

# **Mindfulness in an Age of Digital Distraction and the Effect of Mindfulness on Employee Engagement, Wellbeing, and Perceived Stress**

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## **Abstract**

This study examined the effect of mindfulness on employee engagement, perceived stress and wellbeing. Based on non-probability sampling, data was gathered from 200 respondents engaged in the services sector in Malaysia. In this quantitative study, numerical data was collected using a survey method. The results of this study revealed that mindfulness practices had the highest impact on the work engagement of employees. The results also showed a strong but inverse relationship between mindfulness and perceived stress. The results further showed that mindfulness had moderate relations with employee wellbeing. The results of this study highlighted the relevance of mindfulness practices on employee engagement, perceived stress, and wellbeing in organisations. Organisations can support and implement mindfulness practices to help employees to combat stress and improve their engagement and wellbeing.

**Keywords:** Mindfulness, Work engagement, Employee wellbeing, Perceived stress

## **Introduction**

Malaysia is a multi-ethnic country with a population of 32million (Department of Statistics Malaysia, 2019). In the New Economic Model that was implemented by the Malaysian government, the services sector assumes an increasing share of GDP. In the Eleventh Malaysia Plan, 2016-2020, the services sector will continue to be the primary driver of economic growth (Malaysian Investment Development Authority, 2020). The services sector is expected to grow at 6.8% per annum and contribute 56.5% to the GDP in 2020 and provide 9.3 million jobs. Despite the crucial contribution of the services sector, the growth of labour productivity was moderated to 4.9% compared to 6.5% in 2018. The Malaysian Reserve (2019) reported that the Malaysian services sector in Malaysia lacks in growth. Therefore, there is a need to take additional measures to improve productivity. As stated in the Malaysia Productivity Blueprint (2018), Malaysia must accelerate productivity growth and one of the critical factors to propel productivity is through efficiency from internal resources such as human capital. Therefore, a

study is useful to understand the role of mindfulness and its impact on employee engagement, employee wellbeing and employee stress levels, of employees engaged in the services sector in Malaysia.

In the current era of digital distractions, mindfulness has gained recognition by employers and is a billion-dollar industry (Berthon and Pitt, 2018). Mindfulness originated from Buddhism, and there are several definitions of mindfulness. A notable definition is by Olendzki (2018) who stated that mindfulness is a faculty of mind that discriminated between wholesome and unwholesome states of mind. It refers to the understanding and detection of the detractors or contributors to an individual's wellbeing (Olendzki, 2018). The effects or influence of mindfulness goes beyond employee experience and training that covers products and services (Berthon and Pitt, 2018). Berthon and Pitt (2018) stressed that managers in today's environment of digital disruptions need to understand the phenomenon of mindfulness, and this presents difficulties. The increase in the prominence of mindfulness in today's era of digitalisation is due to the growth of information, increase in costs of mindfulness and the ever-increasing acceptance of mindfulness by people (Berthon and Pitt, 2018). Researchers have stated that mindfulness improves the health of employees that encompass stress and burn-out levels (e.g., Gotink et al., 2015). In addition, mindfulness also improves cognitive performance (e.g., Wang, Berthon, Pitt, and McCarthy, 2016). Despite the growth in recognition of mindfulness, there is a dearth of studies that examined the influence of mindfulness on employees' outcomes such as work engagement, wellbeing, and job performance in Malaysia. Employee engagement refers to employee's involvement, enthusiasm and commitment to their job and their contribution to the organisations, in a positive manner (Gallup, 2013). As pointed out by Saks (2006), employee engagement has become a significant area of discussion among researchers and consulting firms. Several past studies have pointed towards the positive influence of employee engagement and several desired organisational outcomes (e.g., Whittington, Meskelis, Asare and Beldona, 2017; Komposo and Srideve, 2010). The study by Komposo and Sridevi (2010) stressed the importance of employee engagement and the positive influence of employee engagement on organisational performance. Santhoshkumar, Jayanthi, and Velanganni (2019) emphasised that in today's work environment, employees prefer to work in the best workplace, handle the best-suited responsibility and enjoy greater autonomy. Therefore, employee engagement is gaining importance and engaging the employees to their work as per their competency level must occupy the centre stage. However, there is a paucity of studies on employee engagement, and there is little knowledge of the antecedents and consequences of employee engagement (Saks, 2006). Past studies have identified several predictors of employee engagement, such as job characteristics, procedural justice, co-employees support (and employee development (Saks, 2006; Ologbo and Sofian, 2012). Past studies have also studied the relationship between mindfulness and work engagement (e.g., Gunasekara and Zheng, 2018). However, most of these studies were carried out in developed countries. There is a dearth of research on the relationship between mindfulness and employee engagement in a developing country like Malaysia.

The current work environment of digitalisation is subjected to complexities, uncertainties, and constant change. The constant organisational changes lead to higher levels of risks related to employee health problems (Dahl, 2011). Higher employee stress has negative consequences not only on employees but also on organisations, families and society (Tiyce, 2013). It was reported that workplace stress caused an additional expenditure between \$125 to 190 billion dollars a year in US health care costs (Blanding, 2015). The Wall Street Journal reported that the indirect costs related to stress that is incurred by organisations could be even much higher than the direct costs of workers' compensation and health benefits (Pfeffer, 2019). As reported in the Malaysian Star Online newspaper, higher levels of stress can bring negative

consequences and be counterproductive. This leads to poor job performances, strained relationships, and poor emotional and physical health (Muthiah, 2018). Another study by AIA Vitality showed that 53% of employees in Malaysia reported at least one dimension of work-related stress, while 12% experienced high levels of anxiety or depression. Due to the high stress and sedentary lifestyle, the survey found that 84% of employees reported at least one type of musculoskeletal condition while 53% are at risk of mental health issues (Fong, 2017). Past studies have identified several workplace stressors that include shift work, employment environment, emotional dissonance, highly demanding job roles and ethical concerns (Tiyce, 2013). Past studies have shown that mindfulness intervention is effective in reducing stress levels in employees and improving the wellbeing of employees (Aikens et al., (2014). However, there is a dearth of studies on the relationship between mindfulness and perceived stress in the services sector in Malaysia.

As reported in the Harvard Business Review, one in five adults suffer from mental health challenges each year. This is costing organisations around \$200 billion and 200 million lost workdays (Lieberman, 2019). The importance of employee wellbeing is supported by the results of a survey which revealed that employers also lose an average of 73.1 days per employee, due to ill-health related absenteeism and presenteeism. The outcome of the survey further revealed the issue of high productivity loss, as well as other behaviours like lack of sleep, stress, poor eating, physical inactivity, as well as overall mental health and wellbeing (Murugesan, 2018). However, as argued by Baptiste (2008), employee wellbeing is a neglected area of inquiry in organisations. Baptiste (2008) stressed that the importance of employee wellbeing had been overshadowed or obscured by the achievement of business-oriented performance outcomes. Past studies have revealed that human resource policies and practices adopted by organisations have a positive impact on the wellbeing of employees (e.g., Baptiste, 2008; Joyce et al., 2010). Factors such as flextime and work-life balance were found to have positive and significant effects on the wellbeing and health of employees (Joyce et al., 2010; Zheng et al., 2015). Past studies have also pointed out the positive association between mindfulness and employee wellbeing (Lomas et al., 2017; Hansen, 2016). However, past studies have been carried out in developed countries and there is a dearth of research on the relationship between mindfulness and employee wellbeing in a developing country like Malaysia. Since employee wellbeing is essential for successful organisational outcomes, this study will examine the effect of employee mindfulness towards their wellbeing in the services sector in Malaysia.

This study will examine the effect of employee mindfulness on employee engagement, wellbeing, and perceived stress among employees in the services sector in Malaysia. By focusing on the effect of mindfulness as a potential contributor to positive work-related outcomes, this study has significant implications for employee's performance and productivity in the services sector. The findings of this research could assist Human Resource managers in understanding mindfulness practices and fine-tune their strategies to encourage the adoption of mindfulness practices among employees in the workplace.

## **Literature Review**

### ***Mindfulness***

Mindfulness is gaining recognition in organisations, and training programs on mindfulness are becoming popular. Mindfulness has its roots in Buddhism and can be viewed as a state of consciousness. There are several definitions of mindfulness that focus on attentional elements or upon self or identity (Reb and Atkins, 2015). Mindfulness was defined by Langer (1989) as an "active information processing" mode. Glomb et al. (2011) defined mindfulness as a state of consciousness experienced by individuals.

Similarly, Brown et al. (2011) defined that mindfulness is a state of consciousness. However, the frequencies of the states of mindfulness experienced by individuals can differ among individuals. According to Reb and Atkins (2015), mindfulness is referred to as a way people attend and relate to the world. Reb and Atkins (2015) explained that mindfulness is a way of being. In addition, mindfulness is a way of inhabiting a person's body, mind, or moment by moment experience.

Similarly, according to Hyland, Lee and Mills (2015), mindfulness refers to an individual's 'present-focused consciousness'. In other words, mindfulness refers to the level to which a person is mindful in his or her work setting (Dane & Brummel, 2013). Brown et al. (2011) further explained that mindfulness is a process thinking and placing attention towards what is taking place at the moment. This encompasses both internal thoughts and external stimuli. The individual observes those stimuli without judgment. In other words, mindfulness refers to awareness and attention to current events and experiences. According to Kabat-Zinn (1990), mindfulness entails an attitude and commitment to non-judgment, patience, and trust in people themselves. Therefore, mindfulness of employees is their state of consciousness whereby they are focused and mindful of their work setting.

There are several reasons to support the importance of mindfulness in organisations. The applications of mindfulness in the workplace encompasses the enhancement of wellbeing of employees and their professional effectiveness (Reb and Atkins, 2015; Glomb et al., 2011). Researchers and scholars have stated that mindfulness has a positive effect on work-related outcomes such as problem-solving, performance, productivity and stress reduction (Glomb et al., 2011; Butler and Gray, 2006). Mindfulness also contributes positively to intuition and strategic decision making (Dane, 2011; Shapiro et al., 2006). In addition, mindfulness increases emotional regulation, creativity, and empathy (Reb and Atkins). Glomb et al. (2011) stated that mindfulness makes employees more resilient, and this leads to an increase in their productivity and performance. They argued that employees enhance their power of self-regulation and improve their social relationships. A study by Reb, Narayanan and Chaturvedi (2014) revealed that mindfulness was related to the wellbeing and performance of employees. Another study by Reb, Narayanan and Ho (2013) revealed that mindfulness was a positive predictor of job performance, job satisfaction, burn-out and organisational citizenship behaviours. Therefore, most past scholars and researchers have pointed out the crucial role of mindfulness in the workplace.

### ***Relationship between Mindfulness and Employee Engagement***

There are several definitions of employee engagement (Bakker, Demerouti and Xanthopoulou, 2011; Kahn, 1994). Schaufeli et al. (2002) defined work engagement as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption. Employees with high levels of engagement show high levels of energy, and they are highly enthusiastic about their job. Truss et al. (2006) explained that employee engagement is mainly a "passion for work". According to Bakker, Demerouti and Xanthopoulou (2011), engagement refers to the experience of work by individuals as something to which they want to focus their effort, something that is meaningful to them and something that is interesting to them. The definition of employee engagement by Kahn (1990, 1992) is more focussed on emotional, physical and cognitive features. Kahn (1990) defined employee engagement as the harnessing of organisation members' selves to their work roles. In engagement, the people employ and express themselves physically, cognitively and emotionally during role performances. The cognitive part of employee engagement is fixated on the employees' beliefs, leaders and working environment. The emotional component is fixated on employees' attitudes, and the physical component is focused on physical vitalities applied by individuals to achieve their



respective roles. Based on the above definitions, employee engagement is a multi-faceted construct that explains the levels of willingness and energy that the employees are willing to put in their jobs. Furthermore, the definition of employee engagement is ambiguous among both academic researchers and among practitioners (Macey, and Schneider, 2008).

Past studies have shown the mindfulness enhances employees' level of engagement in organisations (Brown and Ryan, 2003; Rich et al., 2010). Researchers have used the self-determination theory to examine the influence of mindfulness on work engagement (e.g., Brown and Ryan, 2003). Self-Determination Theory addresses the innate and psychological needs of individuals (Deci and Ryan, 2000). Mindfulness makes employees more focussed and improves their internal awareness (Brown & Ryan, 2003). Brown and Ryan (2003) explained that employees' attention increases the certainty and clarity of their experiences and they become positively immersed in their job and activities. Kahn (1990) introduced the concept of psychological presence and stated that employee engagement is a function of being psychologically present at work and being open and attentive. Langer and Moldoveanu (2000) added that mindfulness could further improve engagement levels by enabling employees to view their current job as exciting and promoting their involvement in their job-related activities. Rich et al. (2010) further added that engaged employees are highly involved in their tasks and activities that they handle. A study by Malinowski and Lim (2015) confirmed that mindfulness is a positive predictor of work engagement and general wellbeing. According to Malinowski and Lim (2015), mindfulness wields a positive influence on work engagement through an increase in optimism, and hope. Atkins, Hassed and Fogliati (2015) also supported the positive influence of mindfulness upon employee's wellbeing and work engagement. Based on the above review, the researcher formulated the hypothesis stated below for further testing:

*H1. Mindfulness' is a positive predictor of employees' engagement.*

### ***Relationship between Mindfulness and Perceived Work-related Stress***

In a study involving 1277 respondents by Holton, Barry, and Chaney (2016), it was revealed that over half of respondents to the survey reported effective stress management by using different coping strategies. This indicates that under the current digital environment, stress and burn-out among employees are increasing. As stated by Wolever et al. (2012), higher levels of stress in employees lead to higher health risks and productivity losses in the workplace. There are several definitions of stress and stress encompasses both environmental stressors and individual strains (Beehr, 2014). Stress also has a different meaning for different people under different conditions (Akanji, 2013). Initially, Seyle (1974) defined stress as the body responds to a specific demand that is considered appropriate. According to Beehr (2014), work-related stress refers to a situation in the workplace that contributes to physical or psychological health-related problems. In other words, stress refers to the relationship between workplace stressors and the poor health of employees. The Beehr-Newman model includes several facets of work-related stress. The Beehr-Newman model shows the relationship between environmental facets and the human consequences facet of stress (Beehr, 2014). The consequence of workplace stress on employees and organisations is also significant. As stated by (Akanji, 2013), work-related stress affects the health, performance and wellbeing of employees in organisations.

Past studies have identified several causes of employee stress. Based on Murphy's schematic framework of factors associated with work-related stress and outcomes of stress, the determinants of stress are categorised as job-related factors, work relationships, organisation climate, career development, role within the organisation and factors that are intrinsic to job role such as workload (Murphy, 1995). According to Rossi, Meurs and Perrewe (2014), the main stressors are work overload, long workdays and fear of being dismissed. Scholars and researchers have stated that mindfulness is one of the factors that can lower stress and promote

the wellbeing of employees (Brown and Ryan, 2003; Aikens et al., 2014). The study by Aikens et al. (2014) found that mindfulness reduces the employee's stress levels and improve their engagement. Another study by Wolever et al. (2012) also revealed that mindfulness significantly enhanced the perceived stress in employees.

Similarly, the study by Chin, Slutsky and Raye and Creswell (2019) found that higher levels of mindfulness training resulted in lower levels of perceived stress in employees. A further study by Koncz et al. (2016) evaluated the effectiveness of mindfulness-based stress release program (SRP) on stress. The study found that mindfulness led to a reduction in perceived workplace stress levels. A study by Heckenberg, Eddy, Kent, and Wright (2018) found that mindfulness-based interventions were effective in reducing stress among employees. Based on past studies, mindfulness is generally a positive predictor of perceived stress. Based on the above review, the researcher formulated the hypothesis stated below:

*H2: Mindfulness' is inversely related to perceived work-related stress*

### ***Relationship between Mindfulness and Employee Wellbeing***

There is a rising interest in employee wellbeing due to the linkage between employee health and performance in the workplace (Juniper, 2011). There are several definitions of employee wellbeing. According to Rath and Harter (2010), employee wellbeing refers to what is important to an individual and how he or she thinks about and experiences. According to Shah and Marks (2004), wellbeing refers to feeling satisfied, happy and being fulfilled. Guest and Conway (2004) referred to employee wellbeing as the employee's perception or ability to manage the workload, control over their current job, support from supervisors and peers, relationships at work, clearly defined role and involvement in organisational changes. Wellbeing is sometimes referred to as strain encountered by employees in the workplace. Le Fevre (2003) defined strain as psychological, physical, or behavioural responses to stressors in the workplace by employees. According to Bradburn (1969) and the individual who has more positive over negative affect will be high in wellbeing. On the contrary, if the negative effect is higher than the positive, the person will be low in wellbeing. Therefore, employee wellbeing has several indicators, and there is no clear definition.

Past studies have identified several determinants of the wellbeing of employees in the workplace (Elovainio et al., 2014; Dickson-Smith et al., 2014). A study by Elovainio et al. (2014) indicated that employees' job demands, and job strain are risk factors for their wellbeing. Another study by Dickson-Smith et al. (2014) focussed on organisational culture. According to Dickson-Smith et al. (2014), an organisational culture that places high importance on the psychosocial needs of the employees will result in better employee's wellbeing. Another study by Zheng et al. (2015) revealed that higher levels of work-life balance among employees lead to better health and wellbeing. Past studies have also identified mindfulness as a predictor of employee wellbeing (Aikens, 2014; Bayer, Lykins and Peters, 2012). The study by Bayer, Lykins and Peters (2012) revealed that mindfulness and self-compassion were positively and significantly related to wellbeing. Similarly, a study by Aikens (2014) indicated that mindfulness intervention was effective in improving the wellbeing of employees. A review was undertaken by Lomas et al., (2017) revealed that mindfulness was a positive predictor of employee wellbeing and other outcomes. The past literature generally pointed to a positive relationship between mindfulness and employee wellbeing. The following hypothesis was developed for testing.

*H3: Mindfulness is positively associated with employee wellbeing.*

## **Methodology and Research Design**

### ***Research Design***

The researcher developed a design to undertake this research for testing the hypothesis based on the data collected from the sample of respondents identified. In this study, the research design encompassed sampling, instrumentation, collection of data and analysis of data (Singh, 2006). This was an explanatory study to empirically examine the relationship of mindfulness (independent variable) towards the three dependent variables (Sarstedt, and Mooi, 2019). In this quantitative study, numerical data was collected to test the hypothesis. This was a cross-sectional study that collected data by using a survey strategy (Saunders et al., 2016). A self-administered questionnaire was administered electronically. The SPSS and Smart-PLS tools were used to generate, analyse the data, and present the findings.

### ***Sample Size and Sampling Technique***

In this study, the researcher used a sampling technique as the study of the total population is not possible (Singh, 2006). The sampling makes the research findings economical and accurate (Singh, 2006). In this study, non-probability sampling was used as a listing of the respondents was not readily available. In non-probability sampling, there is no probability of selecting any individual (Singh, 2006). The researcher applied the accidental or haphazard sampling method because the sampling elements were not readily available (Singh, 2006). The study population was employees engaged in the services sector in Malaysia. For sample size calculation, the rule of thumb proposed by Green (1991) stated that if you want to test for individual parameters' effect, you need a sample size of  $N > 104 + k$  where  $k$  is the number of predictors. Hair et al. (2010) suggested that for multiple regression testing, the recommended sample size should be 15 to 20 for each predictor. Loehlin (1992) suggested that for Structural Equation Modelling, there must be at least 100 respondents and preferably 200. The target sample size for this study was 200 respondents.

### ***Instrumentation***

The researcher developed a self-administered questionnaire. The first part of the questionnaire was to collect personal information on the respondents. The second part had closed-ended questions, and a five-point Likert scale was used to establish the degree of agreement with specific statements. The questions for perceived stress were adapted from Cohen, Carmack, and Mermelstein (1983). Based on the testing, the reliability for the Perceived Stress Scale for three different samples was .84, .85, and .86, respectively. The questionnaire for Employee Engagement was adapted from the Work and Well-Being Survey (UWES) by Schaufeli, Bakker and Salanova (2006). The factorial validity of the UWES was established by Schaufeli, Bakker and Salanova (2006) by utilising confirmatory factor analyses. The test showed that the three scale scores have good internal consistency and test-retest reliability. To measure mindfulness, the Mindfulness Awareness Scale (MAAS) was used to test levels of awareness (Brown and Ryan, 2003). For employee wellbeing, the questionnaire developed by Smith and Smith (2017) was adapted. The questions were tested using factor analysis, and the results for all the questions were within the acceptable range (Smith and Smith, 2017).

### ***Data Collection and Analysis***

The researcher used a questionnaire for data collection, as this method is frequently used in this type of research (Singh, 2006). Through data collection, the researcher accumulated evidence analysed the results and verified the research hypothesis (Singh, 2006). The ethical considerations of privacy and confidentiality were adhered to by the researcher (Singh, 2006). A multi-mode method was used to collect data. The questionnaires were distributed by hand

and electronically. Without follow up, the success rate of responses received electronically can be low. According to Sheehan (2001), success rates can only be roughly 25-30%. The researcher sent 400 self-administered questionnaires electronically, and another 120 were distributed by hand using the direct distribute and collect method. After a lapse of one month, 212 completed questionnaires were received. Based on editing and checking, 12 questionnaires were removed.

For all the usable questionnaires, numerical codes were assigned, and data were entered into an Excel spreadsheet. The data was later uploaded into the SMART-PLS system (Version 3.0) and SPSS system (Version 20). The descriptive statistics were generated from the SPSS system. The Smart-PLS system was used to test validity and generate inferential statistics to test the hypothesis. To test the validity of the data, the researcher checked the composite reliability, factor loadings and multicollinearity statistics (Hair et al., 2010). In the inner model, the path coefficients and the level of significance were checked to examine the hypothesised relationships in this study. Bootstrapping with sub-samples of 1000 was done, and the results revealed the path coefficients and the t-values.

## Results

### *Demographic Profiles of Respondents*

In this study, 200 questionnaires were valid and used for analysis to generate descriptive and inferential statistics. There were 115 females (57.5%) and 85 males (42.5%). In terms of age, 62 (31%) of the respondents were aged between 26 to 33 years, and 23 (11.5%) were aged between 18 to 25 years. Another 79 (39.5%) of the respondents were aged between 34 to 41 years. The rest (18%) of the respondents were above the age of 42. In terms of income, 67 (33.5%) of the respondents reported an income between RM3,001 to RM4,500. Another 33 (16.5%) reported an income above RM4,600, A total 74 (37.0%) reported an income between RM1,501 to RM3,000. The rest (13%) reported an income below RM1,500. In terms of working experience, 38 respondents (19%) have been working for more than five years. Another 39 respondents (19.5%) have been working for less than one year. A total of 64 respondents (32%) have been working between 1 to 3 years. The rest (29.5%) have been working between 3 to 5 years.

### *Descriptive Statistics*

To test normality, the researcher checked the skewness and kurtosis of the data. The symmetry of data distribution is referred to as skewness. This shows the amount and direction of the skew. The kurtosis is the sharpness and height of the central peak of the data. According to George and Mallery (2010), the values of -2 and +2 for normal data distribution, as shown for skewness and kurtosis are considered acceptable. In this study, the values of kurtosis and skewness are within the acceptable range. The researcher also checked the mean value and standard deviation. The mean value for perceived stress low but high for the other three variables. The standard deviation that looks at the spread of data is low, and this indicates the normality of data distribution.

Table 1: Descriptive statistics

	Mean	Std. Dev	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Perceived Stress	2.0883	.87539	1.375	.172	1.422	.342
Engagement	3.9633	.89483	-1.484	.172	1.468	.342
Wellbeing	4.2183	.37932	-.298	.172	.703	.342
Mindfulness	3.9292	.73050	-1.254	.172	1.017	.342



***Construct Reliability***

The researcher checked the reliability of the questionnaire to confirm the consistency and stability of the responses or scores given by the respondents (McMillan, 2007). In this study, the reliability or consistency of the scores was checked based on the Cronbach's alpha value. As explained by Hair et al. (2017), the reliability or stability estimates are provided by the Cronbach's alpha based on the intercorrelations of the indicator variables. As stated by Blunch (2008), the alpha value must be at least 0.7 or above. In this study, the alpha values of engagement, perceived stress and mindfulness were higher than 0.7. However, for employee wellbeing, the score was 0.677 and this is considered within an acceptable range. The scores for the composite reliability are slightly higher than the value for Cronbach Alpha (Peterson & Kim, 2013). This confirmed that the reliability of scores in this study was not violated.

Table 2: Construct Validity and Reliability

	Cronbach's Alpha	rho_A	Comp. Reliability	AVE
Employee wellbeing	0.677	0.677	0.792	0.482
Engagement	0.928	0.929	0.943	0.736
Perceived Stress	0.916	0.918	0.934	0.704
Mindfulness	0.858	0.890	0.900	0.649

***Validity and Factor Loadings***

The researcher checked convergent validity and the outer loadings that indicate the relationships between the indicators that are measured and the reflective construct (Hair et al., 2017). The construct validity is established when the variables in this study are presumed to measure the same construct and if their intercorrelations are appreciable in magnitude (Kline, 2016). The convergent validity in this study was determined by looking at the outer loadings of each indicator variable and the average variance extracted (AVE). The researcher examined the effect on reliability and validity when an indicator variable with outer loading below 0.70 was removed (Hair et al., 2017). Two indicator variables with low factor loadings were removed. The deletion of two indicators led to an increase in composite reliability and content validity (Hair et al., 2017).

In this study, the measurement of convergent validity was based on the Average Variance Extracted (AVE) (Hair et al., 2017). The value of the average variance extracted (AVE) is equivalent to the communality of a construct. As stated by Hair et al. (2017), the value of the average variance extracted (AVE) should be 0.5 or higher. This indicates that, on average, the construct explains more than half of its indicators (Hair et al., 2017). An AVE with a low value shows that on average, more error remains in the items than the variance explained by the construct. The convergent validity in this study was established as the average variance extracted (AVE) was higher than 0.50 (Hair et al., 2017).

***Coefficient of Determination (R<sup>2</sup>)***

The value of "R squared" indicates the proportion of the variance in the dependent variable that is attributable to the independent variable. In this study, mindfulness was the only independent variable. The coefficient of determination (R<sup>2</sup>) value evaluates the effects of the independent variable on the three dependent variables. The R<sup>2</sup> value for employee wellbeing was low (17%). This indicates that only 17% of the variability in employee wellbeing is accounted for by mindfulness. The R<sup>2</sup> value for employee engagement was 85%, and job stress was 75%. Therefore, mindfulness is a strong predictor of employee engagement and job stress.

### ***Discriminant Validity***

The researcher also established the discriminant validity. The discriminant validity is established if the intercorrelations among a set of variables presumed to measure different constructs are not too high (Kline, 2016). Hair et al. (2017) explained that discriminant validity is established to look at the extent to which a construct is truly distinct from other constructs by empirical standards. In this study, the Fornell-Larcker criterion was used by the researcher to assess discriminant validity (Hair et al., 2017). The Fornell-Larcker criterion compares the square root of the AVE values with the latent variable correlations (Hair et al., 2017). As shown in the table below, the square root of each construct's AVE is higher than its highest correlation with any other construct. Therefore, discriminant validity was established in this study.

Table 3: Discriminant Validity Fornell-Lacker Criterion

	Employee wellbeing	Engagement	Job Stress	Mindfulness
Employee wellbeing	0.658			
Engagement	0.426	0.898		
Job Stress	-0.419	-0.815	0.839	
Mindfulness	0.410	0.878	-0.810	0.806

### ***Hypothesis Testing***

The path coefficients are shown in the structural model. The path coefficient indicates the estimated path relationships, as shown in the table below. Bootstrapping with 1000 subsamples was done. As stated by Hair et al. (2017), a large number of bootstrap samples are drawn from the original sample with a replacement model. The path coefficients indicate the hypothesised relationships among the exogenous and endogenous constructs. The p-values for all the three hypothesised relationships are significant in this study. In this study, the path coefficient between mindfulness and work engagement is 0.858, and the p-value is less than 0.05 ( $p < 0.05$ ). Therefore, hypothesis H1 is proven and accepted. The value for path-coefficient between mindfulness and perceived stress is -0.88. The p-value is also significant. This shows an inverse and significant relationship between mindfulness and perceived stress. Therefore, hypothesis H2 was accepted. Hypothesis H3 hypothesised that mindfulness is positively related to work engagement. The value of the path coefficient between mindfulness and employee wellbeing is positive and significant. Therefore, hypothesis H3 is also proven.

Table 4: Path Coefficients

	Original Sample	Sample Mean	Std Deviation	P Values
Mindfulness -> Employee wellbeing	0.410	0.419	0.060	0.000
Mindfulness -> Engagement	0.858	0.858	0.013	0.000
Mindfulness -> Job Stress	-0.880	-0.881	0.021	0.000

### ***Discussion and Conclusion***

The first hypothesis of this study was to find out whether mindfulness is a positive predictor of employee engagement in the services sector in Malaysia. The results of this study revealed that mindfulness was a very strong predictor of employees' engagement. This means that higher levels of mindfulness will lead to a higher level of employee engagement. The results are

consistent with findings from past studies. The results of this study are consistent with prior studies (Malinowski and Lim, 2015; Atkins, Hassed and Fogliati, 2015). The study by Malinowski and Lim (2015) revealed that mindfulness was a positive and significant predictor of work engagement. Higher levels of mindfulness will increase the focus and internal awareness of employees. This will lead to more considerable attention and clarity. Higher levels of mindfulness in the workplace will lead to a higher level to which employees are mindful in their work environment or setting (Dane & Brummel, 2013). In the workplace, an employee with a greater level of mindfulness is focused and does not react towards what is taking place in the workplace. This will improve the engagement of employees, and these employees will approach their relationship with their peers and leaders nonjudgmentally (Hülsheger, Alberts, Feinholdt and Lang, 2013). Therefore, greater levels of mindfulness enable organisations to foster employee (Hyland et al., 2015).

In this study, it was hypothesised that mindfulness is inversely related to perceived work-related stress. The results of this study revealed that mindfulness was inversely associated with perceived work-related stress among employees. The results also support the findings by past researchers (Wolever et al., 2012; Chin, Slutsky and Raye and Creswell, 2019). The study by Chin, Slutsky and Raye and Creswell (2019) revealed that perceived stress is lowered through mindfulness training in organisations. Similarly, Heckenberg, Eddy, Kent, and Wright (2018) also stated that mindfulness-based interventions lowered the stress levels in employees. Hyland et al. (2015) also stressed that mindfulness is effective in combatting and managing stress among the employees. Stress in the workplace stress affects both individuals and organisations in terms of productivity, performance, absenteeism and turnover intention. Therefore, mindfulness training can assist in reducing stress among employees and benefiting both employees and organisations (Hyland et al., 2015).

In this study, it was hypothesised that mindfulness was a positive predictor of employees' wellbeing. The results showed that mindfulness is positively and significantly related to employee's wellbeing. However, the impact of mindfulness on employee wellbeing was lower than the impact on employee engagement. The results of this study are also consistent with past studies (Aikens, 2014). Previous studies have also identified mindfulness as a predictor of employee wellbeing (Aikens, 2014; Lomas et al., 2017). The research by Aikens (2014) revealed that mindfulness intervention effectively improved the wellbeing of employees. Mindfulness training can improve the employee's wellbeing physically, emotionally, and psychologically (e.g., Aikens, 2014; Glomb et al., 2011). Mindfulness-based practices in organisations can improve the employee's emotions, self-regulation of feelings and behaviours, and this leads to better wellbeing in the workplace (Glomb et al., 2011). Mindfulness-based practices provide and support the mental and physical health of employees and such practices to promote the wellbeing of employees.

### ***Implications***

Mindfulness is gaining importance today, and a vast amount of knowledge is available to employees via social media and the internet. The potential implication of mindfulness on employee engagement and wellbeing can be far-reaching for both the employees and organisations. At the individual level, a better understanding of mindfulness can potentially lower stress levels and improve their engagement. Training and investment in mindfulness can benefit organisations in terms of losses incurred due to absenteeism, productivity and presenteeism. Investment in mindfulness can also benefit teams. Therefore, organisations should include mindfulness in human resource practices. However, mindfulness may not be a 'quick-fix' for employees and require long term commitment by leaders in organisations. Organisations should promote interventions that will facilitate learning and adoption of

mindfulness. Organisations should encourage and support leaders and other employees to practice mindfulness and improve employee engagement.

There were several implications of this study from the theoretical perspective. Based on the knowledge of the researcher, this is the first study on the effect of mindfulness on employee engagement, perceived stress and wellbeing. Therefore, this study is unique and added new knowledge relating to the role of mindfulness towards employee engagement, perceived stress and wellbeing. This study helps to fill the research gaps by providing new information towards the role of mindfulness in combatting stress and improving employees' engagement and wellbeing.

### ***Limitations and Recommendations for Future Research***

There were some limitations related to this study. These limitations paved the way for recommendations for studies in the future. The first limitation was related to demographic variables such as age and gender. There may be differences based on age or gender towards mindfulness. In addition, the demographic variables can act as moderators in the relationship between mindfulness and the dependent variables. Future studies should include demographic variables to test the differences based on specific demographic variables such as age. In addition, the demographic variable should be included as moderators to find out the changes in the strength of the relationship between the constructs. Secondly, this was a cross-sectional study that was carried out among employees in Kuala Lumpur only. Future studies should be extended to other sectors and towns. In the future, research-based on longitudinal studies of employees can provide better insights on the effect of mindfulness on employee engagement and wellbeing.

### **References**

- Aikens, K. A., Astin, J., Pelletier, K. R., Levanovich, K., Baase, C. M., Park, Y. Y., & Bodnar, C. M. (2014). Mindfulness Goes to Work: Impact of an Online Workplace Intervention. *Journal of Occupational and Environmental Medicine*, 56(7), 721–731
- Atkins, P. W., Hassed, C., & Fogliati, V. J. (2015). Mindfulness improves work engagement, wellbeing and performance in a university setting. In *Flourishing in Life, Work and Careers*. Cheltenham: Edward Elgar Publishing.
- Akanji, B. (2013). Occupational Stress: A Review on Conceptualisations, Causes and Cure. *Economic Insights – Trends and Challenges*, 2(3), 73 - 80
- Bakker, A. B., Demerouti, E., and Xanthopoulou, D. (2012). How do engaged employees stay engaged. *Ciencia and Trabajo*, 14(1), 15-21.
- Baptiste, N. R. (2008). Tightening the link between employee wellbeing at work and performance: A new dimension for HRM. *Management Decision*, 46(2), 284–309.
- Baer, R. A., Lykins, E. L. B., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators. *Journal of Positive Psychology*, 7(3), 230–238.
- Beehr, Terry A. (2014). *Psychological stress in the workplace* (psychology revivals). Routledge, London
- Berthon, P. R., & Pitt, L. F. (2019). Types of mindfulness in an age of digital distraction. *Business Horizons*, 62(2), 131-137.
- Blanding, M. (2015). Workplace Stress Responsible for Up To \$190B In Annual U.S. Healthcare Costs. <https://www.forbes.com/sites/hbsworkingknowledge/2015/01/26/workplace-stress-responsible-for-up-to-190-billion->
- Blunch, N. J. (2008). *Introduction to structural equation modelling using SPSS and AMOS*. Thousand Oaks, CA: Sage Publications Ltd.

- Bradburn, N. (1969). *The structure of psychological wellbeing*. Chicago: Aldine
- Brown, K. W., and Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological wellbeing. *Journal of Personality and Social Psychology*, 84(4), 822–848.
- Butler, B. S., & Gray, P. H. (2006). Reliability, mindfulness, and information systems. *Mis Quarterly*, 30(2), 211-224.
- Chin, B., Slutsky, J., Raye, J. and Creswell, J. D. (2019). Mindfulness Training Reduces Stress at Work: A Randomized Controlled Trial. *Mindfulness*, 10(4), 627–638.
- Cohen S, Kamarck T, Mermelstein R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 358–396
- Dahl, M. S. (2011). Organisational change and employee stress. *Management Science*, 57(2), 240–256.
- Dane, E. and Brummel, B. J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human relations*, 67(1), 105-128.
- Dane, E. (2011). Paying attention to mindfulness and its effects on task performance in the workplace. *Journal of management*, 37(4), 997-1018.
- Deci, E. L., & Ryan, R. (2000). The “what” and “why” of goals pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4), 227–268.
- Dickson-Swift, V., Fox, C., Marshall, K., Welch, N. and Willis, J. (2014). What really improves employee health and wellbeing: Findings from regional Australian workplaces. *International Journal of Workplace Health Management*, 7(3), 138-155.
- Elovainio, M., Heponiemi, T., Kuusio, H., Jokela, M., Aalto, A.M., Pekkarinen, L., Noro, A., Finne-Soveri, H., Kivimäki, M. and Sinervo, T. (2014). Job demands and job strain as risk factors for employee wellbeing in elderly care: an instrumental-variables analysis. *The European Journal of Public Health*, 25(1), 103-108.
- Fong, M.F. (2017, Nov17). Survey: Malaysians work most hours but are least productive. Star Online. <https://www.thestar.com.my/news/nation/2017/11/17/survey-malaysians-work-most-hours-but-are-least-productive>
- Gallup (2013). State of the American workplace: Employee engagement insights for US business leaders. <https://www.gallup.com/workplace/238085/state-american-workplace-report-2017.aspx>
- George, D. and Mallery, M. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference*. Boston: Pearson.
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work. *Research in Personnel and Human Resources Management*, 30(1), 115–157.
- Gotink, R. A., Chu, P., Busschbach, J. J., Benson, H., Fricchione, G. L., & Hunink, M. M. (2015). Standardised mindfulness-based interventions in healthcare: An overview of systematic reviews and meta-analyses of RCTs. *PloS One*, 10(4), e0124344. <https://doi.org/10.1371/journal.pone.0124344>
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, 26(3), 499–510.
- Gunasekara, A., & Zheng, C. S. M. (2019). Examining the effect of different facets of mindfulness on work engagement. *Employee Relations*, 41(1), 193-208.
- Guest, D. and Conway, N. (2004), *Employee WellBeing and the Psychological Contract: A Research Report*, CIPD, London.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a Silver Bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139–152.
- Hair, J. F., Black, W.C., Babin, J.B., Anderson, R.E., & Tatham, R.L. (2010). *Multivariate Data Analysis*. Pearson Prentice-Hall International, Upper Saddle River, New Jersey,



U.S.A.

- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.
- Hansen, E. (2016). The Effects of Mindfulness on Work-Related Stress, Wellbeing, Recovery Quality, and Employee Resilience. (Unpublished doctoral dissertation) University of Canterbury, New Zealand.
- Heckenberg, R. A., Eddy, P., Kent, S., & Wright, B. J. (2018). Do workplace-based mindfulness meditation programs improve physiological indices of stress. A systematic review and meta-analysis. *Journal of Psychosomatic Research*. Elsevier Inc., 114, 62–71
- Holton, M. K., Barry, A. E., & Chaney, J. D. (2016). Employee stress management: An examination of adaptive and maladaptive coping strategies on employee health. *Work*, 53(2), 299-305.
- Hülshager, U. R., Alberts, H. J., Feinholdt, A., & Lang, J. W. (2013). Benefits of mindfulness at work: the role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 310.
- Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organisational performance. *Industrial and Organisational Psychology*, 8(4), 576-602.
- Joyce, K., Pabayo, R., Critchley, J. A., & Bambra, C. (2010). *Flexible working conditions and their effects on employee health and wellbeing*. The Cochrane Collaboration, John Wiley and Sons.
- Juniper, B. (2011). Defining employee wellbeing. *Occupational Health & Wellbeing*, 63(10), 25.
- Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human relations*, 45(4), 321-349.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724
- Kompaso, S. M., & Sridevi, M. S. (2010). Employee Engagement: The Key to Improving Performance. *International Journal of Business and Management*, 5(12), 89-96.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delacorte Press.
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling* (4th ed.). New York, NY: The Guilford Press.
- Koncz, R., Wolfenden, F., Hassed, C., Chambers, R., Cohen, J., & Glozier, N. (2016). Mindfulness-based stress release program for university employees a pilot, waitlist-controlled trial and implementation replication. *Journal of Occupational and Environmental Medicine*, 58(10), 1021–1027.
- Langer, E. J., & Moldoveanu, M. (2000). Mindfulness research and the future. *Journal of Social Issues*, 56, 129–139.
- Langer, E. J. (1989). Minding matters: The consequences of mindlessness-mindfulness. *Advances in Experimental Social Psychology*, 22, 137–173.
- Le Fevre, M., Matheny, J. and Kolt, G.S. (2003). Eustress, distress, and interpretation in occupational stress. *Journal of Managerial Psychology*, 18(9), 726-44.
- Lieberman (2019). What Wellness Programs Don't Do for Workers. *Harvard Business Review* 14 Aug 2019. <https://store.hbr.org/product/what-wellness-programs-don-t-do-for-workers/H053U7>
- Loehlin, J.C. (1992). *Latent Variable Models: An introduction to factor, path and structural analysis*. Hillsdale, New Jersey.

- Lomas, T., Medina, J. C., Ivztan, I., Rupprecht, S., Hart, R., & Eiroa-Orosa, F. J. (2017). The impact of mindfulness on wellbeing and performance in the workplace: an inclusive systematic review of the empirical literature. *European Journal of Work and Organizational Psychology*, 26(4), 492-513.
- Malinowski, P., & Lim, H. J. (2015). Mindfulness at Work: Positive Affect, Hope, and Optimism Mediate the Relationship Between Dispositional Mindfulness, Work Engagement, and Well-Being. *Mindfulness*, 6(6), 1250–1262.
- Malaysian Investment Development Authority (2020). Services Sector. <https://www.mida.gov.my/home/services-sector/posts/>
- McMillan, J.H. (2007). *Classroom assessment: principles and practice for effective standards-based instruction* (4th ed.). Boston: Pearson.
- Muthiah, W. (2018, Oct 2). Stress and workplace depression must be addressed, says mental health association. *Star*. <https://www.thestar.com.my/news/nation/2018/10/02/stress-and-workplace-depression-must-be-addressed-says-mental-health-association>
- Macey, W. H., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organisational Psychology*, 1(1), 3–30.
- Murphy, L. R. (1995). Occupational stress management: Current status and future directions. *Trends in Organisational Behaviour*, 2, 1-14.
- Murugesan, M. (2018, November 29). Creating a healthy workplace. *New Straits Times*. <https://www.nst.com.my/lifestyle/heal/2018/11/435521/creating-healthy-workplace>.
- Olendzki, A. (2011). The construction of mindfulness. *Contemporary Buddhism*, 12(1), 55—70.
- Ologbo, A.C., and Sofian, S. (2012). Individual and Organisational Factors of Employee Engagement on Employee Work Outcomes. *International Journal of Business and Behavioral Sciences*, 3(3), 1-9.
- Peterson, R. A., & Kim, Y. (2013). On the Relationship between Coefficient Alpha and Composite Reliability. *Journal of Applied Psychology*, 98(1), 194-8.
- Pfeffer, J. (2019). The Hidden Costs of Stressed-Out Workers. *The Wall Street Journal*. <https://www.wsj.com/articles/the-hidden-costs-of-stressed-out-workers-11551367913>
- Rath, T. and Harter, J.K. (2010), *Wellbeing: The Five Essential Elements*, Gallup Press, New York, NY
- Reb, J., & Atkins, P. W. (Eds.). (2015). *Mindfulness in organisations: Foundations, research, and applications*. Cambridge University Press. United Kingdom
- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading Mindfully: Two Studies on the Influence of Supervisor Trait Mindfulness on Employee Well-Being and Performance. *Mindfulness*, 5(1), 36–45
- Reb, J., Narayanan, J., & Ho, Z. W. (2015). Mindfulness at work: Antecedents and consequences of employee awareness and absent-mindedness. *Mindfulness*, 6(1), 111-122.
- Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635.
- Rossi, A. M., Meurs, J. A., & Perrewe, P. L. (Eds.). (2013). *Improving employee health and wellbeing*. Information Age Publishing, Charlotte.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Santhoshkumar, G., Jayanthi, S., & Velanganni, R. (2019). Employee engagement. *Journal of Advanced Research in Dynamical and Control Systems*, 11(9 Special Issue), 1100–1104.
- Schaufeli, W. B., Salanova, M., González-Romá, V. and Bakker, A. B. (2002). The measurement of engagement and burn-out: A two sample confirmatory factor analytic

- approach. *Journal of Happiness studies*, 3(1), 71-92.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, 66(4), 701–716.
- Shah, H., & Marks, N. (2004). *A wellbeing manifesto for a flourishing society*. London: The New Economics Foundation
- Selye, H. (1974). *Stress without Distress*. New American Library: New York.
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of clinical psychology*, 62(3), 373-386.
- Smith, A. P., & Smith, H. (2017). A short questionnaire to measure wellbeing at work (Short-SWELL) and to examine the interaction between the employee and organisation. [http://orca.cf.ac.uk/101213/1/SmithandSmith\\_2\\_revised.pdf](http://orca.cf.ac.uk/101213/1/SmithandSmith_2_revised.pdf)
- Singh, Y.K. (2006). *Fundamentals of Research Methodology and Statistics*. New Age International (P) Ltd, New Delhi
- Sarstedt, M. and Mooi, E. (2019). *Cluster analysis. In A concise guide to market research*. Springer, Berlin, Heidelberg.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students*. Essex: Pearson
- Sheehan, K. B. (2001). E-mail survey response rates: A review. *Journal of computer-mediated communication*, 6(2), JCMC621.
- Truss, K., Soane, E., Edwards, C. Y. L., Wisdom, K., Croll, A. and Burnett, J. (2006). *Working life: employee attitudes and engagement 2006*. London, UK: Chartered Institute of Personnel and Development.
- Tiyyce, M., Hing, N., Cairncross, G. and Breen, H. (2013). Employee stress and stressors in gambling and hospitality workplaces. *Journal of Human Resources in Hospitality & Tourism*, 12(2), 126-154.
- The Department of Statistics Malaysia (2019). Statistics (Online) <https://www.dosm.gov.my/v1/index.php?r=column/ctwoBy>
- The Malaysian Reserve (2019, March 31). Productivity in services sector lacks growth, says MPC. <https://themalaysianreserve.com/2017/03/31/productivity-in-services-s>
- Wang, E. J., Berthon, P., Pitt, L., & McCarthy, I. P. (2016). Service, emotional labour, and mindfulness. *Business Horizons*, 59(6), 655—661.
- Wolever, R. Q., Bobinet, K. J., McCabe, K., Mackenzie, E. R., Fekete, E., Kusnick, C. A., & Baime, M. (2012). Effective and viable mind-body stress reduction in the workplace: A randomised controlled trial. *Journal of Occupational Health Psychology*, 17(2), 246–258.
- Whittington, J. L., Meskelis, S., Asare, E., & Beldona, S. (2017). Enhancing Engagement Through Effective Performance Management. In *Enhancing Employee Engagement* (pp. 81-90). Palgrave Macmillan, Cham.
- Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. (2015). Developing individual and organisational work-life balance strategies to improve employee health and wellbeing. *Employee Relations*, 37(3), 354–379.