




SAPIENZA
UNIVERSITÀ EDITRICE

Work published in open access form
and licensed under Creative Commons
Attribution – NonCommercial
ShareAlike 4.0 International (CC BY-NC-SA 4.0)

 © Author(s)
E-ISSN 2724-2943
ISSN 2723-973X

Psychology Hub (2024)
XLI, 1, 79-90

Article info

Submitted: 02 August 2022
Accepted: 27 February 2024
DOI: 10.13133/2724-2943/17820

Unveiling the veil of workplace Loneliness: A Theory-Concept-Methodology (TCM) framework

Archana Choudhary¹, Biswa Prakash Jena¹, Smruti Patre²

¹ Birla School of Management, Birla Global University, Bhubaneswar, Odisha, India

² Symbiosis Institute of Business Management, Nagpur
Constituent of Symbiosis International (Deemed) University, Pune

Abstract

This review paper aims to learn more about the causes and effects of workplace loneliness. The paper uses a TCM (Theory, Context, Methodology) framework based on various studies to critically assess and analyse the existing body of research on workplace loneliness from 2010 to 2021. It tries to do a comprehensive review of the antecedents, underlying processes, and outcomes, which will provide future directions for further development of the workplace loneliness construct and identify significant opportunities for researchers to advance the field's theoretical and empirical development.

Keywords: Loneliness, Review, Workplace Loneliness, Antecedents, Consequences

*Corresponding author.
Archana Choudhary
Birla School of Management,
Birla Global University,
Bhubaneswar, Odisha,
India
E-mail: archana.choudhary@bgu.ac.in
(A. Choudhary)

Introduction

Loneliness is a universal emotion that has woven its presence through the tapestry of human experience. The feeling of a disconnect, even amidst a crowd, resonates within our shared narratives. As social beings, humans inherently seek secure and social environments to thrive. The perception of social isolation or loneliness, as articulated by Peplau and Perlman (1982), introduces a vulnerability that can impact physiological functions, diminish sleep quality, and elevate morbidity and mortality risks. Loneliness, according to these scholars, emerges when there is a dissonance between desired and perceived interpersonal relationships, ushering in an emotional experience marked by a sense of unfulfillment.

Buchholz and Catton (1999) further characterize loneliness as an aversive state stemming from a yearning for connection, giving rise to negative sentiments such as hopelessness, sadness, anger, and boredom. While loneliness is an undesirable state, its counterpart—aleness or solitude—is recognized as a desirable condition with positive outcomes, fostering concentration, creativity, self-regulation, self-reflection, and identity formation.

Acknowledging the inevitability of loneliness in the human experience, researchers like Neto and Barros (2000) emphasize its multifaceted nature, suggesting that everyone, regardless of gender, age, socio-economic status, race, or health, encounters loneliness at various life stages. Weiss's (1973) typology further dissects loneliness into emotional and social categories. Emotional loneliness emanates from a lack of close, intimate bonds, evoking feelings of emptiness and anxiety. Social loneliness, on the other hand, results from a dearth of social networks and contacts within a group, leading to sensations of boredom, aimlessness, and marginalization.

With loneliness viewed as a subjective state akin to physical discomfort caused by a lack of social connections (Cacioppo & Patrick, 2008), its implications extend beyond personal well-being into the realm of workplace dynamics. The workplace, where individuals spend a significant portion of their lives, emerges as a complex arena where loneliness can permeate and influence personal lives outside the professional sphere. It comes, the negative ones have a far reaching impact and hence the present review focuses on it.

The evolving landscape of technology and industrialization introduces a pertinent question: Can workplace loneliness pose a challenge, and if so, to what extent? The shift towards independent work methods diminishes opportunities for collaborative processes, impacting the establishment of interpersonal relationships within the workplace (Wright, 2007). This paper seeks to delve into the multifaceted aspects of workplace loneliness, offering an updated review of its constructs and outcomes relevant to both organizations and employees.

The objective is clear: to comprehend the prevalence of workplace loneliness, identify its root causes and far-reaching consequences, and evaluate the efficacy of potential interventions. By defining these parameters, we aim to provide a comprehensive guide for understanding and addressing workplace loneliness, shedding light on factors that influence employees' experiences of loneliness within their professional realms.

The paper will scrutinize the evolving nature of work, its impact on social connections, and the resultant implications for employee loneliness. Through this inclusive approach, we endeavour to capture the nuances of loneliness in diverse workplace settings, acknowledging the unique challenges and opportunities presented by varying organizational cultures.

By synthesizing existing knowledge and insights, this paper aims to contribute not only to the scholarly discourse on workplace loneliness but also to the development of practical strategies for organizations to cultivate inclusive, supportive, and emotionally fulfilling work environments. Studying antecedents (factors contributing to), outcomes of workplace loneliness, and strategies to address it is crucial for several reasons, and the implications are far-reaching for individuals, organizations, and society as a whole. Studying outcomes sheds light on the impact on mental health and implementing strategies can significantly improve employee well-being. Workplace loneliness can hinder productivity and contribute to absenteeism. Strategies addressing loneliness can enhance collaboration and teamwork, positively impacting organizational performance. Identifying antecedents and outcomes helps in implementing targeted strategies to retain talent and reduce turnover. Addressing loneliness enhances employee engagement, fostering a positive and inclusive organizational culture. HR professionals can use research on antecedents and outcomes to tailor recruitment and talent management strategies. Implementing effective strategies enhances the overall employee experience.

Methodology

The researchers have reviewed a number of relevant articles for the current paper. A three-stage procedure of preparation, execution and reporting has been carried out to do the analysis (Tranfield et al., 2003; Siddaway, 2014). In the preparation stage, five key concepts have been recognized namely "loneliness", "workplace loneliness", "depression", and "feelings of sadness". These terms have been used to draw out pertinent papers related to the topic. Subsequently, the following elimination criteria have been used: papers published in non-English language, articles not printed in a peer-reviewed journal, papers in which the terms "loneliness", or "workplace loneliness" have not been considered as a major concern or just treated as a marginal subject matter. In the last accomplishment stage, the article search was organized using major electronic databases.

This review focuses on the concept, causes, and consequences of workplace loneliness. In this regard, articles on workplace loneliness published during the time frame 2010–2021 were searched from the EBSCO host Database, Science Direct Database, JSTOR Database, SAGE Database and 'Google Scholar' utilizing various 'keywords' like loneliness, workplace loneliness, depression and feelings of sadness. Relevant online published papers, working papers, all sorts of books, theories, and reports of numerous kinds were accessed through 'Google Search'. Altogether, 208 journal

articles were assessed and depending on the relevance of the articles to the primary objective of this paper, 22 articles were chosen for developing this paper. The rationale of choosing these papers were that they had used various psychological theories to explain the relationship between various variables. Following this, we present the relevant literature using Theory, Contexts and Methodology, TCM construct (Paul et al., 2017) along with future directions of research.

Conceptualization of loneliness

Barrett (1998) describes loneliness as a discrete emotional state that endures emotional distress when a person feels estranged, and excluded by others who lack social integration and opportunities to have emotional intimacy with others. In their article, Dykstra & Fokkema (2007) explained loneliness as a “social needs” approach that provides different social prerequisite aspects to feelings of loneliness.

According to Marangoni & Ickes (1989), loneliness causes low self-esteem, depressive symptoms, shyness, neuroticism, low optimism, conscientiousness, and agreeableness. Loneliness, according to the cognitive discrepancy hypothesis, is defined as a change in social perceptions and attributions in one’s social interaction if one views it as not fulfilling what one desires; hence, cognition mediates the relationship between social needs and loneliness (Peplau & Perlman, 1982). When we look at loneliness through the lens of Freud’s psychodynamic approach, we can see how it is explained in terms of clinical and stigmatic features of human conduct. It’s an “abnormal” or “deviant” state that’s completely out of the ordinary. The theory of Sigmund Freud emphasises how intrapsychic conflict or individual characteristics contribute to loneliness.

In a study on the “self-theory” of personality (Rogers, 1973) the researcher found that social pressure from society demands an individual to act in a restricted and desirable manner that creates conflict with one’s true self and the way they represent themselves in everyday lives. When there is a conflict between the external persona and their inner selves, these individuals can experience loneliness. Rogers (1973) says that recent individual experiences and societal factors can be a reason for loneliness among individuals. The theory of cognition (Barrett, L. F., 1998) tries to explain the understanding of loneliness from a psychological perspective, where cognition acts as a mediator between loneliness and social relationships. This perspective explains that when a discrepancy between a perceived social relationship and an expected social relationship occurs, it can lead to loneliness, revealing some dysfunctional behaviours in human-like, social anxiety, insecurities, fear of rejection, and social embarrassment. Another two theories related to psychology help to explain loneliness, whose prime motive is to emphasize the unmet needs of human beings that give rise to theories such as social support theory (Durkheim et al., 1952) and social development theory (Jacobs, G., & Asokan, N., 1999). In one of the earlier studies, Bowlby (1973) identified that, unlike children, adults need some intimate relationship with others, and this attachment has a more significant influence on individual social relationships and the quality of life they like to live. Social development theory is expressive

about the importance of social relationships among humans to fulfil their intimacy needs.

In contrast, social support theory (Durkheim et al., 1952) considers loneliness as a lack of individual attachment, which leads to low self-worth, low self-esteem, and also has a negative influence on the quality of life. Durkheim et al. (1952), a sociologist who developed theories on social relationships and social integration, explained from a social perspective that loneliness could also be defined in a social context where individuals develop such sensitivity throughout their relationships and depend on the social environment the individual is surrounded with. Thus, the sociological perspective has assumed to have loneliness because of social isolation, which affects social networking and lacks social integration.

Conceptualizing Workplace Loneliness

Loneliness is an inevitable part of the human experience, transcending the challenges faced by individuals in their life journey. Extensive research characterizes loneliness as a consequence of deficient social relationships, giving rise to severe mental, emotional, and physical health implications affecting the mind, body, and soul. Wright et al. (2006) specifically highlight workplace loneliness stemming from uncooperative work environments and heightened competitiveness.

The ‘need to belong’ theory emphasizes the innate human desire for intimate associations, positing that disengagement from such connections can have adverse effects (Baumeister & Leary, 1995). In the workplace, employees may perceive low social support, organizational support, self-esteem, neuroticism, locus of control, shyness, and trust issues, leading to unsatisfactory workplace relationships (Russell et al., 1980; Peplau & Cutrona, 1980; Inderbitzen-Pisaruk et al., 1992; Jones & Carpenter, 1986). These challenges manifest in various unpleasant emotions such as grief, anxiety, boredom, self-deprecation, and marginality (Rook, 1984).

Loneliness demonstrates positive correlations with dispositional characteristics like depression, shyness, low self-esteem, and pessimism (Anderson & Arnoult, 1985; Jones et al., 1985; Kamath & Kanekar, 1993; Russell, 1982; Davis et al., 1993).

Affiliation plays a pivotal role in human behaviour, reflecting the extent of harmonious interpersonal relationships. It is crucial for social interactions, expressed through affiliative attitudes, such as employee affective commitment towards their organization, and affiliative behaviours, indicating attachment and involvement in social interactions (Freeman, 1992; Wiemann, 1977).

Mao (2006) suggests that workplace relationships significantly contribute to employees’ psychological well-being by facilitating the exchange of information and resources. Conversely, insufficient workplace relationships may result in lonely employees, impacting job performance effectiveness.

At an individual level, loneliness leads to stress, poor quality of life, depression, and reduced well-being. In the workplace, it diminishes group coherency, decreases employee commitment, performance and creativity, and increases turnover intention.

Tab. 1. Workplace loneliness definitions

Study	Definition
Yilmaz (2011)	"Isolation and solitude stemming from the social environment"
Erdil and Ertosun (2011)	"Workplace-specific emotion coexists with certain characteristics of the working environment such as competitive climate, virtual teams, and alternative work arrangements"
Wright et al (2005b)	"An unfavourable state of mind caused by a lack of good interpersonal relationships and the inability to socialize"
Wright et al (2006)	"A reflection of the poor quality of social interactions and interpersonal relationships"

Loneliness profoundly affects human emotions, behaviour, attitude, and cognition, resulting in elevated emotional distress (Cacioppo & Hawkley, 2009).

Workplace loneliness leads to emotional exhaustion, and chronic depletion affecting employees' emotional and physical states (Wright & Cropanzano, 1998). This exhaustion negatively impacts job performance and citizenship behaviour while being positively related to turnover intentions (Cropanzano et al., 2003). Lonely employees exhibit low social skills, poor self-image, and a reluctance to take social risks (Heinrich & Gullone, 2006; Lam & Lau, 2012), focusing more on negative social information and perceiving more threats than opportunities (Cacioppo & Hawkley, 2009). In alignment with Maslow's hierarchy of needs, social needs are considered essential for human well-being.

Factors Influencing Workplace Loneliness

Several factors have not only an individual impact but also an organizational and contextual too. Individuals can influence social behaviour in work settings, depending upon the social work-related relationship they prefer to make regarding the quality and quantity of social contact they desire to create relational and connectedness benefits.

Personality

Personality is a complex and multifaceted psychological construct that encompasses enduring patterns of thoughts, feelings, and behaviours that distinguish individuals from one another. It reflects the characteristic ways in which an individual interacts with the world and responds to various situations. It plays a critical part in the manifestation of workplace loneliness among employees. Introversion is a crucial component associated with loneliness, according to researchers. Other coworkers may misinterpret a behavioural pattern of personality qualities like unfriendliness, awkwardness, non-involvement, shyness, social avoidance, and a reduction in interpersonal relationships at work. Introversion-oriented behaviours impair the quality and quantity of genuine workplace interactions, displaying weak emotional regulation, narcissism, and low workplace agreeability. Shyness also mirrors one of the personality traits connected with loneliness (Cheek & Busch, 1981) which speaks about the limitations of an employee's social abilities. Social avoidance is predicted to have a beneficial impact on workplace loneliness, indicating a lack of social interaction among coworkers.

A competitive attitude in an individual can contribute to a sense of working loneliness, when one has a strong urge

to succeed and outpace others, causing trust issues and the building of close bonds with others.

Social Skills behaviour

Social skills refer to a set of abilities and behaviours that facilitate effective and positive interactions with others. It encompasses a wide range of interpersonal abilities, including verbal and nonverbal communication, empathy, cooperation, conflict resolution, and emotional regulation. Silman and Dogan (2013) say that social skills, social awareness, and social information processes all play a major role in predicting loneliness. Another study, Buhrmester (1988), confirmed this by concluding that persons with low social skills experience loneliness as a result of a less rewarding relationship.

To understand the relationship between loneliness and social skills at the workplace, one needs to recognize the organizational climate they impart to employees (Rochford & Boyatzis, 2016). A strong favourable climate can foster a meaningful social relationship that is likely to precede fulfilment in their relationship. A toxic relational climate can have unsatisfying social relationships that may lead to loneliness depending upon how an individual considers the situation. An adverse relational climate can exaggerate the quality and quantity of actual relationships an individual is having, thus leading to the inability to have a meaningful relationship with others. A person with high social intelligence (Silman & Dogan, 2013) tends to have less loneliness at work; thus, the climate condition in which an individual is working affects the actual social relationships of a person.

Job Characteristics

Job characteristics refer to the various attributes and features that define a specific employment position. These characteristics collectively shape the nature of the work and influence the experiences and outcomes of individuals occupying that job. Job characteristics encompass a variety of factors, including the tasks performed, the work environment, and the broader organizational context. It can have a few effects on loneliness in the workplace. Bell et al. (1991) predicted that working hours can reveal the loneliness felt by the employee; the longer the working hours, the less interpersonal relationship-building among coworkers, leading to a sense of loneliness among employees. Here, workgroup cohesion comes up to play its role; if team cohesion is low, then working hours and loneliness play a significant role. Too much fatigue, workload, burnout, and lack of time and liveliness can form interpersonal relationship problems and cause loneliness (Wright, 2005b).

Organizational Climate

Organizational climate refers to the prevailing atmosphere, mood, or psychological environment within an organization. It reflects the collective perceptions, attitudes, and feelings of individuals within the workplace and influences their behaviour, motivation, and overall job satisfaction. Employees consider the working environment as a place that develops a sense of attachment and connection with their organisation, therefore the atmosphere of an organisation plays a vital role in building and developing high-quality interpersonal connections at work. In the workplace, high-quality relationships such as trust, compassion, reciprocal care, and positive esteem have a favourable impact on the real relationship quality (Carmeli et al., 2009)

An organization that emphasizes culture such as individualism, competitiveness, and personal success can affect an employee's thoughts and is often regarded as having inferior workplace relationships. Since a culture of cooperation and relatedness brings a healthier relationship among co-workers, a healthy climate should be developed in the organization so that every individual takes an interest in others and spends their time and energy in building a healthier relationship as compared to performance climate (Gardner et al., 2005). A work environment that has positive interpersonal relationships depicts less loneliness in the workplace.

Tab. 2. Reviewed papers on workplace loneliness (2010-2021)

S. No.	Author	Theory	Context	Methodology
1	Erdil and Ertosum (2011)	Cognitive Theory	Diverse sectors and different-sized companies (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Correlations; and Factor analysis tools
2	Chan and Qiu (2011)	NA	Migrant workers (China)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics correlation method
3	Lam <i>et al.</i> (2012)	Social Exchange Theory	Academicians (China)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Confirmatory factor analysis; Hierarchical regression tools
4	Silman and Dogan (2013)	Social Exchange Theory	Academicians (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Multiple regression
5	Ayazlar and Guzel (2014)	NA	5-star hotel (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Regression analysis
6	Chen et al., (2016)	Similarity-attraction theory	Leader-follower of 10 companies (China)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; intercorrelations; Regression tools
7	Peng et al (2017)	Feeling-as-information theory	Subordinates and leaders of private companies (China)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Confirmatory factor analysis; Hierarchical linear modelling tools
8	Akcit & Barutcu (2017)	NA	Academicians (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Regression
9	Ghadi (2017)	Social exchange theory	Academicians from public and private universities (Jordan)	-Quantitative study (Cross-sectional) -Survey -Descriptive statistics; Correlation; Structural equation modelling
10	Ozcelik et al (2018)	Affect theory of social exchange	Employees and their supervisors of two organizations (U.S)	-Quantitative (Time-lagged) -Survey method -Correlation Analysis, Hierarchical Linear Modelling, Multilevel Structural Equation Modelling
11	Öge et al (2018)	NA	Employees Air Traffic Controller (Turkey)	-Quantitative (Cross-sectional) -Survey method -CFA and SEM

Perceived Organisational Support

Perceived Organizational Support (POS) is a concept in organizational psychology that refers to employees' subjective perceptions of the extent to which their organization values their contributions and cares about their well-being. It reflects the belief that the organization is committed to meeting employees' needs, supporting their professional development, and fostering a positive work environment. Lack of organizational support can bring a sense of loneliness at work, and employees will have less confidence in resolving work problems. They feel less concerned about other's help and encounter complications in forming an intimate relationship with their co-workers. Wright (2005a) shows a shred of empirical evidence on superior support and peer support that negatively affects workplace loneliness. If leaders provide timely cognition and feedback to their followers at their work subsequently, loneliness can be reduced. Superiors play an essential role in persuading the well-being of employees. When a superior tries to reduce the employee's workload through their coordination and boosts employee effort, it prevents depression, emotional exhaustion, and tension. This two-way communication and support increase the morale, trust, and attachment to their organization. Therefore, support is considered bringing reduce workplace loneliness (Lindorff, 2001).

S. No.	Author	Theory	Context	Methodology
12	Anand and Mishra (2019)	NA	Nurses and Employees of BPO's (India)	-Quantitative study (Cross-sectional) -Survey method -Descriptive statistics; correlations; multiple regression analysis
13	Amarat <i>et al.</i> (2019)	NA	Health and wellness (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Correlation analysis; PROCESS Hayes
14	Chen <i>et al.</i> (2019)	Social capital theory	Leaders and members Private firm (China)	-Quantitative (Time-lagged) -Survey method -Convenience sampling Correlation; CFA and linear regression
15	Zumaeta (2019)	NA	C-suite executives (Chile, South America)	-Qualitative -Semi-structured, in-depth- interview
16	Sekhon and Srivastava (2019)	NA	Theoretical	-Qualitative
17	Kuna (2019)	NA	Executives (Israel)	-Exploratory qualitative method -Interview method Sampling technique: Convenience Snowball and Grounded approach
18	Arslan and Schermer, (2020)	Affective event theory	Health sector (Turkey)	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; inter-scale correlation; and structural equation modelling
19	Firoz <i>et al.</i> (2020)	NA	Theoretical	-Qualitative
20	Lim <i>et al.</i> (2020)	NA	Theoretical	-Qualitative
21	Mohapatra <i>et al.</i> (2020)	NA	Middle -level-managers (Delhi-NCR)	-Quantitative (cross-sectional) -Survey method -Descriptive statistics; Correlation and Regression analysis
22	Silard and Wright (2020)	NA	Practitioner	-Theoretical
23	Guo (2020)	Social exchange theory	Employees of enterprises of south China	-Quantitative (Cross-sectional) -Survey method -Descriptive statistics; Correlation; Structural equation modelling, bootstrap test
24	Jung <i>et al.</i> (2021)	Social exchange theory	Employees from a deluxe hotel in Seoul (South Korea)	-Quantitative method (cross-sectional) -Survey method -Descriptive statistics; Correlation; Structural equation modelling.
25	Barreto <i>et al.</i> (2021)	NA	An online survey was conducted by BBC Radio 4 and BBC World Service.	-Quantitative (Quasi-experimental) -Survey method -Descriptive statistics; unstandardized mean and intercorrelations analysis.
26	Anand and Mishra (2021)	Leader-Member exchange theory	Private hospitals and multinational BPOs (India)	-Quantitative (cross-sectional) -Survey method -Descriptive statistics; bivariate correlation; bootstrapping technique; hierarchical regression.
27	Kotera <i>et al.</i> (2021)	NA	Medical Workers (Japan)	-Quantitative (cross-sectional) -Survey method Descriptive statistics; T-test; multiple regression

Note: NA = Not Available

Socio-environmental factors

Socio-environmental factors refer to the social and environmental elements that collectively shape and influence the behaviour, experiences, and well-being of individuals and communities. These factors are multifaceted and can include aspects of the physical environment, societal structures, cultural norms, economic conditions, and interpersonal relationships. The usage of digital platforms for communication in this 21st century is incredibly conventional when discussing public interest. However, several empirical pieces of evidence speak about the negative impact the digital world can have on human mental health (Moody, 2001). How humans use their opportunities on digital technology for communication

disguises its role as a barrier or facilitator for social interaction. For instance, if social media acts as an enabler for offline relations, helping to communicate and plan new friends, it can reduce the experience of loneliness. On another dark side, social media can cut the social skills of human beings by substituting offline interaction with online interaction, thus increasing the risk of loneliness (Primack *et al.*, 2017). Nowadays, digital technology plays a vital role in every mode of communication, so one can explore the factors and have a deeper understanding of how and why the relationship between technology and loneliness can lead to unhealthy relations within people, groups, or society or in the workplace. Hence, it has a negative impact on employee well-being, which is influenced by factors corresponding to a social climate like

excessive internet usage and lack of affiliation at work due to lower approachability of staff.

Consequences of Workplace Loneliness

Due to workplace loneliness, a variety of negative consequences stifle communication and contact among employees and businesses. Several empirical research has found a negative relationship between job happiness and workplace loneliness (Erdil & Ertosun, 2011), as well as a negative relationship between job satisfaction and workplace loneliness (Wright, 2005a). Employee emotional responses are likely to deteriorate if the quality and quantity of interpersonal relationships do not meet the expected level due to workplace loneliness (Lam & Lau, 2012). Employees’ organisational commitment is influenced by their desire for intimacy and social ties; researchers discovered that workplace loneliness is adversely associated to organisational commitment and favourably related to turnover intention (Wright, 2005a). Ertosun & Erdil (2012) used Wright’s LAWS scale to discover that emotional deprivation and social loss had a positive relationship with turnover intention and negatively related to organizational commitment.

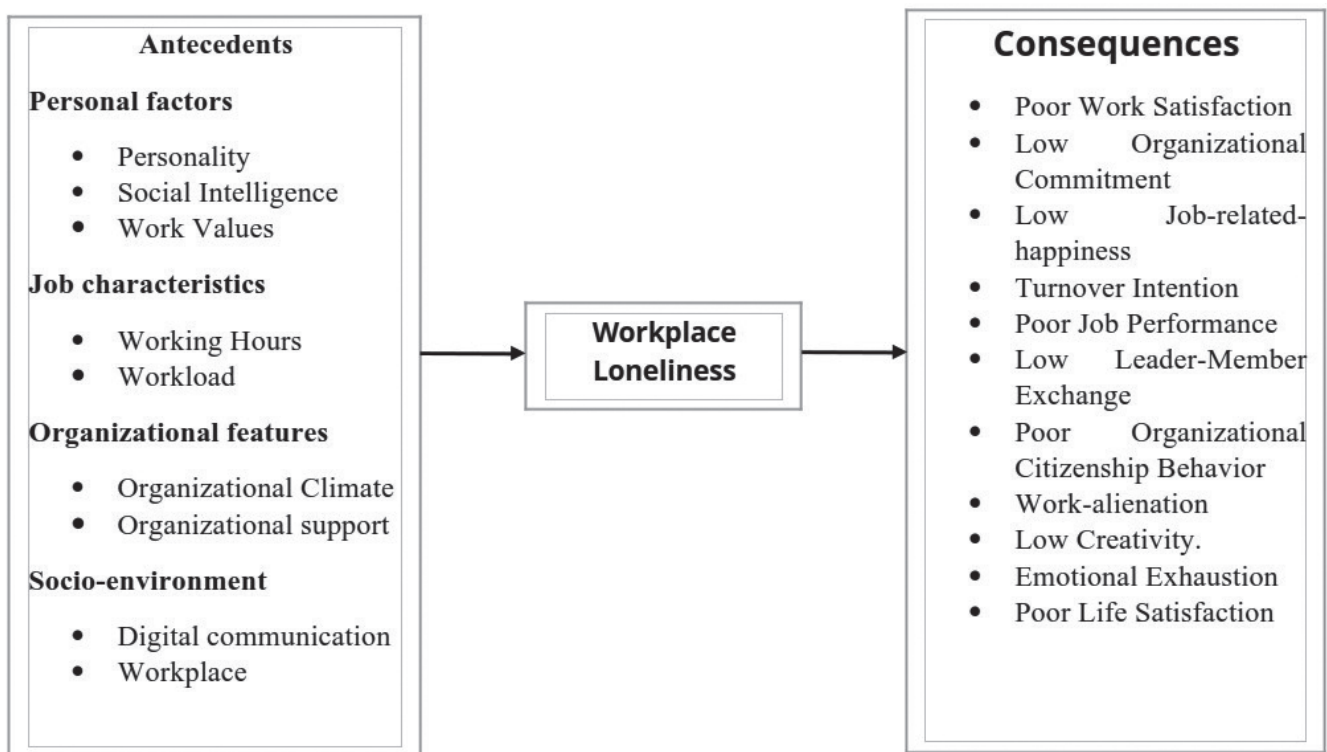
Ozcelik and Barsade (2011) used a relationship mechanism to explain the relationship between loneliness and job performance; if an employee disturbs others due to lack of contacts, it disturbs the sense of belongingness of an individual, resulting in a reduction in task performance of the employee. The review also found that workplace loneliness can influence both individual performance and team performance, hindering the effectiveness of both team and organization. Grounded in social exchange theory, Lam and Lau (2012) explained that workplace loneliness could harm organizational citizenship

behaviour (OCB) also. Workplace loneliness can affect the five dimensions of Organizational Citizenship Behavior (OCB), namely altruism, courtesy, civic virtue, conscientiousness, and sportsmanship (Organ,1988). If the organization cannot meet their intimacy and social relationship, then job performance will be low, and the organization will not achieve goals. Leader-Member Exchange (LMX) theory turns into play when we talk about the exchange of relationships or information among employees of an organization. It is a process of interaction between leader and followers with varying degrees of relationships exchanged (Graen & Uhl-Bien, 1995). High LMX will show trust, respect, love, and responsibility towards followers and improve job performance and OCB. Lam and Lau (2012) studied that loneliness at the workplace is negatively correlated to OCB, and LMX plays a mediating role between loneliness and OCB at the workplace. Followers with solitude display inferior quality of Organisational member exchange (OMX), which is negatively correlated with loneliness and job performance. Studies have also found a positive correlation between workplace loneliness and work-family conflict moderated by psychological capital. This in turn impacts the life satisfaction in an adverse manner (Firoz & Chaudhary, 2022).

Implications for Practioners

The review provides a comprehensive list of loneliness experienced at the workplace to practioners. This also gives reference to the academicians and scholars to understand literature on workplace loneliness that has been published in last ten years. The following paragraphs discusses the initiatives organizations should take to deal with or reduce loneliness at workplace.

Fig. 1. Antecedents and consequences studied concerning Workplace Loneliness



Social Connection Initiatives

Introduce Team-Building Activities: The organizations can facilitate regular team-building activities, both in-person and virtually to strengthen social bonds among team members.

Mentorship Programs: Organizations can also establish mentorship programs to connect experienced employees with newer ones, fostering professional relationships and providing support.

Communication and Feedback:

Encourage Open Communication: The organizations can promote open communication channels to ensure that employees feel comfortable expressing their concerns and sharing experiences.

Regular Feedback Sessions: The workplace can have provision for regular feedback sessions to address employee concerns and provide a platform where the employees can voice their opinions and suggestions

Flexible Work Arrangements

Remote Work Options: The organizations can offer flexible work arrangements, including remote work options, to accommodate different preferences and work styles.

Flexible Hours: The organizations can allow employees to set flexible work hours, enabling them to better balance work and personal commitments.

Training and Awareness Programs

Loneliness Awareness Training: The organizations should provide training programs to increase awareness of workplace loneliness, its impact, and strategies for fostering a more inclusive environment.

Emotional Intelligence Training: The organizations should also offer training on emotional intelligence to help employees understand and manage their emotions, promoting empathy and connection.

Inclusive Policies

Diversity and Inclusion Initiatives: Diversity and inclusion initiatives should be initiated and implemented to create a workplace culture that values and celebrates differences.

Equal Opportunities: Equal opportunities for career advancement and professional development should be created and given regardless of background or demographic factors.

Employee Assistance Programs (EAPs)

Mental Health Support Services: Employee Assistance Programs should be enhanced and executed to provide mental health support services to employees, including counseling and resources for managing stress and loneliness.

Physical Workspace Design

Collaborative Spaces: Physical workspaces should be designed to facilitate and encourage collaboration and spontaneous interactions, fostering a sense of community amongst co-workers.

Wellness Areas: Designated wellness areas should be created where employees can take breaks and engage in activities that promote mental and physical well-being.

Policy Changes

Flexible Leave Policies

Mental Health Days: Organizations can implement policies that explicitly recognize and support mental health days, allowing employees to take time off when needed without stigma or penalty.

Personal Leave Flexibility: Employees should be provided flexibility in personal leave policies to accommodate various personal circumstances contributing to loneliness.

Anti-Bullying and Harassment Policies

Clear Reporting Procedures: Employees should be protected from bullying and harassment, by strengthening policies that addresses bullying and harassment, ensuring clear reporting procedures and swift, confidential resolution processes.

Educational Programs: Organizations should conduct educational programs from time to time on respectful communication and behavior to prevent workplace bullying and harassment.

Promotion of Work-Life Balance

Clear Boundaries: Healthy work-life balance should be promoted by establishing and communicating clear expectations regarding work hours and off-hours communication to the employees.

Encourage Breaks: Employees should be encouraged to take breaks and vacations to prevent burnout and enhance overall well-being.

Recognition and Rewards

Recognition Programs: Employee recognition programs should be implemented to acknowledge and celebrate individual and team achievements fostering a positive and supportive work environment.

Inclusive Recognition: Organizations can ensure that recognition programs are inclusive and considerate of diverse contributions and accomplishments.

Continuous Feedback and Improvement

Regular Policy Reviews: Organizations should regularly review and update policies to address emerging issues and also ensure that they align with the evolving needs of the workforce.

Feedback Mechanisms: Organizations should establish mechanisms for employees to provide feedback on existing policies and suggest improvements.

Support for Career Development

Professional Development Opportunities: There should be provision of equal access for professional development opportunities, training, and mentorship programs to support career growth for all employees.

Clear Promotion Criteria: Promotion criteria should be clearly communicated to employees to ensure transparency and equal opportunities for advancement.

Conclusion and Future Directions of Research

While loneliness has been linked to various psychological consequences like anxiety, depression, and mental disorders (Igbokwe et al., 2020), studies specifically examining loneliness within the workplace are scarce (Anand & Mishra, 2021; Wright & Silard, 2020). This study supplements existing research by emphasizing the significance of workplace loneliness and its potential adverse effects when not adequately addressed by organizations. Additionally, it also offers suggestions for prospective research directions in this area.

In summary, this exhaustive review spanning 2010–2020 has intricately examined workplace loneliness, uncovering the multifaceted interplay of personal and organizational factors. From personality traits to organizational climate, the antecedents of loneliness have been dissected, providing a holistic understanding of this phenomenon within organizational contexts. Simultaneously, the consequences of workplace loneliness, ranging from diminished work satisfaction to heightened turnover intentions, underscore the far-reaching impact on individuals and organizations alike. This comprehensive review not only contributes to the evolving discourse on workplace loneliness but also provides a foundation for targeted interventions. By acknowledging the unique challenges posed by loneliness in the workplace, organizations can foster a culture of open communication and support. The potential implications of this review extend to the development of interventions aimed at mitigating the negative outcomes associated with workplace loneliness. Strategies that prioritize social connections, enhance organizational support, and address the complexities surrounding the discussion of loneliness in the workplace can contribute to the creation of healthier, more inclusive work environments.

Future research should undertake empirical studies with longitudinal designs to deepen our understanding of workplace loneliness of employees in various time intervals. There is a need to clarify related constructs like alone, solitude, isolation, alienation, and ostracism. Exploring the nature, scope, and dimensions of these constructs can distinguish general loneliness from workplace loneliness. Beyond individual factors, future studies should focus on organizational attributes like psychological safety, integrity, and trust. Investigating

the link between Big Five Personality traits and workplace loneliness can provide valuable insights. Additionally, exploring the influence of different leadership styles on individual and group experiences of loneliness will contribute to effective leadership strategies in organizations.

Ethical approval

All procedures performed in studies were in accordance with the ethical standards.

Data availability statement

The data that support the findings of this study are available from the corresponding author, [Dr. Archana Choudhary], upon reasonable request. However, this is a conceptual paper and no primary data was collected for the study.

Funding/Financial Support

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Authors' contribution

The first author conceptualized and developed the paper, the second author contributed in terms of methodology section and the third author worked on the implications and overall quality of the paper.

Conflict of interest

The authors have no conflicts of interest to declare.

References

- Akçit, V., & Barutçu, E. (2017). The relationship between performance and loneliness at workplace: a study on academicians. *European Scientific Journal, Special Issue*, 235–243.
- Amarat, M., Akbolat, M., Ünal, Ö., & Güneş Karakaya, B. (2019). The mediating role of work alienation in the effect of workplace loneliness on nurses' performance. *Journal of nursing management*, 27(3), 553–559. <https://doi.org/10.1111/jonm.12710>
- Anand, P., & Mishra, S. K. (2019). Linking core self-evaluation and emotional exhaustion with workplace loneliness: does high LMX make the consequence worse? *The International Journal of Human Resource Management*, 1–26. <https://doi.org/10.1080/09585192.2019.1570308>
- Anand, P., & Mishra, S. K. (2021). Linking core self-evaluation and emotional exhaustion with workplace loneliness: does high LMX make the consequence worse? *The International Journal of Human Resource Management*, 32(10), 2124–2149.
- Anderson, C., & Arnoult, L. (1985). Attributional style and everyday problems in living: Depression, loneliness, and shyness. *Social Cognition*, 3, 16–35. <https://doi.org/10.1521/soco.1985.3.1.16>
- Arslan, A., Yener, S., & Schermer, J. A. (2020). Predicting workplace loneliness in the nursing profession. *Journal of nursing*

- ing management, 28(3), 710-717. <https://doi.org/10.1111/jonm.12987>
- Ayazlar, G., & Güzel, B. (2014). The effect of loneliness in the workplace on organizational commitment. *Procedia-Social and Behavioral Sciences*, 131, 319-325. <https://doi.org/10.1016/j.sbspro.2014.04.124>
- Barrett, L. F. (1998). Discrete emotions or dimensions? The role of valence focus and arousal focus. *Cognition & Emotion*, 12(4), 579-599. <https://doi.org/10.1080/026999398379574>
- Barreto, M., Victor, C., Hammond, C., Eccles, A., Richins, M. T., & Qualter, P. (2021). Loneliness around the world: Age, gender, and cultural differences in loneliness. *Personality and Individual Differences*, 169, 110066. <https://doi.org/10.1016/j.paid.2020.110066>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Bell, R. A., Roloff, M. E., Camp, K. V., & Karol, S. H. (1991). Is It Lonely at the Top?: Career Success and Personal Relationships. *Journal of Communication*, 40, 9-23. <https://doi.org/10.1111/j.1460-2466.1990.tb02247.x>
- Bowlby, J. (1973). The nature of the child's tie to his mother 1 (Vol. 39, p. 175). MSS Information Corporation.
- Buchholz, E. S., & Catton, R. (1999). Adolescents' perceptions of aloneness and loneliness. *Adolescence*, 34, 203-213.
- Buhrmester D, Furman W, Wittenberg M, et al. (1988) Five domains of interpersonal competence in peer relationships. *Journal of Personality and Social Psychology* 55(6): 991-1008. <https://doi.org/10.1037//0022-3514.55.6.991>
- Cacioppo, J.T. and Patrick, W. (2008), *Loneliness: Human Nature and the Need for Social Connection*, WW Norton & Company, NY, NY.
- Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447-454. DOI: 10.1016/j.tics.2009.06.005
- Chan, S. H., & Qiu, H. H. (2011). Loneliness, job satisfaction, and organizational commitment of migrant workers: Empirical evidence from China. *The International Journal of Human Resource Management*, 22(05), 1109-1127. <https://doi.org/10.1080/09585192.2011.556785>
- Carmeli A, Brueller D and Dutton J (2009) Learning behaviors in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science* 26(1): 81-98
- Cheek J and Busch C (1981) The influence of shyness on loneliness in a new situation. *Personality and Social Psychology Bulletin* 7(4): 572-577. <https://doi.org/10.1177/014616728174008>
- Chen, Y., Wen, Z., Peng, J., & Liu, X. (2016). Leader-follower congruence in loneliness, LMX and turnover intention. *Journal of Managerial Psychology*, 31(4), 864-879. <https://doi.org/10.1108/jmp-06-2015-0205>
- Chen, X., Peng, J., Lei, X., & Zou, Y. (2019). Leave or stay with a lonely leader? An investigation into whether, why, and when leader workplace loneliness increases team turnover intentions. *Asian Business & Management*, 1-24.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160-169. <https://doi.org/10.1037/0021-9010.88.1.160>
- Davis, S., Hanson, H., Edson, R., & Ziegler, C. (1992). The relationship between optimism-pessimism, loneliness, and level of self-esteem in college students. *College Student Journal*, 26, 244-247.
- Durkheim, E., Simpson, G., & Spaulding, J. A. (1952). *Suicide. A Study in Sociology...* Translated by John A. Spaulding and George Simpson. Edited with an Introduction by George Simpson. London
- Dykstra, P. A., & Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and Applied Social Psychology*, 29, 1-12. <https://doi.org/10.1080/01973530701330843>
- Erdil, O., & Ertosun, Ö. G. (2011). The relationship between social climate and loneliness in the workplace and effects on employee well-being. *Procedia-Social and Behavioral Sciences*, 24, 505-525. <https://doi.org/10.1016/j.sbspro.2011.09.091>
- Ertosun, Ö. G., & Erdil, O. (2012). The effects of loneliness on employees' commitment and intention to leave. *Procedia-Social and Behavioral Sciences*, 41, 469-476. <https://doi.org/10.1016/j.sbspro.2012.04.057>
- Firoz, M., Chaudhary, R., & Khan, A. (2020). Desolated milieu: exploring the trajectory of workplace loneliness (2006-2019). *Management Research Review*. Vol. 44 No. 5, pp. 757-780. <https://doi.org/10.1108/MRR-01-2020-0051>
- Firoz, M., & Chaudhary, R. (2022). The impact of workplace loneliness on employee outcomes: what role does psychological capital play?. *Personnel Review*, 51(4), 1221-1247. <https://doi.org/10.1108/PR-03-2020-0200>
- Freeman, L. C. 1992. Filling in the blanks: A theory of cognitive categories and the structure of social affiliation. *Social Psychology Quarterly*, 55: 118-127. <https://doi.org/10.2307/2786941>
- Gardner WL, Avolio BJ, Luthans F, et al. (2005) 'Can you see the real me?' A self-based model of authentic leader and follower development. *The Leadership Quarterly* 16(3): 343-372. <https://doi.org/10.1016/j.leaqua.2005.03.003>
- Ghadi, M.Y. (2017), "The impact of workplace spirituality on voluntary turnover intentions through loneliness in work", *Journal of Economic and Administrative Sciences*, Vol. 33 No. 1, pp. 81-110. <https://doi.org/10.1108/JEAS-03-2016-0005>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly*, 6(2), 219-247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Guo, L. (2020). The Effect of Workplace Loneliness on Silence Behavior. *Psychology*, 11(03), 467. <https://doi.org/10.4236/psych.2020.113032>
- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review*, 26(6), 695-718. <https://doi.org/10.1016/j.cpr.2006.04.002>
- Inderbitzen-Pisaruk, H., Clark, M. L., & Solano, C. H. (1992). Correlates of loneliness in mid-adolescence. *Journal of Youth*

- and Adolescence, 21, 151–167. <https://doi.org/10.1007/BF01537334>
- Igbokwe, C.C., Ejeh, V.J., Agbaje, O.S., Umoke, P.I.C., Iweama, C.N., & Ozoemena, E.L. (2020). Prevalence of loneliness and association with depressive and anxiety symptoms among retirees in Northcentral Nigeria: A cross-sectional study. *BMC Geriatrics*, 20, 1-10. <https://doi.org/10.1186/s12877-020-01561-4>
- Jacobs, G., & Asokan, N. (1999). Towards a Comprehensive Theory of Social Development. In *Human Choice*, World Academy of Art & Science, USA, 51.
- Jones, W., Carpenter, B., & Quintana, D. (1985). Personality and interpersonal predictors of loneliness in two cultures. *Journal of Personality and Social Psychology*, 48(6), 1503–1511. <https://doi.org/10.1037/0022-3514.48.6.1503>
- Jones, W. H., & Carpenter, B. N. (1986). Shyness, social behavior and relationships. In W. H. Jones, J. M. Cheek, & R. Briggs (Eds.), *A sourcebook of shyness: Research and treatment* (pp. 227–238). New York: Plenum Press. https://doi.org/10.1007/978-1-4899-0525-3_17
- Jung, H. S., Song, M. K., & Yoon, H. H. (2021). The Effects of Workplace Loneliness on Work Engagement and Organizational Commitment: Moderating Roles of Leader-Member Exchange and Coworker Exchange. *Sustainability*, 13(2), 948. <https://doi.org/10.3390/su13020948>
- Kamath, M., & Kanekar, S. (1993). Loneliness, shyness, self-esteem, and extraversion. *Journal of Social Psychology*, 133, 855–857. <https://doi.org/10.1080/00224545.1993.9713949>
- Kotera, Y., Ozaki, A., Miyatake, H., Tsunetoshi, C., Nishikawa, Y., & Tanimoto, T. (2021). Mental health of medical workers in Japan during COVID-19: Relationships with loneliness, hope and self-compassion. *Current Psychology*, 1-4. <https://doi.org/10.1007/s12144-021-01514-z>
- Kuna, S. (2019). All by myself? Executives' impostor phenomenon and loneliness as catalysts for executive coaching with management consultants. *The Journal of Applied Behavioral Science*, 55(3), 306-326. <https://doi.org/10.1177/0021886319832009>
- 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>
- Lim, M. H., Holt-Lunstad, J., & Badcock, J. C. (2020). Loneliness: contemporary insights into causes, correlates, and consequences. 55, 789–791. <https://doi.org/10.1007/s00127-020-01891-z>
- Lindorff, M. (2001). Research Note: Are they lonely at the top? Social relationships and social support among Australian managers. *Work and Stress*, 15(3), 274-282. <https://doi.org/10.1080/026783701110.1080/02678370110066599>
- Marangoni, C. & Ickes, W. (1989). Loneliness: A theoretical review with implications for measurement. *Journal of Social & Personal Relationships*, 6, 93-128. <https://doi.org/10.1177/026540758900600107>
- Mao, H-Y. (2006), 'The Relationship Between Organizational Level and Workplace Friendship,' *International Journal of Human Resource Management*, 17, 1819– 1833 <https://doi.org/10.1080/09585190600965316>
- Mohapatra, M., Madan, P., & Srivastava, S. (2020). Loneliness at Work: Its Consequences and Role of Moderators. *Global Business Review*, 0972150919892714. <https://doi.org/10.1177/0972150919892714>
- Moody EJ (2001) Internet use and its relationship to loneliness. *Cyberpsychol Behav* 4(3):393–401. <https://doi.org/10.1089/109493101300210303>
- Neto, F., & Barros, J. (2000). Psychosocial concomitants of loneliness among students of Cape Verde and Portugal. *Journal of Psychology*, 134, 503–514 <https://doi.org/10.1080/00223980009598232>
- Öge, E., Cetin, M., & Top, S. (2018). The effects of paternalistic leadership on workplace loneliness, work-family conflict and work engagement among air traffic controllers in Turkey. *Journal of air transport management*, 66, 25-35. <https://doi.org/10.1016/j.jairtraman.2017.10.003>
- Organ, D.W. (1988), *Organizational Citizenship Behaviour, the Good Soldier Syndrome*, Lexington Books, Lexington, MA.
- Ozcelik, H., & Barsade, S. G. (2018). No employee an island: Workplace loneliness and job performance. *Academy of Management Journal*, 61(6), 2343-2366. <https://doi.org/10.5465/amj.2015.1066>
- Paul, Justin; Parthasarathy, Sundar; Gupta, Parul (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), 327–342. <https://doi.org/10.1016/j.jwb.2017.01.003>
- 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. A., & Perlman, D. (1982). Perspectives on loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 1–18). New York: Wiley.
- Primack BA, Shensa A, Sidani JE, Whaitte EO, Ly L, Rosen D, Colditz JB, Radovic A, Miller E (2017) Social media use and perceived social isolation among young adults in the US. *Am J Prev Med* 53(1):1–8 <https://doi.org/10.1016/j.amepre.2017.01.010>
- Rochford K and Boyatzis RE (2016) Relational climate in the workplace: Dimensions, measurement, and validation. Paper presented at the Academy of Management, Anaheim, CA, August 2016. <https://doi.org/10.5465/ambpp.2016.11454abstract>
- Rogers, C. R. (1973). The interpersonal relationship: The core of guidance. *Interpersonal Growth & Self-Actualization in Groups*, 32, 176.
- Rook, K. S. (1984). The negative side of social interaction: impact on psychological well-being. *Journal of personality and social psychology*, 46(5), 1097. <https://doi.org/10.1037/0022-3514.46.5.1097>
- Russell, D., Peplau, L., & Cutrona, C. (1980). The revised UCLA loneliness scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472–480. <https://doi.org/10.1037/0022-3514.39.3.472>

- Russell, D. (1982). The measurement of loneliness. In L. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 351–378). New York: John Wiley
- Sekhon, S. K., & Srivastava, M. (2019). Conquering workplace loneliness Individual or organization accountability. *Human Resource Management International Digest*. <https://doi.org/10.1108/HRMID-09-2018-0182>
- Siddaway, A. (2014). What is a systematic literature review and how do I do one. *University of Stirling*, 1(1), 1-13.
- Silard, A., & Wright, S. (2020). The price of wearing (or not wearing) the crown: The effects of loneliness on leaders and followers. *Leadership*, 16(4), 389-410. <https://doi.org/10.1177/1742715019893828>
- Silman F and Dogan T (2013) Social intelligence as a predictor of loneliness in the workplace. *Spanish Journal of Psychology* 16(e36): 1–6. <https://doi.org/10.1017/sjp.2013.21>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222. <https://doi.org/10.1111/1467-8551.00375>
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. Cambridge, MA: MIT Press
- Wiemann, J. M. 1977. Explication and test of a model of communicative competence. *Human Communication Research*, 3: 195-213. <https://doi.org/10.1111/j.1468-2958.1977.tb00518.x>
- Wright, S. L. (2005b). Organizational Climate, Social Support and Loneliness in the Workplace. *Research on Emotion in Organizations*, 1, 123-142. [https://doi.org/10.1016/S1746-9791\(05\)01106-5](https://doi.org/10.1016/S1746-9791(05)01106-5)
- Wright, S. (2007). *The Experience of Loneliness in Organisations*. Christchurch: University of Canterbury Management.
- Wright, S. L. (2005a). *Loneliness in the Workplace* (Vol. 1, pp. 123-142). VDM Verlag Dr. Müller Aktiengesellschaft & Co. kg.
- 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(2), 59–68.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486–493. <https://doi.org/10.1037/0021-9010.83.3.486>
- Wright, S., & Silard, A. (2020). Unravelling the antecedents of loneliness in the workplace. *Human Relations*. <https://doi.org/10.1177/0018726720906013>
- Yilmaz, E. (2011), “An investigation of teachers’ loneliness in the workplace in terms of human values they possess”, *African Journal of Business Management*, Vol. 5 No. 13, pp. 5070-5075.
- Zumaeta, J. (2019). Lonely at the top: how do senior leaders navigate the need to belong? *Journal of Leadership & Organizational Studies*, 26(1), 111-135. <https://doi.org/10.1177/1548051818774548>