EXPLORING THE INTERPLAY OF JOB-RELATED AND PERSONAL FACTORS IN CONSTRUCTION PROJECT PROFESSIONALS' WELL-BEING: CONCEPTUAL FRAMEWORK

Gazierem Onwuegbuchulam¹, Clara Man Cheung², Jillian Yeow³ and Patrick Manu⁴

1,2, 3 Department of Civil Engineering and Management, School of Engineering, Nancy Rothwell Building, The University of Manchester, Oxford Road, M13 9PL, Manchester, UK

4 School of Architecture and Environment, University of the West of England, Coldharbour Lane, BS16 1QY, Bristol, United Kingdom

Workplace well-being is increasingly recognised as crucial for the work performance of construction professionals. Consequently, identifying factors leading to well-being is essential for employers because this enables them to gauge the well-being of their workforce effectively. Such an assessment is crucial in facilitating pre-emptive measures to mitigate the detrimental impacts of suboptimal well-being on job performance. Existing research, particularly within the construction industry, has primarily focused on the direct outcomes of well-being and its general determinants. However, a significant gap remains in understanding the nuanced interplay of specific job-related factors (intrinsic to the work environment i.e., destructive leadership, perceived workload, and peer support) and personal factors (individual characteristics i.e., psychological capital and personal traits) contributing to well-being. This gap is especially pronounced in the context of how these factors interact within the unique environment of the construction sector. Through a critical examination of workplace well-being literature, this paper contributes to bridge this gap by proposing a conceptual model that explores the dynamics of these relationships which could offer a holistic view of the determinants of workplace well-being in construction.

Keywords: destructive leadership, peer support, perceived workload, psychological capital, well-being.

INTRODUCTION

The construction industry is a project-based industry and has been found to possess one of the highest rates of work-related illnesses (Fenton et al. 2014). Construction is also viewed as a career which involves extreme stress capable of impacting physical and psychological well-being (PWB) (Fenton et al. 2014). A survey of the Chartered Institute of Building (CIOB) members revealed that relative to the general working population, construction professionals were at high risk of experiencing ill-being

¹ gazierem.onwuegbuchulam@postgrad.manchester.ac.uk

(Cattell et al. 2017) while another survey of over 2000 construction industry professionals conducted by the CIOB reported that 70% of respondents experienced depression, 97% stress, and 87% anxiety highlighting the high prevalence of common mental health and well-being difficulties in the construction industry (Rees-Evans 2020). Existing research work have attempted to define well-being from a broader perspective particularly in the field of psychology and sociology. Two main definitions can be established in the existing research: hedonic well-being and eudaimonic wellbeing (Ryan and Deci 2001). Hedonic well-being, which is often regarded as subjective well-being refers to abundance of positive feelings like happiness (Ryan and Deci 2001) and acquisition of satisfaction in health, relationships, and work life (Toor and Ofori 2009) while eudaimonic well-being, which can be considered psychological well-being (PWB) refers to the achievement of personal goals and growth, skill development and ultimately self-actualisation and (Henderson and Knight 2012). Onwuegbuchulam et al. (2023) identified a disproportionate focus on SWB in existing research. In the construction industry and built environment, Watson (2018) alludes to existing research taking a largely hedonic perspective of well-being underlining the need for further research on psychological well-being in construction and the built environment. This study seeks to investigate PWB in construction project professionals (CPPs) and the factors that affect the PWB of CPPs. It does so by critically reviewing literature and consequently proposing a conceptual framework that conceptualises the relationship between job factors, personal factors and PWB.

LITERATURE REVIEW

This section reviews literature pertaining to components of the job demands-resources (JD-R) model to provide a reasoned basis for conceptualising the relationship between job factors, personal factors and PWB.

JD-R Model

Demerouti et al. (2001) introduced the job demands-resources (JD-R) model. The JDR model categorised job characteristics into demands and resources. The demands consist of the physical, psychological, social, and organisational aspects of the job which necessitate sustained efforts or skill that result in work overload which negatively impacts well-being (Demerouti et al. 2001). The resources consist of the physical, psychological, social, and organisational aspects of the job such as support, leadership, and autonomy which promote the accomplishment of work goals, reduce job demands and encourage learning and personal development in workers thereby promoting well-being (Demerouti et al. 2001). The JD-R model also suggest that personal resources can perform a similar role as job resources (Xanthopoulou et al. 2013). Personal resources deal with the beliefs individuals have regarding the degree of control they possess over their environment. Personal resources and job resources can be helpful in managing well-being and ensuring job performance. Personal resources such as psychological capital (PsyCap) have been found useful for coping with stress and improving well-being. Furthermore, construction project managers suppose that job resources such as additional support in terms of delegation would be helpful in managing their responsibilities (Styhre 2006). Additional support to construction project personnel could also be obtained from peers or managers. Peer

support has become an essential trend in mental health and well-being programmes supplementing mental health and well-being professional therapies which acknowledges the prevalent burden of poor well-being, the complex nature of mental illnesses and the recovery process involved (Palaniappan et al. 2023). Meanwhile, managers can through their endorsement of well-being programmes and visible support for employees' health create an organisational culture that promotes employee well-being (Passey et a. 2018). However, manager's support is often highly influenced by senior leadership (Passey et al. 2018). Leadership can therefore be considered a key factor in achieving workplace well-being as it can set the tone for eventual manager and employee behaviours. Leadership could be constructive or destructive.

Constructive leadership including authentic, transformational and servant leadership has been extensively studied and found to have a positive impact on workplace wellbeing in existing literature (Jang et al. 2022; Kobayashi et al. 2020) however, the impact of destructive leadership (DL) on workplace well-being in the construction industry is sparsely investigated. Ahmad et al. (2022) investigated the role of leadership and subordinates' psychological factors which lead to desirable or undesirable outcomes in construction projects, however, more research needs to be conducted on the impact of DL to the well-being of CPPs. This study presents information on PWB and how job factors such as DL, perceived workload and peer support impact well-being and how personal resources such as PsyCap impact PWB.

Psychological Well-being (PWB)

PWB refers to the achievement of personal goals and growth, skill development and ultimately self-actualisation (Henderson and Knight 2012). Ryff (1989) conceptualised PWB as having six dimensions which are self-acceptance, purpose in life, environmental mastery, positive relations, personal growth, and autonomy. Selfacceptance refers to a positive interpretation of oneself and past experiences while embracing one's peculiarity. Purpose in life refers to feelings of meaning to one's existence and an accompanying sense of fulfilment in one's efforts and challenges in life. Environmental mastery refers to one's ability to manage and influence their environment to meet their needs and demands. Positive relations refer to engagement in warm, genuine, healthy, and satisfactory relationships with family members, coworkers, and supervisors. Personal growth refers to an individual's capacity and aspiration to realise their full potential through the development of skills, knowledge, and behavioural patterns. Autonomy refers to an individual's perception of selfdetermination, self-regulation, and personal authority, that is, the degree of independence availed to an individual to make decisions and execute their jobs.

Organisational factors

Destructive Leadership (DL)

Einarsen et al. (2007, p.208) defines DL behaviour as "the systematic and repeated behaviour by a leader, supervisor or manager that violates the legitimate interest of the organisation by undermining and/or sabotaging the organisation's goals, tasks, resources, and effectiveness and/or the motivation, well-being, or job satisfaction of his/her subordinates." DL does not suggest incompetency or apathy in a leader, rather it associates a leader's tendency to apply destructive behaviours with intent to damage

subordinates and the organisation (Molino et al. 2019). Empirical studies have shown that whenever a leader employs a highly structural or action-driven approach towards employees while being inconsiderate, abusive, hostile in their behaviours, or exercises a laissez-faire approach to issues, employees report a decline in well-being and increased psychological distress (Skogstad et al. 2007). Schmidt (2008) discusses five behavioural patterns which characterise DL. They are self-promotion, abusive supervision, unpredictability, narcissism, and authoritarian leadership. Einarsen et al. (2007) posit that destructive leaders who can also be referred to as toxic leaders (Lipman-Blumen 2005) can undermine the interests of an organisation, frustrate tasks, and curtail performance, job satisfaction, motivation and PWB of subordinates even when they apply hostile behaviours to fulfil organisational objectives (Wang et al. 2022). Destructive leaders may also seek to maintain totalitarianism over employees by enforcing strict rules, ridiculing their competence, and issuing threats to control their performance and ensure compliance (Wang et al. 2022). Molino et al. (2019) suggest that destructive leaders who are extremely demanding and controlling create high expectations about fulfilment at work and employees may think that working hard and always is required to satisfy a supervisor which may inflate their perception of the amount of work to be done. From the above discussion, the following hypotheses can be put forward:

DL is hypothesised to have a negative relationship on PWB (H1).

DL is hypothesised to have a positive relationship with perceived workload (H2).

Perceived Workload

Perceived workload is commonly regarded as a measure of the relationship of the amount of resources demanded by a task situation – the "demands" – to the amount of resources a person has available to complete the task – the "capacity" (Sanders and McCormick 1993). Perceived workload comprises mental components, which are largely related to a workers' attention capacity and information processing and time demands of a task. As construction projects are highly dynamic with lots of uncertainty, multiple stakeholders, and tight schedules (Chan et al., 2014), CPPs have to manage complex tasks, strict deadlines, and complicated stakeholder relationships in a demanding and stressful work environment throughout the project life cycle. Moreover, CPPs may also face excessive administrative interventions and excessive public relations activities (Yang et al., 2017). Therefore, CPPs are highly vulnerable to negative emotions and psychological problems (Hampton et al., 2019). From the above discussion, the following hypothesis can be put forward:

Perceived workload is hypothesised to have a negative relationship with PWB (H3).

Peer Support

Peer support is a type of emotional and social support extended by people who have passed through similar ordeals of mental distress and have recovered from them (Rosenberg, 2011). Existing studies have found that peer support at work can help to relieve or avert distress, however when lacking can lead to further distress (McKenna

et al. 2022). Employees have also identified peer support as a useful coping mechanism for dealing with the negative impacts of excessive workload on PWB because it enables workplace relationships that provide reassurance and a sense of hope and belief in the future (McKenna et al. 2022).

It has been postulated that peers are better able to recognise issues associated with poor well-being including oppression and social isolation (Le Boutillier et al., 2011), offer an environment where thoughts can be communicated without fear of authority (Newlin et al., 2015), exploit available resources within shared social contexts, and restore impacted individuals into social networks (McKenna et al. 2022). From the above discussion, the following hypotheses can be put forward:

Peer support is hypothesised to have a negative relationship with perceived workload (H4)

Peer support is hypothesised to have a positive relationship with PWB (H5)

Personal factors

Psychological Capital (PsyCap)

PsyCap is a higher-order component which utilises a vital mechanism of positive emotions and retains a motivating capacity in human behaviour (Alsultan, et al. 2023). PsyCap is composed of four dimensions: self-efficacy, hope, optimism, and resilience (Avey et al., 2011). Self-efficacy is a cognitive and emotional state that reflects individuals' trust and confidence in their abilities. It means that individuals can generate inspiration and cognitive resources to perform the required actions to achieve success in a given task notwithstanding the working conditions (Alsultan et al. 2023). Hope is a dynamic cognitive and motivational mechanism that functions to prompt cognitive processes and emotional responsibility which steers individuals towards attaining their goals (Luthans et al. 2006). Optimism is a positive acknowledgement of immediate and anticipated success (Luthans et al. 2006). Optimistic individuals take personal responsibility for their successes and use encouraging expositions to deflect responsibility for negative experiences (Alsultan et al. 2023). Resilience is one's capacity to respond to negative or positive stressful situations and in some circumstances, to even flourish from them (Luthans et al. 2006). Self-efficacy, hope, and optimism can build resilience. For instance, confident, hopeful, and optimistic employees are more likely to respond and thrive from distress than their peers who are not (Alsultan et al. 2023). Rabenu et al. (2017) identified that PsyCap as the most essential component of well-being which produces positive emotions and inspires a desirable attitude (Avey et al., 2011). Existing research indicate PsyCap is positively associated with positive outcomes, negatively associated with negative outcomes (Luthans et al. 2006), and positively impacts PWB (Rabenu et a. 2017). From the above discussion, the following hypothesis can be put forward:

PsyCap is hypothesised to have a positive relationship with PWB (H6)

PsyCap as a Moderator

As PsyCap increases, individuals might begin to develop more capacity to cope with rising job demands. Higher job demands are linked to amplified stress levels and research indicates that employees with PsyCap are likely more capable of coping with these demands (Avey et al. 2011). In other words, personal resources moderate the negative effects of stressful work environments on employee well-being (Grover et al. 2018). Individuals with higher PsyCap typically take proactive measures to help them with demanding work environment. The resilient quality of PsyCap promotes positive swift reactions to the impact of job demands because PsyCap has the positive mental resources which enable employees to cope with the demands. This underpins the argument that PsyCap moderates the impact of job demands on well-being. PsyCap can therefore be viewed as a personal resource that assists in the quest for more job resources (Grover et al. 2018). Existing research posit that employees with high levels of PsyCap possess greater mastery that aids them in using resources within their environment and manage working conditions more effectively. For instance, Okros et al. (2022) found that PsyCap moderates the impact of job demands on well-being. In particular, when job demands such as workload are higher, employees with high PsyCap levels experience less decrease in their PWB when compared to employees with low PsyCap levels (Kim et al. 2020) hence confirming the role of PsyCap as a protective factor from stress due to increased workload (Okros et al. 2022). From the above discussion, the following hypothesis can be put forward:

PsyCap is hypothesised to significantly weaken the negative impact of perceived workload on PWB (H7).

CONCEPTUALISING THE INTERPLAY OF JOB-RELATED AND PERSONAL FACTORS IN CONSTRUCTION PROJECT PROFESSIONALS WELL-BEING

Conceptual Framework

Drawing on the aforementioned discussion and hypotheses, this study proposes a conceptual framework to examine how DL, perceived workload, peer support and PsyCap directly affect PWB. In addition, the framework examines how perceived workload is amplified or reduced by DL and peer support respectively. It also examines PsyCap as a moderator of the effect of perceived workload on PWB.

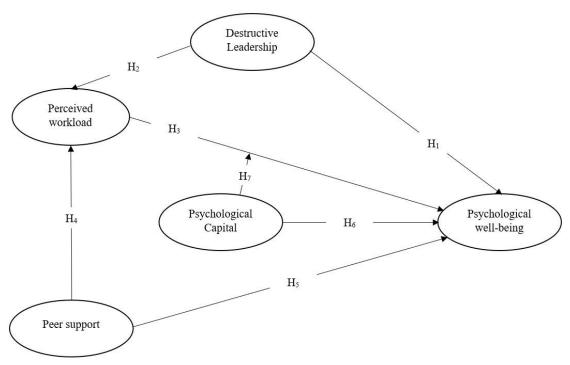


Figure 1: Conceptual framework of the relationship between job factors, personal factors and PWB.

RESEARCH AGENDA

The next step in this study is to test the conceptual framework. Given that relationships depicted by the framework need to be tested, the positivist paradigm and quantitative strategy are considered most suitable for testing the framework because they are effective in investigating and establishing relationships between variables (Gross and Burrell 2017). Data collection will be done using a survey instrument which will be sent to CPPs (e.g., architects, construction managers, project managers, engineers, and surveyors) who will constitute the research participants. The survey instrument consists of a PWB scale (Ryff and Keyes 1995), DL scale (Schmidt 2008), workload scale (Kirby et al. 2003), peer support scale (Edwards and Webster 2012) and compound PsyCap scale (Lorenz et al. 2016). Cluster sampling procedure and nonprobability sampling will be used to obtain a relevant sample for the study. A pilot study will be conducted to test research protocols, data collection instruments, sample requirement strategies and obtain the necessary information for calculating the sample size, evaluating the main study, and minimising waste of research resources. This will be followed by the main data collection and analysis. Data analysis will be performed using structural equation modelling (SEM) technique.

CONCLUSION

This study elucidates the interaction between job-related and personal factors on CPPs' well-being. The study has put forward a conceptual model which depicts the interrelationship between job-related factors, personal factors, and PWB. By this, the framework has provided further understanding into how job demands, job resources and personal resources could impact workplace well-being. Researchers can therefore

apply this framework to empirically ascertain the impact of job demands, job resources, and personal resources on PWB. Tested empirically, the proposed framework could assist practitioners in implementing appropriate workplace interventions to improve the well-being of construction professionals.

REFERENCES

- Ahmad, R., Nauman, S., & Malik, S. Z. (2022). Tyrannical leader, machiavellian follower, work withdrawal, and task performance: Missing links in construction projects. Journal of Construction Engineering and Management, 148(7) doi:10.1061/(ASCE)CO.1943-7862.0002290
- Alsultan, A., Alharbi, A., Mahmoud, S., & Elsharkasy, A. (2023). The mediating role of psychological capital between academic stress and well-being among university students. Pegem Journal of Education and Instruction, 13(2), 335. doi:10.47750/pegegog.13.02.37
- Avey, J. B., Wernsing, T. S., & Mhatre, K. H. (2011). A longitudinal analysis of positive psychological constructs and emotions on stress, anxiety, and well-being. Journal of Leadership & Organizational Studies, 18(2), 216-228. doi:10.1177/1548051810397368
- Cattell, K. S., Bowen, P. A., Cooper, C. L., & Edwards, P. J. (2017). The state of well-being in the construction industry. (). Bracknell: Chartered Institute of Building. Retrieved from https://www.ciob.org/industry/research/state-Wellbeing-Construction-Industry
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demandsresources model of burnout. Journal of Applied Psychology, 86(3), 499-512. doi:10.1037/0021-9010.86.3.499
- Edwards, J. A., & Webster, S. (2012). Psychosocial risk assessment: Measurement invariance of the UK health and safety executive's management standards indicator tool across public and private sector organizations. Work and Stress, 26(2), 130-142. doi:10.1080/02678373.2012.688554
- Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. The Leadership Quarterly, 18(3), 207-216. doi:10.1016/j.leaqua.2007.03.002
- Fenton, S. J., Pinilla Roncancio, M., Sing, M., Sadhra, S., & Carmichael, F. (2014). Workplace wellbeing programmes and their impact on employees and their employing organisations: A scoping review of the evidence base. Collab between Health Exchange Univ Birmingham, 11(27), 2014.
- Gross, C., & Burrell, N. (2017). Purpose of quantitative research.
- Grover, S. L., Teo, S. T. T., Pick, D., Roche, M., & Newton, C. J. (2018). Psychological capital as a personal resource in the JD-R model. IndraStra Global, 47(4), 968-984. doi:10.1108/PR-08-2016-0213
- Hampton, P., Chinyio, E. A., & Riva, S. (2019). Framing stress and associated behaviours at work. Engineering, Construction, and Architectural Management, 26(11), 2566-2580. doi:10.1108/ECAM-10-2018-0432
- Henderson, L. W., & Knight, T. (2012). Integrating the hedonic and eudaimonic perspectives to more comprehensively understand wellbeing and pathways to wellbeing. International Journal of Wellbeing, 2(3), 196-221. doi:10.5502/ijw.v2.i3.3

- Jang, S., Chung, Y., & Son, H. (2022). Employee participation in performance measurement system: Focusing on job satisfaction and leadership. International Journal of Productivity and Performance Management, doi:10.1108/IJPPM-08-2021-0448
- Kahneman, D., Diener, E., & Schwarz, N. (1999). Well-being: The foundations of hedonic psychology. New York: Russell Sage Foundation. Retrieved from https://www.jstor.org/stable/10.7758/9781610443258
- Kim, M., Kim, Y. D., & Lee, H. (2020). It is time to consider athletes' well-being and performance satisfaction: The roles of authentic leadership and psychological capital. Sport Management Review, 23(5), 964-977. doi:10.1016/j.smr.2019.12.008
- Kirby, J. R., Delva, M. D., Knapper, C., & Birtwhistle, R. V. (2003). Development of the approaches to work and workplace climate questionnaires for physicians. Evaluation & the Health Professions, 26(1), 104-121. doi:10.1177/0163278702250097
- Kobayashi, Y., Watanabe, K., Otsuka, Y., Eguchi, H., Kawakami, N., Imamura, K., & van Dierendonck, D. (2020). Servant leadership in japan: A validation study of the japanese version of the servant leadership survey (SLS-J). Frontiers in Psychology, 11, 1711. doi:10.3389/fpsyg.2020.01711
- Le Boutillier, C., Leamy, M., Bird, V. J., Davidson, L., Williams, J., & Slade, M. (2011). What does recovery mean in practice? A qualitative analysis of international recovery-oriented practice guidance. Psychiatric Services (Washington, D.C.), 62(12), 1470-1476. doi:10.1176/appi.ps.001312011
- Lipman-Blumen, J. (2005). The allure of toxic leaders why we follow destructive bosses and corrupt politicians and how we can survive them. Cary: Oxford University Press, Incorporated. Retrieved from https://ebookcentral.proquest.com/lib/[SITE_ID]/detail.action?docID=4914669
- Lorenz, T., Beer, C., Pütz, J., & Heinitz, K. (2016). Measuring psychological capital: Construction and validation of the compound PsyCap scale (CPC-12). PloS One, 11(4), e0152892. doi:10.1371/journal.pone.0152892
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. Human Resource Development Review, 5(1), 25-44. doi:10.1177/1534484305285335
- McKenna, M., Dempster, M., Jarowslawska, A., Shayegh, J., Graham-Wisener, L., McPherson, A., & White, C. (2022). Moderating the work distress experience among inpatient hospice staff: A qualitative study. International Journal of Palliative Nursing, 28(6), 280-288. doi:10.12968/ijpn.2022.28.6.280
- Molino, M., Cortese, C., & Ghislieri, C. (2019). Unsustainable working conditions: The association of destructive leadership, use of technology, and workload with workaholism and exhaustion. Sustainability, 11(2), 446. doi:10.3390/su11020446
- Newlin, M., Webber, M., Morris, D., & Howarth, S. (2015). Social participation interventions for adults with mental health problems: A review and narrative synthesis. Social Work Research, 39(3), 167-180. doi:10.1093/swr/svv015
- Okros, N., Vîrgă, D., & Lazăr, T. (2022). Types of demands and well-being in correctional officers: The protective role of psychological capital. Work (Reading, Mass.), 73(1), 165-180. doi:10.3233/WOR-205100
- Onwuegbuchulam, G. S., Cheung, C., Manu, P., & Yeow, J. (2023). Leading indicators of workplace well-being A systematic literature review. Paper presented at the The 37th British Academy of Management Conference.

- Palaniappan, K., Rajaraman, N., & Ghosh, S. (2023). Effectiveness of peer support to reduce depression, anxiety and stress among migrant construction workers in singapore. Engineering, Construction, and Architectural Management, 30(10), 4867-4880. doi:10.1108/ECAM-03-2022-0269
- Passey, D. G., Brown, M. C., Hammerback, K., Harris, J. R., & Hannon, P. A. (2018). Managers' support for employee wellness programs: An integrative review. Los Angeles, CA: SAGE Publications. doi:10.1177/0890117118764856
- Rabenu, E., Yaniv, E., & Elizur, D. (2017). The relationship between psychological capital, coping with stress, well-being, and performance. Current Psychology (New Brunswick, N.J.), 36(4), 875-887. doi:10.1007/s12144-016-9477-4
- Rees-Evans, D. (2020). Understanding mental health in the built environment. (). Bracknell, UK: Chartered Institute of Building (CIOB). Retrieved from https://www.ciob.org/industry/politics-government/campaigns/mental-healthconstruction
- Rosenberg, L. (2011). Addressing trauma in mental health and substance use treatment. The Journal of Behavioral Health Services & Research, 38(4), 428-431. doi:10.1007/s11414-011-9256-9
- Ryan, R. M., & Deci, E. L. (2001). To be happy or to be self-fulfilled: A review of research on hedonic and eudaimonic well-being. Annual Review of Psychology, 52(1), 141166.
- Ryff, C. D. (1989). Happiness is everything, or is it? explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57(6), 10691081. doi:10.1037/0022-3514.57.6.1069
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69(4), 719-727. doi:10.1037/00223514.69.4.719
- Sanders, M. S., & McCormick, E. J. (1993). Human factors in engineering and design, 7th ed. New York, NY, England: Mcgraw-Hill Book Company.
- Schmidt, A. A. (2008). Development and validation of the toxic leadership scale Available from Masters Abstracts International. Retrieved from http://www.pqdtcn.com/thesisDetails/DE4EAE5F5AA370313CCCAFC3D18C67EA
- Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behavior. Journal of Occupational Health Psychology, 12(1), 80-92. doi:10.1037/1076-8998.12.1.80
- Styhre, A. (2006). The bureaucratization of the project manager function: The case of the construction industry. International Journal of Project Management, 24(3), 271-276. doi:10.1016/j.ijproman.2006.01.002
- Toor, S. -. -., & Ofori, G. (2009). Authenticity and its influence on psychological wellbeing and contingent self-esteem of leaders in singapore construction sector. Construction Management and Economics, 27(3), 299-313. doi:10.1080/01446190902729721
- Wang, S., Wu, J., He, C., & Gu, J. (2022). The impact of authoritarian leadership on employee creativity: The joint moderating roles of benevolent leadership and power distance. Journal of Managerial Psychology, 37(6), 527-544. doi:10.1108/JMP-012021-0046
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands. Journal of Personnel Psychology, 12(2), 74-84. doi:10.1027/1866-5888/a000085
- Y.S. Chan, I., Leung, M., & Yuan, T. (2014). Structural relationships between cultural values and coping behaviors of professionals in the stressful construction industry.

Engineering, Construction, and Architectural Management, 21(2), 133-151. doi:10.1108/ECAM-07-2012-0069

Yang, F., Li, X., Zhu, Y., Li, Y., & Wu, C. (2017). Job burnout of construction project managers in china: A cross-sectional analysis. International Journal of Project Management, 35(7), 1272-1287. doi:10.1016/j.ijproman.2017.06.005