A Conceptual Model of the Relationship between Quality of Work Life and Employee Engagement among Telecommunication Call Center Employees in Malaysia

 *Muhammad Hafiz Suhaimi¹, Narehan Hassan², Ahmad Suffian Mohd Zahari³, Muhamad Nasrullah Zamri⁴, Nor Tasnim Syahera Rasak⁴
¹Centre of Technology Management, Universiti Teknologi MARA Pahang, Malaysia
²Centre of Technology and Supply Chain, Universiti Teknologi MARA Puncak Alam, Selangor, Malaysia
³Department of Business and Management, Universiti Teknologi MARA Terengganu, Malaysia
⁴Department of Business and Management, Universiti Teknologi MARA Perak, Malaysia
*muhammadhfiz@uitm.edu.my, drnarehan@uitm.edu.my, ahmadsuf@uitm.edu.my, mdnasrullah@uitm.edu.my, tasnimsyahera@uitm.edu.my

Corresponding Author: Muhammad Hafiz Suhaimi

Abstract: Employee engagement has been one of the deepest issues for organizations. Organizations are currently struggling to survive due to the tough current economic environment, whereas the only tool for the organization to achieve a competitive advantage is by engaging employees to foster a competitive edge in the marketplace. Previous studies discovered that employee engagement in Malaysia is still steadily improving but falling behind its neighboring countries, including Indonesia and the Philippines, with the result rising only by four points to 63%. In addition, it was revealed that our country still ranks among the lowest in the region. This study focuses on employee engagement among call centers at selected telcos in Malaysia. There are many theoretical approaches to examining the quality of work life and employee engagement. Hence, this study adopted the Spillover Theory and Self-Determination Theory to explain the relationship between independent variables and employee engagement.

Keywords: Employee Engagement, Quality of Work Life, Call Center

1. Introduction and Background

Employee engagement is the positive attitudes, interests, and attachment of employees toward the organization, its mission, vision, goals, and values (Mat et al., 2019). Nasreen et al. (2019) mentioned that employee engagement is a required benefit and can be a key managerial objective. The concept of employee engagement may be vital because it has many effects and includes many factors. It influences things like job fulfillment, commitment to the company, stress, task performance, and pressure (Saks, 2019). A lot of earlier research has also proved that employee engagement affects job performance. Besides, many scholars revealed that employee engagement impacts other variables for instance creativity (Ismail et al., 2019; Eldor & Harpaz, 2016).

According to Gallup (2022), State of the Workplace research showed that 60% of workers experience feeling disconnected at work, while 19% are actively detached. In Sub-Saharan Africa, 21% of employees are actively engaged at the workplace, 46% are considering quitting occupations, and 23% experience everyday unhappiness at work. Employees who are highly engaged mostly prefer to take joy in their work, maintain close relationships with their coworkers, and may be less likely to consider quitting (Bahri et al., 2020). According to Gallup (2017b), employees will show good engagement if management focuses on the basic human need for psychological engagement.

Employee engagement is directly connected to their quality of work life. Quality of work life may be preferred as working conditions, job contentment, chance for continuous growth, work-life balance, workplace stress management, organizational culture, communication, and social relationships. Quality of work life has gotten attention in recent years due to its ability to foster employee engagement and enable the attraction and retention of personnel (Ranna & Sharma, 2019; Suifan et al., 2016). Harini et al. (2019) observed a positive and statistically existing correlation between the quality of work life and employee engagement. Specifically, the researchers discovered that employees who practiced a more balanced working life presented a higher degree of engagement (Harini et al., 2019).

According to Sahni (2019), compared to other industries, telecommunications is a more rapidly growing and

Information Management and Business Review (ISSN 2220-3796) Vol. 16, No. 3S(a), pp. 78-87, Oct 2024

dynamic sector, however, the increase puts weight on each employee because their working hours are also longer than before. The transformation of technology and services that is taking place in the telecom industry challenges every employee to move more quickly, effectively, and efficiently when carrying out tasks. To adjust the quality of work life among employees, the industry needs to play an important role by constantly being concerned and taking proactive steps, which will help each employee focus more and be able to adapt to change (Sahni, 2019).

Kotera et al., (2021) determined that the tendency to not engage when working can prevent them from achieving their goals, which in turn reduces opportunities to be productive because they do not achieve the desired results. Additionally, employee engagement rates continue to decline while working around the world, based on the results of employee engagement surveys, despite numerous journals and articles mentioning a high increase in employee engagement (Saks, 2017). An increase in workplace accidents and obstacles to organizational progress, coupled with a decline in employee morale, financial impact, and productivity, can significantly impact the organization through employee disengagement (Robotham et al., 2020).

From a practitioner's viewpoint, there is a significant gap in terms of the percentage of employee engagement scores across countries and the global average score. According to a report by Aon Hewitt (2017), for the years 2015 and 2017, there are still a few countries, including Malaysia, where employee engagement is minimal than the global average of 65 percent. Disengaging employees costs United States companies up to \$5.5 billion annually (Vega, 2020). As cited by Natrajan et al. (2019), after six months, their engagement drops by 38% and can only reach 20% of their initial level even though employees are normally highly engaged at the start of their careers. Since studies among call center employee development, which is employee engagement. Recent studies show that call centers are now a valuable resource in improving the customer experience. However, most employees from call centers receive high stress in the workplace environment and experience high rates of quitting (Baek & Lee, 2018).

It was anticipated that call centers in Malaysia would produce more than \$15.5 million in profits for the organizations. Moreover, the high attrition rate among call center employees impeded the growth of profits as organizations were forced to pay additional operational expenses to retrain and replace new employees (Narehan et al., 2020). Based on the discussion mentioned above, this paper tries to find the answers, is there a relationship between quality of work life and employee engagement? And which factors of quality of work life predict employee engagement?

2. Literature Review

Call Center

A call center is known as a facility that handles many telephone calls, usually for customer service and technical support. The center serves as the main channel for companies to interact with their customers, solve problems, provide information, and ensure customer satisfaction. Call centers are often regarded as a fundamental factor in driving several commercial processes in the contemporary business environment. As a result, call centers play a crucial role in the global economy (Horng & Lin, 2020). They are seen as essential resources utilized by firms to maintain communication with customers and address issues referring to products and services (Nazli, 2020).

The industry's rapid expansion can be recognized as technological advancements, globalization, and shifts in customer expectations and habits (Han et al., 2020; Connell & Hannif, 2009; Hannif et al., 2008; Rameshbabu et al.,2013) by an expected 20% annually to account for about 3% of the workforce in the United States and the United Kingdom (Nag & Helal, 2017). In view of Nkonde and Phiri (2020), call centers prepare enhanced customer service through competence while expanding their market share through competence. Moreover, the 24/7 economy has created the functions and characteristics of call centers, which in turn shaped the 24/7 economy.

Further, the preferences of customers to transact business virtually using their technical devices are examples of shifts in consumer requirements and habits. Consequently, businesses have been pushed to change their

operating strategies to enable customers to conduct business wherever they are and whenever they choose, thus raising the 24/7 economy (Riekhoff, Krutova, & Nätti, 2019). The impact of differences in the consumer and business environment has caused many companies to reduce or downsize their physical locations. With this move, face-to-face interactions with customers become less frequent, making call centers the main channel for customers to communicate with the company (Nag and Helal, 2017). Therefore, customers utilize call centers primarily to settle issues they cannot fix (Nkonde et al, 2020).

Employee Engagement

Employee engagement is a critical topic in cooperation management theory and practice. On the other hand, definitions, ideas, antecedents, and consequences differ significantly (Sun & Bunchapattanadasakda, 2019). In the words of Uddin et al. (2019), employee engagement is meaningful for the survival and success of businesses. Employee engagement is described as an emotional interaction characterized by a positive attitude toward the organization's values (Sun & Bunchapattanasakda, 2019). Similarly, employee engagement is seen as critical in Human Resource Development (HRD) as a critical concept for many organizations (Lee & Eissesstat, 2018). This substance is also broadly discussed in a variety of fields, particularly industrial development, psychology, and organizational management (Wood et al., 2020). Besides, employee engagement is a multidimensional motivating notion that reveals a person's physical energy, cognition emotions, and excellent performance (Kuok & Taormina, 2017). As a result, focusing on employee engagement is needed nowadays because it can increase an organization's sustainability quality, as evidenced by favorable outcomes in prior research (Bakker & Albrecht, 2018). Intrinsically motivated employees always want to grow and develop because they are always connected to their position. Employee engagement rises because of the intrinsic link since they desire to be more active in their role (Adil & Hamid, 2019; Amabile & Pratt, 2016). Understanding the difference between motivation and engagement, as well as the relationship between the two, can help companies devise methods to maintain employee engagement levels. When companies understand how motivation drives employees and how engagement improves performance, they can develop more effective strategies to keep employees interested and committed to their jobs.

Martin (2020) conducted research that explored employee engagement in various library positions in the United States. Participants consisted of staff in a variety of positions, including user services, acquisitions, cataloging, information literacy, library technology, and support systems. There was a total of 1,100 relevant questionnaires used for testing, including 139 responses from men and 939 from women. The UWES-17 is used to determine the overall level of employee work engagement. As claimed by Martin (2022), a one-way ANOVA analysis shows that there is a difference in engagement according to gender, where women (M=4.32) statistically show more engagement or connection than men (M=3.87).

Quality of Work Life

Recently, researchers have identified QWL as employees' sense of comfort and well-being in the workplace (Hermawati, 2019; Monzani et al, 2016; Nayak & Sahoo, 2015). Afterward, industrial psychologists and management specialists generally agree that QWL is primarily concerned with promoting employee well-being. Kwahar and Iyortsuun (2018) also noted that the term QWL can vary depending on the nature of the industry and the working environment of the organization. Exactly, they described QWL in the context of the hospitality industry as a means of humanizing the work environment by improving physical work settings, remuneration and benefits, social relationships, job characteristics, management systems, and employee relations.

In the tourism field, the quality of work life is getting more and more attention. Previous research has demonstrated that various factors, including organizational attachment, leadership style, and corporate social responsibility practices, influence the quality of work life and life satisfaction of tourism workers (Ampofo et al., 2021; Kara et al., 2013; Kim et al., 2021). The well-being of tour facilitators merits special consideration. Anxiety can be caused by inherent characteristics of tour guidance, such as unstable income and future uncertainty (Chen & Chang, 2020).

Generally, numerous publications have revealed and evaluated the quality of work life (QWL) as a multidimensional model of influencing factors, as it is widely used in terms of managerial, worker behavioral, and individual performance variables (Aruldoss et al., 2021). In general, quality work life is achieved by humanizing work, whereas basic requirements demand more, which has persuaded employees to expand their

work quality (Malik et al., 2020). Quality work life has been explored as a job enrichment path and a motivating tool for significant variables of career achievement, job satisfaction and career balance regarding employee requirements (Davoodi et al., 2020).

This is consistent with empirical studies on the role of the quality of work life in relation to the concept of employee loyalty to the organization, which motivates employees and improves the best performance in the organization to increase their involvement (Park et al., 2019). Along with the request for additional research on quality work life to identify the significant aspect of employment, this study checks the closest aspect, namely the work engagement scope (Sahni, 2019).

Many studies confirm that the quality of work-life influences employees in terms of identification with the organization, job satisfaction, teamwork, effort at work, job achievement, intention to quit, resignation rate, and alienation from the organization (Aruldoss et al., 2021). Consequently, this paper acknowledges that embracing the idea of employee engagement is critical to organizational accomplishment, and organizations need to develop better strategies to foster highly engaged employees (Setyaningrum & Pawar, 2020).

Silarova et al., (2022) demonstrated that the quality of work life among nursing staff was studied a decade ago to determine whether employees were fulfilling their individual needs through experience while achieving organizational goals. Work-life balance is closely related to the emotional, physical, and mental health of employees and in turn affects organizational outcomes, work quality, and attrition rates. The main characteristics of work life include work-related factors, organizational characteristics, balance between personal and professional spheres, and professional personality (Silarova et al., 2022; Hsu, 2016).

A low quality of work life can also result in increased medication use, sleep difficulties, migraines, frustrated outbursts, depression, anxiety, nightmares, poor appetite, and job or career changes (Cha & Lee, 2022). According to studies, poor work-life balance affects social aspects and, subsequently, the quality of medical care (Souza Calliari et al., 2021). Empathy, fatigue, and traumatic stress are often linked with job satisfaction, which affects the quality of life at work. Job stress and satisfaction can also impact on a person's quality of life at work (Inocian et al., 2021).

The link between Quality of Work Life and Employee Engagement

A call center in the telecommunications industry is facing challenges in considering work and personal life, dealing with unclear work roles, and affecting individual well-being. Studies have revealed that call centers encounter significant pressure or stress due to rushed task completion and limited time constraints. Call centers also experienced work for extended periods, encountering interruptions during task completion and often lacking sufficient rest periods. High work pressure can lead to stress and emotional health issues (Curzy et al., 2020; Felstead and Henseke, 2017)

Hermawati and Mas (2017) found that the quality of work life has a positive relationship with employee engagement, and these two variables play a crucial role in influencing the relationship between global leadership and employee performance. In addition, the results of the study by Smeltzer et al. (2017) showed the influence of employee engagement on quality of life in the United States. Overall, quality of work life and employee engagement are closely related, and both characteristics influence employee performance outcomes.

Furthermore, extensive research over the years has shown the importance of quality of work life (QWL) in expecting employee engagement. Toscanodel Cairo et al. (2020), presenting insights from South America, found that organizational initiatives to improve the quality of work life had a positive effect on the level of employee engagement in a higher education institution in Colombia. Quality of work life (QWOL) is an important factor influencing employee engagement, in addition to job satisfaction, workplace interactions, freedom of choice, and continuing education (Geldenhuy et al., 2015). Therefore, it is expected that employees who receive sufficient advantages from their employer are more committed to their work. In addition, when employees have been treated equitably, with dignity, and with respect, these employees are connected at work. The character of working life raises employee engagement. From the existing literature mentioned, this is a new field to investigate, particularly from the perspective of call center employees.

H1: There is a relationship between Quality of Work Life and Employee Engagement

3. Theoretical Framework: Underpinning Theory

Self-determination theory related to employee engagement

Gagné et al. (2017) mentioned that self-determination theory encompasses a broad concept of motivation, personal objectives, and well-being in relation to engagement and motivation at work. This theory becomes the theoretical basis for studies that observe the relationship between the quality of work life and employee engagement. In self-determination theory, individuals thrive in work environments that meet their basic psychological needs. This concept is important because it shows that employees are more engaged and motivated when needs such as autonomy, competence, and social connection are met in their workplace (Olafsen et al, 2015; Ryan & Deci, 2017). In accordance with self-determination theory, a person's primary psychological requirements are autonomy, competence, and relatedness (Ryan & Deci, 2017). Selfdetermination theory applies to numerous fields, including business, sports, education, religion, healthcare, and interpersonal relationships (Güntert, 2015). The individual is a central reference in Self-Determination Theory (SDT), and variables such as management style and work context can either support or hinder motivation and well-being. SDT provides an evidence-based approach to motivation and involvement, so it is able to challenge conventional wisdom about motivation in the workplace and fit societal transformation by stressing individual strengths. This approach emphasizes that intrinsic motivation, such as the desire to grow and connect with others, is more effective in the long term than extrinsic motivation based solely on reward.

According to self-determination theory, all people have an essential desire to develop, grow, improve their environment, and live life with passion. People who are energetic, dynamic, passionate, curious, and creative, who take the initiative and are excited about life and its chances, function optimally. Moreover, people at the other end of the spectrum are uninterested, bored, lonely, and disengaged effects of their energy and enthusiasm for life have disappeared. Self-determination theory presents that these people have unfulfilled needs for competence, autonomy, and connectedness (Deci & Ryan, 2000).

Deci and Ryan sought to understand the results of studies in intrinsic motivation and internalization when they realized the three needs of competence, autonomy, and relatedness through inductive empirical methods. SDT illustrates the needs as necessary nutrients for healthy human functioning, which, if unmet, can negatively impact personal well-being. Therefore, SDT emerged to elucidate the three crucial elements necessary for intrinsic motivation, psychological development, and overall well-being (Deci & Ryan, 2000).

Spillover Theory Related to Quality of Work Life.

Spillover refers to the phenomenon where employees' activities, attitudes, and behaviors at work carry over into their personal lives. Sirgy et al. (2001) used spillover theory as a conceptual framework to develop a quality of work life (QWOL) measurement tool. Spillover theory suggests that employees' experiences are not only confined to the workplace but also spill over into their personal or family lives, existing in an unbounded environment. In theory, this spillover can be positive or negative (Khateeb, 2021). Positive spillover refers to the belief that positive experiences at work lead to feelings of satisfaction and achievement in one's personal or family life, and vice versa. Negative spillover occurs when a negative experience in one domain causes a negative experience in another domain, which reflects the reverse relationship between the domains. Positive spillover describes the idea that positive experiences in one aspect of life can lead to positive experiences in other aspects of life (Vijayakumar & Janakiram, 2017).

Life satisfaction can be influenced when the presence or absence of happiness in one important area of life has the potential to have a vertical or horizontal impact on other areas of life. An example of a spillover could be after experiencing a similar reaction from a superior at work, an employee becoming suddenly angry and acting hostile towards a family member. According to spillover scholars, there is a relationship or a strong correlation between the domains of work and home life, as well as between home life and work (Mauno et al., 2017).

Patel (2018) asserts that the spillover theory holds the distinction of being the most frequently utilized and cited among the several theories about work-life balance. Patel found the work and family structures as two distinct approaches that compete within the framework of spillover theory. This theory suggests that there is potential for a positive or negative association between these two systems. The nature of the relationships is

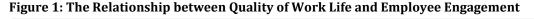
Information Management and Business Review (ISSN 2220-3796) Vol. 16, No. 3S(a), pp. 78-87, Oct 2024

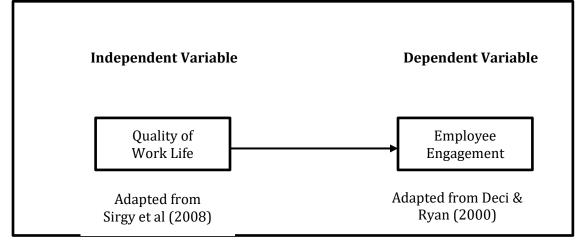
affected by moderator effects, including factors such as place, time, flexibility and energy (Patel, 2018).

To discover the spillover idea, scholars have conducted studies to examine the influence of different variables on the connection between work and home behaviors. In their study, Barber et al., (2017) employed a quantitative research approach to explore the potential mediating influences of sleep and exercise on family treatment following cases of supervisor-lowering treatment, which encompasses various negative behaviors such as employee disapproval, critical feedback, anger, and work conditions that prevent the achievement of goals. The study conducted by researchers showed a significant correlation linking supervisor undermining and home undermining.

Furthermore, it was observed that this correlation played a mediating role in subjective sleep quality. These findings suggested comparable outcomes regarding the exercise's mediation impact. The authors proposed that the adverse effects of spillovers might be effectively mitigated through the implementation of suitable interventions, such as maintaining a regular sleep schedule and engaging in a well-balanced exercise routine (Barber et al., 2017).

From the literature reviewed, the conceptual framework for The Relationship between Quality of Work Life and Employee Engagement among telecommunication Call Center Employees in Malaysia is shown in Figure 1.





4. Conclusion

This study shows the significance of quality of work life and employee engagement. The conceptual framework reveals the direct relationship between quality of work life and employee engagement. This study wants to measure the effectiveness of quality of work life that will enhance the level of engagement among call centers in the telecommunication industry. Indeed, this conceptual paper suggested that the survey results will address issues involving between quality of work life and employee engagement in the telecommunication call centers industry. Hence, some suggestions for future research are to study other variables involved in testing the model for current issues linked to quality of work life and employee engagement.

References

Abdulla, A., Ahmed, A., & Khalid, N. (2020). The relationship between leaders' emotional intelligence and employee engagement: an empirical study from the Kingdom of Bahrain. *International Journal of Intellectual Resource Management*, 1(1), 1-11.

Aboagye-Da-Costa, D. P. (2012). Internet Quality in Southern Ghana for Businesses Vendor: Viope Solutions Oy. Bachelor Thesis. Leppävaara, Finland: Laurea University of Applied Sciences.

Adil, M. S., & Hamid, K. B. A. (2019). The relationship between leader creativity expectations, intrinsic

Information Management and Business Review (ISSN 2220-3796) Vol. 16, No. 3S(a), pp. 78-87, Oct 2024

motivation, and creative performance. *SEISENSE Journal of Management, 2*(2), 58-68. https://doi.org/10.33215/sjom.v2i2.123

- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior, 36,* 157-183.
- Ampofo, E. T., Owusu, J., Coffie, R. B., & AsieduAppiah, F. (2021). Work engagement, organizational embeddedness, and life satisfaction among frontline employees of star-rated hotels in Ghana. Tourism and Hospitality Research. https://doi.org/10.1177/14673584211040310
- Aon Hewitt. (2017). 2017 trends in global employee engagement: Global anxiety erodes employee engagement gains. New York: Aon Plc.
- Aruldoss, A., Kowalski, K. B., & Parayitam, S. (2021). The relationship between quality of work life and worklife balance mediating role of job stress, job satisfaction, and job commitment: evidence from India. *Journal of Advances in Management Research*, 18(1), 36-62.
- Aruldoss, A., Kowalski, K. B., & Parayitam, S. (2021). The relationship between quality of work life and worklife balance mediating role of job stress, job satisfaction, and job commitment: evidence from India. *Journal of Advances in Management Research*, *18*(1), 36-62.
- Baek, J. T., & Lee, H. Y. (2018). The mediating effects of self-efficacy and organizational commitment in the relationship between emotional labor, occupational stress, and depression in a call center counselor. *Journal of the Korea Academia-Industrial Cooperation Society*, 19(10), 290-299.
- Bahri, S., Sabrina, R., & Sulasmi, E. (2020). The mediating effect of work engagement between the relationship of self-efficacy, career identity, work environment, and job embeddedness. *Journal of Security & Sustainability Issues*, *10*(2), 793-806. https://doi.org/10.9770/jssi.2020.10.2(33)
- Bakker, A. B., & Albrecht, S. (2018). Work engagement: current trends. *Career Development International*, 23(1), 4-11.
- Barber, L. K., Burton, J. P., Taylor, S. G., & Bailey, S. F. (2017). A self-regulatory perspective of work-to-home undermining spillover/crossover: Examining the roles of sleep and exercise. *Journal of Applied Psychology*, 102(5), 753-763. Doi:10.1037/ap10000196
- Cha, C., & Lee, M. (2022). High-risk symptom cluster groups for work-life quality and turnover intention among nurses. West. Nurs. Res., 23, 1939459221113511.
- Chen, J., & Chang, T. C. (2020). Touring as labor: Mobilities and reconsideration of tour guiding in everyday life. Tourism Geographies, *22*(4-5), 813-831.
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747-770. Doi:10.1177/0018726700536001
- Connell, J., & Hannif, Z. (2009). Call centers, quality of work life, and HRM practices. An in-house/outsourced comparison. *Employee Relations*, *31*(4), 477-490. Doi:10.1108/0145450910965423
- Curzy, Y., Pistoresi, B., Fabbri, T. (2020). Understanding the stressful implications of remote e-working: evidence from Europe. *DEMB Work Pap. Ser. 165*, 1-17.
- Davoodi, A., Azarsa, T., Shahbazpour, M., Sokhanvar, Z., & Ghahramanian, A. (2020). Relationship between quality of work life and caring behaviors among emergency nurses. *International Journal of Workplace Health Management*, *13*(6), 687-701.
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Eldor, L., & Harpaz, I. (2016). A process model of employee engagement: The learning climate and its relationship with extra role performance behaviors. *Journal of Organizational Behavior, 37*(2), 213-235.
- Felstead, A., Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, wellbeing, and work-life balance. *New Technol. Work. Employ, 32*, 195-212.
- Gagné, M., Deci, E. L., & Ryan, R. M. (2017). Self-determination theory applied to work motivation and organizational behavior. In D. S. Ones, H. K. Sinangil, C. Viswesvaran, & N. Anderson (Eds.), *Handbook of industrial, work, & organizational psychology, 2*(2), 97-121.
- Gallup, Inc. (2017b). *State of the global workplace*. New York, NY: Gallup Press
- Gallup. (2022). State of the global workplace report. Gallup.com.ttps://www.gallup.com/workplace/349484/state-of-theglobalworkplace.aspx.
- Güntert, S. T. (2015). The impact of work design, autonomy support, and strategy on employee outcomes: A differentiated perspective on self-determination at work. *Motivation and Emotion, 39*(1), 74-87.
- Han, W., Jiang, T., Li, Y., Schuller, B., & Ruan, H. (2020). Ordinal learning for emotion recognition in customer

service calls. In *ICASSP 2020-2020IEEE International Conference on Acoustics, Speech and Signal Processing* (ICASSP) (pp.6494-6498). IEEE. Doi:10.1109/ICASSP40776.2020.9053648

- Hannif, Z., Burgess, J., & Connell, J. (2008). Call centers and the quality of work life: Towards a research agenda. *Journal of Industrial Relations*, *50*(2), 271-284. Doi:10.1177/0022185607087902.
- Harini, S., Luddin, M. R., & Hamidah, H. (2019). Work-life balance, job satisfaction, work engagement, and organizational commitment among lecturers. *Journal of Engineering and Applied Sciences*, 14, 2195-2202. https://doi.org/10.36478/jeasci.2019.2195.2202
- Hermawati, A., & Mas, N. (2017). Mediation effect of quality of work life, job involvement, and organizational citizenship behavior (case study in the most outstanding cooperatives in east Java province). *International Journal of Law and Management*, 1-22.
- Hermawati, A., Suhermin, & Puji, R. (2019). The transglobal leadership-based strategy of MSMEs performance optimization of Malang Raya and the implementation of quality of work life. Research Journal of Textile and Apparel, *23*(1), 38-57. https://doi.org/10.1108/RJTA-05-2018-0038
- Horng, S. C., & Lin, S. S. (2020). Coupling elephant herding with ordinal optimization for solving the stochastic inequality-constrained optimization problems. *Applied Sciences*, 10(6), 2075. DOI: 10.3390/app10062075
- Hsu, M. A. (2016). Quality of working life survey instrument for hospital nurses. J. Nurs. Res, 24, 87-99.
- Inocian, E. P., Cruz, J. P., Alshehry, A. S., Alshamlani, Y., Hatulan Ignacio, E., & Tumala, R. B. (2021). Professional quality of life and caring behaviors among clinical nurses during the COVID-19 pandemic. J. Clin. Nurs, 6.
- Ismail, H. N., Iqbal, A. & Nasr, L. (2019). Employee engagement and job performance in Lebanon: the mediating role of creativity. *International Journal of Productivity and Performance Management*, *68*(3), 506-523.
- Kara, D./ Uysal, M., Sirgy, M. J., & Lee, G. (2013). The effects of leadership style on employee well-being in hospitality. *International Journal of Hospitality Management, 34*, 9-18.
- Khateeb, F. (2021). Work-life balance-a review of theories, definitions, and policies. *Cross-Cultural Management Journal*, 23(1), 27-55.
- Kim, H., Im, J., & Shin, Y. H. (2021). The impact of transformational leadership and commitment to change on restaurant employees' quality of work life during a crisis. *Journal of Hospitality and Tourism Management*, 48, 322-330.
- Kiriago, A. N., & Bwisa, H. M. (2013). Working Environment Factors that affect the quality of work life among attendants in Petrol Stations in Kitale Town in Kenya. International Journal of Academic Research in Business and Social Sciences, *3*(5), 289-296.
- Kotera, I. B. G. A., Sriathi, A. A. A., & Suwandana, I. G. M. (2022). The effect of work environment, work discipline, and work motivation on employee performance in manufacturing companies. *European Journal of Business and Management Research*, 7(3), 26-30. https://doi.org/10.24018/ejbmr.2022.7.3.1396
- Kuok, A. C. H., & Taormina, R. J. (2017). Work engagement: evolution of the concept and a new inventory. *Psychological Thought*, *10*(2), 262-287.
- Kwahar, N., & Lyortsuun, A. S. (2018). Determining the underlying dimensions of quality of work life (QWL) in the Nigerian Hotel Industry. Entrepreneurial Business and Economics Review, 6(1), 53-70. http://dx.doi.org/10.15678/EBER.2018.060103
- Lee, Y., & Eissenstat, S. H. J. (2018). An application of work engagement in the job demands-resources model to career development: Assessing gender differences. *Human Resource Development Quarterly*, 29(2), 143-161.
- Malik, M. I., Mehmood, H., & Umrani, W. A. (2020). Modeling teachers' quality of work life: a partial least square approach. *International Journal of Productivity and Performance Management*, 69(9), 1861-1879.
- Martin, J. (2020). Workplace engagement of librarians and library staff. *Journal of Library Administration*, 60(1), 22-40. https://doi.org/10.1080/01930826.2019.1671037
- Mat, N., Jansriboot, P., & Mat, N. (2019). Big Five personality, transformational leadership, psychological safety, and employee engagement of private sector employees in southern Thailand. *Journal Pengurusan*, *56*, 15-26. https://doi.org/10.17576/pengurusan-2019-56-02
- Mauno, S., Cheng, T., & Lim, V. (2017). The far-reaching consequences of job insecurity: A review on familyrelated outcomes. *Marriage and Family Review*, *53*(8), 717-743. Doi: 10.1080/014929.2017.1283382
- Nag, K., & Helal, M. (2017). Evaluating Erlang C and Erlang a model for staff optimization: A case study in an airline call center. In 2017 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)(pp. 1-5). IEEE.

- Narehan, H., NurMunirah, W. M., Mazuin, M. H., Shereen, N., & NoorZalina, Z. (2020). The moderating roles of organizational commitment on the relationship between quality of work life and turnover intention among call center employees. *Malaysian Journal of Consumer and Family Economics*, *24*(1), pp 208-228.
- Nasreen, A., Varshney, P., & Waseem, C. (2019). Organizational climate in NBFC: Implications on employee engagement. Amity Global Business Review, 9, 7-14.
- Natrajan, N. S., Sanjeev, R., & Singh, S. K. (2019). Achieving job performance from empowerment through the mediation of employee engagement: An empirical study. *Independent Journal of Management & Production (IJM&P)*, 10(3), 1094-1105. https://doi.org/10.14807/ijmp.v10i3.891
- Nayak, T., & Sahoo, C. K. (2015). Quality of work life and organizational performance. Journal of Health Management, *17*(3), 263-273. https://doi.org/10.1177/0972063415589236
- Nazli, M. (2020). Customer representatives' competence of call center employees: An exploratory study. *Journal of Multidisciplinary Academic Tourism*, 5(1), 11-16. Doi:10.31822/jomat.671224
- Nkonde, Z., & Phiri, J. (2020). An assessment of outsourcing of offshore call centers on customer service in commercial banks: A case of Zambia. *Open Journal of Social Sciences, 8*(2), 296-310. Doi:10.4236/jss.2020.82023
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. *Scandinavian Journal of Psychology*, *56*(4), 447-457.
- Park, S., Johnson, K. R., & Chaudhuri, S. (2019). Promoting work engagement in the hotel sector: review and analysis. *Management Research Review*, 42(8), 971-990.
- Patel, D. (2018). Bringing work-life balance to extension. *Journal of Human Sciences and Extension*, 6(3). Retrieved from https://www.jhseonline.com/
- Rameshbabu, A., Reddy, D. M., & Fleming, R. (2013). Correlates of negative physical health in call center shift workers. *Applied Ergonomics*, 44(3), 350-354. Doi: 10.1016/j.apergo.2012.09.002
- Ranna, B., & Sharma, M. (2019). Employee engagement: A tool for talent management, retention, and employee satisfaction in the IT/ITES companies in India. *International Journal of Research and Commerce & Management*, *10*, 19-22. https://www.ijrcms.com/index.php/ijrcms
- Ribeiro, M., Anna, B., Moreno deSiqueira, J., Barbosa Silva, M.,Silva Pablo, A., deMoraes Antonian, G. M., Pereira deFarias, S. N. (2020). Hospital nurses' health and quality of life at work harms A cross-sectional study. Rev. Enferm, 28,1-8.
- Riekhoff, A. J., Krutova, O., & Nätti, J. (2019). The 24/7 economy and work during unsocial hours in Europe: Examining the influence of labor market dualization, regulation and collective bargaining. *Economic and Industrial Democracy*, 00(0), 1-25. Doi: 10.1177/0143831X19846330
- Robotham, D., Windon, S., & Henzi Plaza, C. (2020). Employee disengagement and the impact of leadership. Penn State Extension. https://extension.psu.edu/employeedisengagement-and-the-impact-of-leadership
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. New York, NY: Guilford Publications.
- Sahni, J. (2019). Role of quality of Work Life in determining employee engagement and organizational commitment in the telecom industry. *International Journal for Quality Research*, *13*(2), pp 285-300. DOI: 10.24874/IJQR13.02-03
- Sahni, J. (2019). Role of quality of Work Life in determining employee engagement and organizational commitment in the telecom industry. *International Journal for Quality Research*, *13*(2), 285-300. DOI: 10.24874/IJQR13.02-03
- Saks, A. M. (2017). Translating Employee Engagement Research into Practice. *Organizational Dynamics*, 46(2), 76-86. https://doi.org/10.1016/j.orgdyn.2017.04.003
- Saks, A. M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of organizational effectiveness: People and performance, 6*(1), 19-38. Doi:10.1108/JOEPP-06-2018-0034
- Setyaningrum, R. P., & Pawar, A. (2020). Quality work life and employee engagement does servant leadership influence employee performance. *Solid State Technology*, *63*(5), 5134-5141.
- Silarova, B., Brookes, N., Palmer, S., Towers, & Hussein (2022). Understanding and measuring the work-related quality of life among those working in adult social care: A scoping review. Health Soc. Care Community, 30, 1637-1664
- Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D. J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theory. Social Indicators Research, *55*(3), 241-302.

http://dx.doi.org/10.1023/A:1010986923468

- Smeltzer, S. C., ShartsHopko, N. C., Cantrell, M. A., Heverly, M. A., Wise, N., & Jenkinson, A. (2017). Perceptions of academic administrators of the effect of involvement in doctoral programs on faculty members' research and work-life balance. *Research and Work-Life Balance Nursing Outlook*, 65(6), 1-32. https://doi.org/10.1016/j.outlook.2017.04.012Soelton
- Souza Caliari, J., Dos Santos, M. A., Andrechuk, C. R. S., Campos, K.R. A., Ceolim, M. F., & Pereira, F. H. (2021). Quality of life of nurse practitioners during the COVID-19 pandemic. Rev. Bras. Enferm, 18, e20201382
- Suifan, T. S., Abdallah, A. B., & Diab, H. (2016). The influence of work-life balance on turnover intention in private hospitals: The mediating role of work-life conflict. *European Journal of Business and Management*, 8, 126-139. https://iiste.org/Journals/index.php/EJBM
- Sun, L. & Bunchpattanasakda, C. (2019). Employee engagement: A literature review. *International Journal of Human Resource Studies*, 9(1), 63-80.
- Toscano-del Cairo, C. A., Vesga-Rodríguez, J. J. & Avendaño-Prieto, B. L. (2020). Quality of life at work and its relationship with engagement. *Acta Colombiana de Psicología, 23*(1), 138-146. Doi.org/10.14718/ACP.2020.23.1.7
- Uddin, M. A., Mahmood, M. & Fan, L. (2019). Why does individual employee engagement matter for team performance? *Team Performance Management: An International Journal*, *25*(2/1), pp. 47-68.
- Vijayakumar, G., & Janakiram, B. (2017). Theories of work-life balance- A conceptual review. *International Research Journal of Management and Commerce*, 4(9), 21-35. https://library.net/document/y4gl0dky-theories-of-work-life-balance-aconceptual-review.html
- Wood, J., Oh, J., Park, J., & Kim, W. (2020). The relationship between work engagement and work-life balance in organizations: A review of the empirical research. *Human Resource Development*, *19*(3), 240-262.
- Nag, K., K., & Ahmad, A. (2017). Impact of the work environment on employee performance factors, empirical evidence from the manufacturing industry from Lahore. Journal of Managerial Science, 11, 422-436.
- Nkonde, Z., & Phiri, J. (2020). An assessment of outsourcing of offshore call centers on customer service in commercial banks: A case of Zambia. *Open Journal of Social Sciences*, 8(2), 296-310. Doi:10.4236/jss.2020.82023
- Geldenhuys, M., Laba, K., & Venter, C. M. (2015). Meaningful work, work engagement and organizational commitment. *SA Journal of Industrial Psychology*, 40(1), 01-10. Doi.org/10.4102/sajip.v40i1.1098
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. *Scandinavian Journal of Psychology*, *56*(4), 447-457.
- Monzani, L., EspoLopez, G. V., Zurriaga, R., & Andersen, L. L. (2016). Manual therapy for tension-type headache related to quality of work life and work presenteeism Secondary analysis of a randomized controlled trial. Complementary Therapies in Medicine, 25, 86-91. https://doi.org/10.1016/j.ctim.2016.01.008
- Vega, M. (2020). 4 reasons why engaged employees drive better business outcomes. BMC Blogs. https://www.bmc.com/blogs/4-reasons-why-engagedemployees-drive-better-business-outcomes/