y., & Düken, M. E. (2019). The effects of technology use on working young loneliness and social relationships. *Perspectives in Psychiatric Care*, *55*(2), 194–200. https://doi.org/10.1111/ppc.12318

Yildirim, C., & Correia, A.-P. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Computers in Human Behavior*, *49*, 130–137. https://doi.org/https://doi.org/10.1016/j.chb.2015.02.059

Zhu, Y., Zhang, Y., Xu, Y., & Qin, F. (2023). Compensatory Effects of Loneliness: How and When does Workplace Loneliness Promotes Employees UPB. *Academy of Management Proceedings*, *2023*(1), 13893. https://doi.org/10.5465/AMPROC.2023.13893abstract