MULTILEVEL ANALYSIS ON EMPLOYEE WELLBEING: THE ROLES OF AUTHENTIC LEADERSHIP, REWARDS, AND MEANINGFUL WORK

Eva Salmee Mohd Salleh^{1*}, Zuraina Dato' Mansor², Siti Rohaida Mohamed Zainal^{3**}, and Ida Md. Yasin¹

 ¹Putra Business School, Level 3, Office Building of the Deputy Vice Chancellor (Research & Innovation), Universiti Putra Malaysia, 43400 Seri Kembangan, Selangor, Malaysia
 ²Department of Management and Marketing, Faculty of Economics and Management, Universiti Putra Malaysia, 43400 Seri Kembangan, Selangor, Malaysia
 ³School of Management, Universiti Sains Malaysia, 11800 USM Pulau Pinang, Malaysia

Corresponding authors: evasalmee.phd17@grad.putrabs.edu.my*; siti_rohaida@usm.my**

Published online: 30 June 2020

To cite this article: Mohd Salleh, E.S., Mansor, Z.D., Mohamed Zainal, S.R., & Md. Yasin, I. (2020). Multilevel analysis on employee wellbeing: The roles of authentic leadership, rewards, and meaningful work. *Asian Academy of Management Journal*, *25*(1), 125–146. https://doi.org/10.21315/aamj2020.25.1.7

To link to this article: https://doi.org/10.21315/aamj2020.25.1.7

ABSTRACT

Employee wellbeing (EW) is becoming a genuine concern, and it has seen a resurgence in interest with the challenges in light of industrial revolution and globalisation. There is no doubt that wellbeing of the employees is one of the secret recipes that generates high return value for all levels of chains; the individual and the organisational productivity and growth as well as nation's prosperity. However, majority of leadership researchers have failed to capture the multi-dimensional concept of EW. Moreover, the studies of the impact of leadership styles on EW are limited and narrow-focused. Thus, this study aims to examine the role of authentic leadership (AL) style on EW. This study uses meso-mediational relationship through financial and non-financial rewards and meaningful work and how they affect EW. Data were collected from 343 employees in 30 manufacturing companies in Malaysia. The finding reveals that the positivity of authentic leaders indirectly influences EW through non-financial rewards and meaningful work. It is also suggested that financial

[©] Asian Academy of Management and Penerbit Universiti Sains Malaysia, 2020. This work is licensed under the terms of the Creative Commons Attribution (CC BY) (http://creativecommons. org/licenses/by/4.0/).

rewards and non-financial rewards should be measured separately in consideration of current socioeconomic conditions and employees' motivational needs.

Keywords: authentic leadership, rewards, meaningful work, employee wellbeing, multilevel

INTRODUCTION

Despite the latest revolution of Industry 4.0, the agenda of employee wellbeing (EW) remains a focus on management. The manufacturing industry is known to be highly exposed to technological transformation and a work environment that contributes to high psychosocial risks and hazard, which can affect EW. Most experts have flagged that psychosocial factors at work and employees' mental health are the two focuses that should be addressed seriously by the employer to improve EW (Lee, 2019; O'Donovan & Hayne, 2018; Pfeffer, 2018).

The technological convergence and globalisation have directly or indirectly caused transformation in the nature of work, work conditions, work designs (Kagermann et al., 2013), and created new employment needs. Indeed, the priority in psychosocial risks has increased (Guest, 2017). With automation and digital enhancement, especially in the Industry 4.0 era, human intervention diminishes; as Schwab (2016) claimed it is the era where the lines between the physical, digital, and biological spheres are blurred. From another perspective, it challenges organisations to "reengineer" and "redesign" their existing business processes and strategies to create the required capacity and flexibility.

In the current dynamic business landscape, an employee is required to have diverse skillsets and capabilities and be able to work in complex, volatile, and rapid technological convergence environment (Schwab & Sala-i-Martín, 2016). However, changes in technology may negatively influence work, leading to over-burden (Derks & Bakker, 2010), work-home intrusion (Derks et al., 2014), skill obsolescence, job insecurity as well as increased stress (Guest, 2017). Additionally, Derks and Bakker (2010) suggested that communication channel can also potentially cause increased work demand and work-overload, work-home interference, and influence the quality and the time spend for family bonding (Crampton et al., 1995). Based on the literature, it can be assumed that if jobs and psychosocial demands are not properly managed, they may lead to work-related stress; the main factor for adverse work-related health and wellbeing (WHO, 2017; CIPD/SimplyHealth, 2016).

Considering the demands of the latest generation of workforce, employers and leaders are expected to focus their attention on how to uplift EW. As stated by past literature, leadership styles are one of the main concerns in psychosocial work environment issues for EW (Montano et al., 2016; Wegge et al., 2014). It is because leaders have an impact on work demand, control at work, social support, as well as employees' morale and productivity. In another study, it is stated that specific leader's behaviour and leadership approaches could determine the sickness absence, early retirement, disability pensions, and job well-being (Kuoppala et al., 2008).

Recently, a few empirical studies have examined the influence of leadership style on EW (Rahimnia & Sharifirad, 2015; Kara et al., 2013; Choi et al., 2016). However, these studies cannot capture the concept of EW, which has multi-dimensional facets. Majority of leadership researchers have a focus on narrow aspects of wellbeing and generally measured EW in the form of job satisfaction (*hedonic*) and work engagement (*eudaimonic*) (Prottas, 2013; Rahimnia & Sharifirad, 2015). As claimed by Inceoglu et al. (2018), the EW issues in leadership literature have tremendously been neglected, and leadership researchers have not seriously considered EW.

Based on the limitations discussed above, this paper aims to address the concern by treating EW as an issue as well as an outcome of this study. This study will analyse the influence of authentic leadership (AL) on EW and examine the mediational processes of how AL can flourish EW. It also hoped that the concern by Hobfoll et al., 2018 to emphasise the uses of Conservation of Resources (COR) theory, from multilevel perspectives instead of individual-level of analysis, is addressed.

CONSERVATION OF RESOURCES THEORY

This study applies the gist of COR theory (Hobfoll, 1989) as underpinning theory. The theory explains the motivation that drives people to obtain and conserve resources they value for survival based on the evolutionary need. The reason why the paper used this theory is that this theory is commonly and widely used to explain the processes which lead to wellbeing (Mulki & Locander, 2006; Barling & Frone, 2017). COR theory posits two main vital principles, those are resource caravans and resources caravan passageways (Hobfoll et al., 2018). The resource caravan's policy highlights that resources (personal, social, material, energy, and condition resources) are *organic*, and they are developed together within organisational ecology and interconnected for both employees and organisation. Meanwhile, the resources caravan passageways' principle explains the environmental conditions

that foster and conserve the resources of individuals and organisations, or that diminish or deplete individual employee's or team's resource reservoirs and sustenance (Hobfoll, 2011). In organisational contexts, COR theory clearly explains how social and environmental conditions in an organisation play a significant role in EW issues and overall organisational success. However, Hobfoll et al. (2018) argued that most of the organisational research scholars overlooked the importance of multilevel perspective, where they extensively focused on resources at individual level.

AUTHENTIC LEADERSHIP, REWARDS, MEANINGFUL WORK, AND WELLBEING CONNECTIONS

In academic literature, many researchers have distinguished between hedonic (experience of pleasure and displeasure of life) and eudaimonic wellbeing (meaning in life and functioning well) (Waterman et al., 2008; Ryan & Deci, 2001). The hedonic approaches are prominently used to describe subjective wellbeing (Ryan & Deci, 2001), in which fundamentally consists of tripartite constructs including satisfaction of life, the existence of positive emotions and the absence of negative emotions (Cooke et al., 2016). Meanwhile, psychological wellbeing is a prominent model to describe eudaimonic approaches (Ryan & Deci, 2001; Waterman et al., 2008). Past studies are in consensus that both elements of *hedonic* and *eudaimonic* wellbeing are distinct, and their distinctiveness is supported by theoretical and empirical shreds of evidence (Diener et al., 2009). However, Kashdan et al. (2008) revealed that even though both hedonic and eudaimonic wellbeing are discrete, their concept is overlapping and share psychological approaches as a fundamental mechanism. This notion is similar to Ryan and Deci (2001) who indicated that in order to capture wellbeing as a multi-dimensional phenomenon, it should integrate both *hedonic* and *eudaimonic* elements.

In other literature, the concept of wellbeing is captured from objective and subjective perspectives. According to Gasper (2007), actual wellbeing is an "externally approved, and thereby normatively endorsed, non-feeling features of a person's life, matters such as mobility or morbidity." It captures the material resources (level of pay/income, food, shelter) and public attributes (education, health care, infrastructure, community networks) that individuals must have to survive and fulfil their needs (Western & Tomaszewski, 2016). In contrast, subjective wellbeing captures individuals' assessment of their life evaluations based on what they feel and think (Diener et al., 1999).

In the context of the current study, wellbeing is referred to as having a multidimensional nature that captures objective and subjective wellbeing; a mixture of an individual's life experiences and functionality. It recognises that the measurement of wellbeing should emphasise on individual's multi-dimensional assessments of their life; which considers the combined effects from individual personality, health condition, quality of the personal or social relationship, supportive social support, positive employment relationship, and other environmental factors (intrinsic or extrinsic) that add as per the general inclination of the fundamental needs and the experience of overall individuals' life fulfilment (Gasper, 2007; Diener et al., 1999; Waterman et al., 2008).

Based on the COR theory, this study argues that leadership style is one of the fundamental constructs that plays an essential role in influencing EW. This study proposes that leaders are expected to promote both positive psychological capacities and work condition to improve EW; specifically, through the resources that leaders can provide to their employees. For example, leaders can invest (funds) in improving the facilities and work environment to enhance their EW. With this, it is hoped employees may form positive beliefs about their working environment, and this will indirectly improve their ability to gain and build resources (Halbesleben et al., 2014). In another view, a study by Montano et al. (2016) suggested that leadership can be one of the psychosocial risk factors that can also give an impact on the individual's EW.

Further, this study focuses on the discussion of relating EW with AL, which is a contemporary leadership style introduced by Luthans and Avolio (2003). According to Luthans and Avolio (2003), AL is "a process that draws from both positive psychological capacities and a highly developed organisational context, which results in both greater self-awareness and self-regulated positive behaviours on the part of leaders and associates, fostering positive self-development" (p. 243). Empirically, organisational leadership has reached a consensus that AL styles are the most reliable predictor to employee's job satisfaction, work engagement, performance, organisational commitment (Walumbwa et al., 2008; Giallonardo et al., 2010). Leaders of this style are also profoundly mindful of their values and beliefs, as well as being genuine, dependable, and trustworthy; where they can create a positive work environment as well as promote positive emotions, transparency, truthfulness, and openness in the leader and employee relationship (Avolio & Gardner, 2005; Ilies et al., 2005). Other studies have demonstrated that AL positively influences both leaders (Toor & Ofori, 2009; Weiss et al., 2018) and EW (Nelson et al., 2014; Rahimnia & Sharifirad, 2015). On this basis, this study posits that AL is in line with the ideals of humanistic, which is the core of the wellbeing domains. The coherence of AL action with their genuine inner thoughts

and feelings are postulated to have a significant impact on EW. Thus, this study proposes that:

H₁: AL is positively related to EW

Based on the importance of resource loss principle (the belief that individuals resource loss is psychologically harmful than it is beneficial for them to gain the resources that they have lost) (Hobfoll et al., 2018), this study focuses on the underlying psychological human needs such rewards and meaningful work as mechanisms to elevate EW in the research model. Moreover, these two resources (awards and significant work experience) are aligned with the concept of support in COR theory that "either is centrally valued in their rights or act as a means to acquire centrally valued ends" (Hobfoll, 2011, p. 307).

Past works suggest that rewards elevate employee motivation and wellbeing. In the current research, the body of knowledge regarding rewards is expanding and this includes Total Rewards Model (Zingheim & Schuster, 2000; WorldatWork, 2007, 2015). In their total rewards model, they had integrated six elements of rewards, such as compensation, benefits, work-life effectiveness, workplace flexibility, recognition, and talent development where these are strategically designed to help the business organisations to attract, motivate, retain, and engage employees. According to Zingheim and Schuster (2000), the total rewards model is popular because it creates a win-win situation for both employees and employers.

This study argues that organisational goals and strategies direct the total reward system used in organisations. As postulated by Zingheim and Schuster (2000), there is a need to balance between financial and non-financial rewards to meet both organisational and personal needs. This includes expanding the perspective from traditional transactional dimensions (basic salary, compensation, and benefit) to cover the emotional connection and experiential aspects in boosting employees' personal fulfilment, both inside and outside of work. Meeting the expectation using rewards is very important. This is because rewards are something given to employees as an acknowledgement of their services and show of appreciation for their contributions or achievement. In modern organisations, rewards create a meaning to psychological contract and can enhance EW. It draws a special attention to employees' structure; what is expected from an organisation (i.e., career development, work-life balance, physical, and mental health workplace) and what is expected from them (i.e., commitment, loyalty). Other than that, a new generation of the workforce is found to be concerned with career development, lifelong learning opportunities, flexibility as motivational factors at work and the concept of work and life success (Kultalahti & Viitala, 2015; Ryan, 2017; Khera

& Malik, 2017). With all these arguments, it clearly shows that the element of rewards should be measured separately (financial versus non-financial rewards), based on current socioeconomic conditions that are aligned with employees' motivational needs. Thus, at the individual level, this study proposes the following hypotheses:

- H₂: Financial reward is positively related to EW
- H₃: Non-financial reward is positively related to EW

In addition, both types of rewards are suggested to elevate the experience of employees' meaningful work. Meaningful work is a state of contentment in which employees feel energetic, have a sense of meaning and purpose, and are fascinated with their work. Meaningful work is a form of thriving workplace. Cultivating a sense of meaningfulness is an ongoing dynamic process, which is significantly influenced by job characteristics, people, and work environment. Steger et al. (2012) defined meaningful work as "work that both significant and positive in valence (meaningfulness)."

Research evidence agreed that meaningful work provides numerous association benefits to employees, organisations, and society. Employees who found their work to be significant had reported greater wellbeing (Arnold et al., 2007; Steger et al., 2012) and had a positive relationship with engagement and performance at work (Ahmed et al., 2016). Therefore, this study proposes that:

- H₄: Meaningful work is positively related to EW
- H₅: Financial reward is positively related to EW through meaningful work
- H₆: Non-financial reward is positively related to EW through meaningful work

From organisational perspective, authentic leaders can foster the growth of authenticity in the employees, which consequently contributes to their wellbeing and performance (Avolio & Gardner, 2005). This happens because authentic leaders are good listeners and responsive to the employees' need, whereby these behaviours make employees feel important and appreciated. They also know how to reward their employees and foster the feeling of pride and mutual loyalty among, and between co-workers. Besides, the cordial relationship between the authentic leaders and employees is suggested to lead to a positive experience in employees' meaningful work. In general, maximising the AL engagement level with employees through appropriate rewards may foster significant work

experience and development of opportunity to improve EW. On these bases, we propose the following hypotheses:

H₇: AL is positively related to EW through financial rewards

H₈: AL is positively related to EW through non-financial rewards

H₉: AL is positively related to EW through meaningful work

RESEARCH MODEL

This study proposes a multilevel research design to examine the interplay of AL in financial rewards and non-financial rewards to revitalise meaningful work and enhance EW (Figure 1).



Figure 1. Proposed research model

DESIGN AND PARTICIPANTS

This study is non-experimental, with cross-sectional multilevel modelling research design. Multilevel modelling is also known as hierarchical linear modelling (Raudenbush & Bryk, 2002). In the multilevel approach, the data structure in the population is hierarchical. For example, employees nested within organisation,

patients nested within clinics, or students nested within classrooms. In terms of sampling procedure, multilevel research is viewed as a multistage sample from a hierarchically structured population (Hox, 2010). Multilevel approach is derived from the fact that individual phenomenon is influenced by social groups or the contexts to which they belong, and the sensation or properties of that group, in which these groups are influenced by the individuals who form that group (Hox, 2010). This approach recognises that the emergence of this phenomena is due to a combination of factors emerging from the same level as well as higher levels of analysis.

In this study, the data were collected from 343 employees in 30 manufacturing companies in Malaysia. The purposive sampling and professional connection approaches were used in this study due to the evidence that simple random sampling technique produces a shallow response rate among companies in Malaysia (Idris et al., 2014) and not cost-efficient for multilevel research design (Snijders & Bosker, 2012). Before data collection, the human resource department or top management of each company had been contacted through phone calls and formal letters. The purpose and procedures of the survey were duly explained.

The information about the company was taken from the 49th edition Federation of Malaysian Manufacturers (FMM) directory, and via snowball personal contact. Both private or hand-delivery drop-off/pick-up and postal mail methods (sending and returning survey by mail) were used. A number of between 5 and 15 respondents from each company were invited to complete the survey. The respondents were informed that participation is voluntary, and all information provided concerning their responses and identity is private and confidential.

The 30 companies that participated in this study came from 9 main sectors in manufacturing industry, such as automobile (17.5%, n = 60), electrical and electronics (15.2%, n = 52), basic metal (12.2%, n = 42), beverages (11.7%, n = 40), engineering support (11.4%, n = 39), textiles and textile products (11.1%, n = 38), pulp and paper (9.3%, n = 32), pharmaceuticals (22%, n = 6.4), and medical devices (5.2%, n = 18). Generation Y employees aged 21–37 years old formed the majority of respondents (72.3%, n = 248), followed by Generation X; 38–53 years (27.1%, n = 93), and baby boomers; 54–58 years (0.6%, n = 2). Of the 343 employees, 57.4% (n = 197) were female respondents and 42.6% (n = 146) were male respondents.

MEASURES

This study used a self-report questionnaire to assess all the constructs for study instrument. The survey instruments were initially developed in English. To capture suitable response rate, the research instrument was translated to Bahasa Malaysia using the back-translation procedure (Brislin, 1970). Ethical approval was obtained from the Ethics Committee for Research Involving Human Subjects, Universiti Putra Malaysia (JKEUPM).

The Confirmation Factor Analysis (CFA) was conducted to assess model fit, construct reliability (CR), and average variance extracted (AVE) of the study variables. Instead of CFA, the measurement model test was conducted to assess the construct validity; convergent and discriminant validity. This test is a useful remedy to eliminate or minimise the potential effects of standard method variance (Podsakoff et al., 2012).

To test the model fit, the fit indices and standard factor loadings had been examined. Multiple fit indices were applied to establish model fit. For example, relative Chisquare (X²/df) =< 5.0; adjusted goodness-of-fit index (AGFI) =< 0.90; goodnessof-fit index (GFI) =< 0.90; comparative fit index (CFI) =< 0.90; normed fit index (NFI) =< 0.90; Tucker Lewis index (TLI) =< 0.90; root means square error of approximation (RMSEA) =< 0.08. For assessment of factor loading, this study applied the criterion for standardised factor loadings including all factor loadings, whereby they must be more than 0.5, ideally 0.7 or higher; positive and not more than 1.0 (Hair et al., 2014). Items with low loadings and not meeting the criteria would be deleted.

CR or alternatively composite reliability is an alternative to Cronbach's coefficient alpha (α) to measure CR and internal consistency in scale items, which is usually used in conjunction with CFA in structural equation modelling (Peterson & Kim, 2013). An instrument with CR > 0.70 is considered reliable (Hair et al., 2014). In this study, convergent validity was verified through the assessment of the average variance extracted (AVE > 0.5). A high AVE (> 0.5) indicates a high concurrent validity (Fornell & Larcker, 1981). Meanwhile, the discriminant validity was assessed through AVE and squared correlation (r²). The discriminant validity is valid if AVE for the two constructs is more significant than their r² (AVE > r²) (Bryne, 2010). For example, discriminant validity between AL and financial rewards. AVE for AL is 0.85; financial rewards is 0.74. r² = 0.00; since both AVEs > 0.00, the two constructs between AL and financial rewards exhibit sufficient discriminant validity.

AUTHENTIC LEADERSHIP

AL was measured using 16 items from AL questionnaire (ALQ) by Avolio et al. (2007). The ALQ has excellent construct reliability, $\alpha = 0.96$ and convergent validity, AVE = 0.85 > 0.50. The ALQ consists of four dimensions which are *transparency*, *moral/ethical*, *balanced processing*, and *self-awareness*. The participants have to respond to the items based on a five-point Likert scale based on the following scale (1 = not at all, 2 = once in a while, 3 = sometimes, 4 = fairly often, and 5 = frequently). Example of items are as follows: (1) Transparency – My leader says exactly what he or she means; (2) Moral/Etical – My leader demonstrates beliefs that are consistent with action; (3) Balance processing – My leader solicits view that challenges his or her deeply held positions; and (4) Self awareness – My leader seeks feedback to improve interactions with others.

FINANCIAL REWARDS

Financial rewards instrument was adapted from remuneration and benefit reward categories by Schlechter et al. (2015). Four items were used with responses score on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample of an item is *My employer provides a provision of competitive pay package (basic salary plus benefits, allowances or variable pay)*. CR for financial rewards, $\alpha = 0.92$ and convergent validity, AVE = 0.74 > 0.50. The items showed excellent internal reliability and high convergent validity.

Non-financial Rewards

Non-financial rewards were measured using 12 items adapted from three elements of total rewards model – career advancement, work-life balance, and recognition developed by Pregnolato (2010) to operationalise our non-financial rewards construct. We conducted a CFA to test the career advancement, work-life balance, and recognition dimensions plus a higher-order factor model to fit our data. The responses were scored on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Samples of items are as follows: (1) career advancement – My employer provides an opportunity for career advancement/ promotions; (2) work-life balance – My employer supports a balanced lifestyle (between your work and personal life); and (3) recognition – My employer recognises the individual employee for his/her outstanding efforts. Based on the CFA test, the standardised factor loading – for career advancement (0.72), work-life balance (0.83), and recognition (0.81). The final CFA model consisting of 11 items indicates that this model fits the data (good; X²/df (< 0.50) = 2.254, GFI

(>= 0.9) = 0.974, AGFI (>= 0.9) = 0.944, CFI (>= 0.9) = 0.991, IFI (>= 0.9) = 0.985, TLI (>= 0.9) = 0.986, RMSEA (<= 0.08) = 0.061). CR for non-financial rewards, $\alpha = 0.86$ and convergent validity, AVE = 0.68 > 0.50. The items showed very good internal reliability and high convergent validity.

MEANINGFUL WORK

Meaningful work was measured using 9 items from Work as Meaning Inventory developed by Steger et al. (2012). We conducted a CFA to test construct reliability, convergent validity, and model fit. Based on the CFA test, the initial model needs to be modified. To get the model fit, three items had to be removed. The final CFA model consists of six items, and this model fits the data (good; X²/df (< 0.50) = 2.436, GFI (>= 0.9) = 0.984, AGFI (>= 0.9) = 0.952, CFI (>= 0.9) = 0.994, IFI (>= 0.9) = 0.994, TLI (>= 0.9) = 0.988, RMSEA (<= 0.08) = 0.065). The sample of item, *I have found a meaningful career* and the responses were scored on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Construct reliability for meaningful work, $\alpha = 0.94$ and convergent validity, AVE = 0.86 > 0.50. The items showed excellent internal reliability and high convergent validity.

EMPLOYEE WELLBEING

EW was measured using the short form of Mental Health Continuum (MHC-SF), where it consisted of 14 items assessing three dimensions of wellbeing emotional, social, and psychological. The scale was developed by Keyes (2005). The participants have to respond to items based on six-point Likert scale based on the experiences they had for the past two weeks (1 = never, 2 = once ortwice, 3 = about once a week, 4 = 2 or 3 times a week, 5 = almost every day, and 6 = every day). The sample of items: During the past two weeks, how often did you feel: (1) Emotional – happy; (2) Social – that you had something to contribute to society; and (3) Psychological – good at managing the responsibilities of your daily life. Based on the CFA test, the second order-3 factor (emotional, social, and psychological) model is the best-fitting model. The final CFA model consists of 9 items and this model fits the data (good; X^2/df (< 0.50) = 3.110, GFI (>= 0.9) = 0.955, AGFI (>= 0.9) = 0.912, CFI (>= 0.9) = 0.974, IFI (>= 0.9)= 0.975, TLI (>= 0.9) = 0.963, RMSEA (<= 0.08) = 0.079). CR for wellbeing, $\alpha = 0.89$ and convergent validity, AVE = 0.73 > 0.50. The items showed very good internal reliability and high convergent validity.

ANALYSIS STRATEGY

The IBM Statistical Package for Social Sciences (SPSS) 23.0 for Windows was used for data entry and checking that involves the processes of identifying data entry errors, checking potential outliers, and testing the normality of data. Besides, the descriptive statistics and correlations analyses for each variable will also be conducted using SPSS. Full result is presented in Table 1.

The HLM 7.03 software (Raudenbush et al., 2011) was used to test all the hypotheses. In the multilevel model, the variables reside in more than one level of analysis. Therefore, it advances three types of relationship (Mathieu et al., 2012). First, lower-level direct relationship is illustrated in Table 2. Second, direct cross-level influences, such as the effects of AL on rewards, meaningful work and individual's EW (shown in Table 3). Third, cross-level interactions may well occur, whereby the relationships between lower-level predictors and outcomes vary as a function of higher-level factors. In summary, the multilevel approach has stimulated the examination of joint influences of predictors at different levels on lower-level issues of interest; while at the same time acknowledging the fact that individuals are usually nested in higher-level units in organisational settings and ideal for contextual influences.

This study applied Mathieu and Taylor (2007) approach to test meso-mediational relationship; cross-level prediction of intercepts. To test the indirect effect, this study used web-based tool, Monte Carlo method (Selig & Preacher, 2008) with 95% confidence interval (CI) and 20,000 bootstraps resample. This study applied bootstrapped CI based on MacKinnon et al. (2004)'s recommendations to get a more accurate estimation on the significant indirect relationship. The effect is significant if the 95% CI, denoted by lower and upper bounds excludes the value of zero.

RESULTS

Aggregation Procedure

Table 1

Means, standard deviations, CR, AVE (on the diagonal), and squared correlation coefficient (on the off-diagonal for study instruments)

Cor	struct	Mean	Std. dev	CR	1	2	3	4	5
1	AL	3.57	0.87	0.96	0.85				
2	Financial rewards	4.30	0.75	0.92	0.00	0.74			
3	Non-financial rewards	3.98	0.69	0.86	0.01	0.56	0.68		
4	Meaningful work	4.92	1.03	0.94	0.17	0.03	0.13	0.86	
5	Wellbeing	4.65	0.90	0.89	0.15	0.01	0.08	0.30	0.73

Aggregation procedure was conducted and "used to attach to higher-level units the mean value of a lower-level explanatory variable" (Hox, 2010, p. 360). To assess the suitability of AL as an organisational-level construct, we assess the interrater agreement within-group estimates; $r_{(WG)}$ (j) intraclass correlation (ICC [1]) and one-way random-effects ANOVA. Based on the results, mean $r_{(WG)}$ (j) = 0.94, SD = 0.05. Hence, it indicates that AL has a very strong inter-rater agreement (LeBreton & Senter, 2008). The intraclass correlation coefficient (ICC [1]) for AL is 0.17, indicating that differences between organisations could explain 17% of variance in AL. The ICC (1) values are within the accepted range. As far as organisational research is concerned, the ICC (1) value should be between 0.05 and 0.20 for multilevel analysis justification (Bliese, 2002). The test for one-way random-effects ANOVA for AL shows significant between-group variance, F-value = 1.94, *p* =< 0.001. Therefore, AL style is justified in reflecting properties of the organisational level construct.

	Wellbei	ng Wellbeing	y Wellbeing	Wellbeing	Wellbeing	Meaningful we	ork Meanin _§	gful work	
Model	1	2	3	4	5	9		7	
Lower-level effects									
Financial rewards	0.05 (0.0) p = 0.2	$\begin{array}{ccc} 5) & 0.09 & (0.08) \\ 6 & p = 0.28 \end{array}$	•			$0.09 (0.03)^*$ p = 0.02			
Non-financial reward	ds		$0.23 (0.04)^{***}$	$0.33 (0.05)^{***}$			0.27 ($0.06)^{***}$	
Meaningful work	0.43 (0.05	ز)*** ا	0.37 (0.04)***		$0.43 (0.04)^{***}$				
to ciclimin with	10101-1000 IN	ljeun							
	Financial rewards	Non-financial rewards	Meaningful work	Meaningful work	Meaningful work	Wellbeing	Wellbeing	Wellbeing	Wellbeing
Model	8	6	10	11	12	13	14	15	16
Lower-level effects									
Financial rewards			$0.69(0.0)^{***}$					0.08 (0.06) p = 0.21	
Non-financial rewards				$0.28~(0.05)^{***}$					0.27 (0.04)***
Meaningful work						$0.43(0.04)^{***}$			
Cross-level effect									
AL	$0.01 \ (0.13)$ p = 0.91	0.22 (0.09) p = 0.11	$0.69~(0.11)^{***}$	0.62 (0.09)***	0.69 (0.11)***	$0.14 \ (0.13)$ p = 0.71	0.46 (0.16)*	$0.46~(0.16)^{*}$	$0.39~(0.14)^{*}$

Multilevel Analysis on Employee Wellbeing

Table 2

HYPOTHESIS TESTING

Hypothesis 1 proposes that AL is positively related to EW. Based on the results, as indicated in Model 14, $\Upsilon = -0.46$, SE = 0.16, p = 0.009. The result shows that AL has significant relationship with EW. Thus, hypothesis 1 is supported.

Hypothesis 2 proposes that financial reward is positively related to EW. Based on the result in Model 2, $\Upsilon = -0.09$, SE = 0.08, p = 0.28. This result indicates that there is no significant relationship between financial reward and EW. Therefore, Hypothesis 2 is not supported.

Hypothesis 3 proposes that non-financial reward is positively related to EW. Based on the result in Model 4, $\Upsilon = 0.33$, SE = 0.05, p = < 0.001. The result indicates that non-financial reward has significant relationship with EW. Thus, Hypothesis 3 is supported.

Hypothesis 4 proposes that financial reward is positively related to meaningful work. Model 6 shows that $\Upsilon = 0.09$, SE = 0.03, p = 0.02. The result indicates that financial reward has significant relationship with meaningful work. Therefore, Hypothesis 4 is supported.

Hypothesis 5 proposes that non-financial reward is positively related to meaningful work. Model 7 shows that $\Upsilon = 0.27$, SE = 0.06, p = < 0.001. The result suggests that non-financial reward has significant relationship with meaningful work. Therefore, Hypothesis 5 is supported.

Hypothesis 6 proposes that meaningful work is positively related to EW. Based on Model 5, $\Upsilon = 0.43$, SE = 0.04, p =< 0.001. The results indicate that meaningful work has a significant positive relationship with EW. Therefore, Hypothesis 6 is supported.

Hypothesis 7 proposes that financial reward is positively related to EW through meaningful work (FinR \rightarrow Meaningful work \rightarrow Wellbeing). Based on Model 1, $\beta = 0.43$, SE = 0.05, LL = -0.02027, UL = 0.06526, p =< 0.001. An indirect effect is significant. The association between financial rewards and wellbeing is not significant, $\beta = 0.05$, SE = 0.05, p = 0.26 as stated in Model 2, the direct effect of financial rewards and wellbeing, $\beta = 0.09$, SE = 0.08, p = 0.28. Therefore, Hypothesis 7 is supported.

Hypothesis 8 proposes that non-financial reward is positively related to EW through meaningful work (Non-FinR \rightarrow Meaningful work \rightarrow Wellbeing). Model 3

shows the results of indirect effect of non-financial rewards on wellbeing $\beta = 0.37$, SE = 0.04, LL = 0.05316, UL = 0.1217, p =< 0.001. The indirect effect is significant. The association between non-financial rewards and wellbeing is significant, $\beta = 0.23$, SE = 0.04, p =< 0.001. The direct effect of non-financial rewards and wellbeing in Model 4 exhibits $\beta = 0.33$, SE = 0.05, p = < 0.001. Therefore, Hypothesis 8 is supported.

Hypothesis 9 proposes that AL is positively related to EW through financial rewards (AL \rightarrow FinR \rightarrow Wellbeing). Model 15 shows that $\beta = 0.08$, SE = 0.06, p = 0.21. The indirect effect is not significant. Therefore, Hypothesis 9 is not supported.

Hypothesis 10 proposes that AL is positively related to EW through non-financial rewards (AL \rightarrow Non-FinR \rightarrow Wellbeing). Model 16 shows that $\beta = 0.27$, SE = 0.04, p =< 0.001; LL = -0.1211, UL = 0.471. The indirect effect is significant. Therefore, Hypothesis 10 is supported.

Hypothesis 11 proposes that AL is positively related to EW through meaningful work. Based on the results of the test stated in Model 13: an indirect effect of AL on wellbeing (AL \rightarrow Meaningful work \rightarrow Wellbeing). B = 0.43, SE = 0.04, LL = -0.05948, UL= 0.0425, p =< 0.001. The indirect effect is significant. In Model 14, direct effect of AL and wellbeing is shown, where $\beta = 0.46$, SE = 0.16, p = 0.009. Therefore, Hypothesis 11 is supported.

DISCUSSION

In this study, a multilevel research model is proposed to explain the influence of AL style on rewards and meaningful work to flourish EW. Based on the findings, the majority of the hypotheses are supported. Interestingly, at the individual level, financial rewards are found to have no significant relationship with EW (Hypothesis 1). For the cross-level effect, the financial rewards are found to not have mediation effect on AL and EW relationship (Hypothesis 9). However, in Hypothesis 7, financial rewards lead to meaningful work and EW. Meaningful work contributes to a positive employee experience when the employees realise that their job serves some real purpose in their life.

Moreover, this study has found that while financial reward is a powerful way to reinforce employees' performance or behaviours, when the value of rewards is not connected or developed with the employees' emotional and psychological needs, or the intrinsic motivators do not exist without a once-present extrinsic reward to meet the similar or new organisational goals after some time, it may undesirably

affect EW in the long run. Thus, based on this finding, it is suggested that financial rewards solely will have a limited impact over time if the value is not integrated with other elements of non-financial rewards. Both financial and non-financial rewards must be tied together for the most impact on EW. Understanding the needs of employees is vital to this process to increase EW and motivation.

Additionally, based on the findings, this study argues that AL is not necessarily specific to job characteristic or job design. It is found that AL indirectly corresponds to the intrinsic states of the employee through non-financial rewards and meaningful work. The sincerity, openness, and altruistic leadership behaviour innate in their characters, are assumed to add value to people or employee and help them to understand their sense of purpose and meaning in life. Furthermore, the authentic leaders' actions and behaviour have shown to foster positive psychological resources in the employees, where this will lead to better meaningful work experiences, and indirectly EW.

On other hand, the results show that non-financial rewards have a direct positive significant effect on EW. Non-financial rewards also fully mediate the relationship between AL and meaningful work. It is revealed that when organisations provide the resources and fulfill a tremendous relational psychological contract to their employees, it is highly likely that the employees feel their work and contribution are recognised and valued. Thus, it increases the sense of meaningful work as a form of a sustainable source of wellbeing. This confirms that in modern organisations, non-financial rewards are expected to be dynamic and flexible based on current working condition and socioeconomic landscapes. This study gives a strong signal to human resource practices that the types and the contents of rewards are considered as the main imperative part in determining employees' needs and motivations from time to time.

Organisations that are concerned about improving the wellbeing of their employees should play their role in achieving this goal. For example, in this case, the manufacturing organisations shall give more resources and training to develop their employees, and create a supportive work environment that reduces psychological risks, specifically the stress and emotional fatigue caused by excessive work demand, highly uncertain task design, poor management support, bad organisational culture, or inadequate enforcement in safety and health policies. Leaders shall also help to reduce high work demands and stressful working conditions.

This study provides valuable information and contributes to the body of knowledge in several ways. First, this study extends the COR theory of resource caravan

passageway in leadership and human resources literature. COR theory is prominent and has been widely used in the stress, work psychology, and occupational and health studies (Hobfoll, 2011; Hobfoll et al., 2015). Most prior studies that applied COR theory have extensively examined resources at the individual level rather than the organisational level, in which they overlooked the importance of ecological perspective. This study has responded to the call from Hobfoll et al. (2018) and emphasised on the resource caravan passageway principles using multilevel approaches to reflect organisational setting. Second, this study extends the wellbeing construct in broader perspectives. EW involves three main facets of wellbeing: (1) emotional (hedonic - happy, interested in life and satisfied); (2) social (eudaimonic - i.e., social integration, social actualisation, social coherence); and (3) psychological wellbeing (eudaimonic - i.e., self-acceptance, personal growth, purpose in life). Third, this study broadens the understanding of how rewards influence meaningful work and wellbeing by extricating the type of rewards into financial and non-financial rewards. This is done to understand the employee demands based on individual employees' reward preferences. Fourth, this study confirms that non-financial rewards have significant evidence in cultivating meaningful work experiences and improving EW. Finally, this study extends multilevel research design in organisational research in the Malaysian context.

However, this study is limited to cross-sectional data. A cross-sectional research does not enable cause-and-effect relationship. Besides, this study uses non-probability sampling technique and only refers to the manufacturing industry in Malaysia. Therefore, the results cannot be used to generalise the overall population. Nevertheless, this study provides valuable information to employers regarding efforts that can be considered to improve EW based on Malaysian preferences. Future research should conduct longitudinal analyses, ideally taken over two or more periods for much stronger assumptions about causality and reciprocal effects between variables. Future research might also focus on examining the separate or combined impact of other organisational resources such as culture, climate, or human resources management on EW.

CONCLUSION

It is recognised that when the wellbeing of an employee is ultimately good, the moral and obligations of the employees toward their organisation are much more intense, in the sense that they are emotionally and psychologically attached to the organisation and possess greater satisfaction of workplace wellbeing. It is suggested that future research enlightens the positive effect of employees'

health and wellbeing are part of employer responsibilities. They should also be integrated with strategic management planning as part of organisational culture and comprehensive wellbeing strategies to provide better working condition and for employees' long-term wellbeing.

REFERENCES

- Ahmed, U., Majid, A.H., & Zin, M.L. (2016). Meaningful work and work engagement: A relationship demanding urgent attention. *International Journal of Academic Research in Business and Social Sciences*, 6(8), 116–122.
- Arnold, K.A., Turner, N., Barling, J., Kelloway, E.K., & McKee, M.C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12, 193–203.
- Avolio, B.J., & Gardner, W.L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly* 16, 315–338.
- Avolio, B.J., Gardner, W.L., & Walumbwa, F.O. (2007). Authentic Leadership Questionnaire (ALQ). Mind Garden. http://www.mindgarden.com.
- Barling, J., & Frone, M.R. (2017). If only my leader would just do something! Passive leadership undermines employee well-being through role stressors and psychological resource depletion. *Stress and Health*, 33, 211–222. https://doi .org/10.1002/smi
- Bliese, P. (2002). Within-group agreement, non-independence, and reliability. In K. Klein,
 & S. Kozlowski, *Multi-level theory, research, and methods in organization*. Jossey-Bass.
- Brislin, R.W. (1970). Back-translation for cross-cultural research. Journal of Cross-Cultural Psychology, 1(3), 185–216.
- Bryne, B. (2010). *Structural equation modeling with AMOS: Basic concepts, application and programming.* Lawrence Erlbaum Associates.
- Choi, S.L., Goh, C.F., & Adam, M.B. (2016). Transformational leadership, empowerment, and job satisfaction: The mediating role of employee empowerment. *Human Resources for Health*, 14(1), 1–14.
- CIPD/SimplyHealth. (2016). *Absence management survey*. Chartered Institute of Personnel and Development (CIPD).
- Cooke, P.J., Melchert, T.P., & Connor, K. (2016). Measuring well-being: A review of instruments. *The Counseling Psychologist Volume*, 44(5), 730–757.
- Crampton, S.M., Hodge, J.W., Mishra, J.M., & Price, S. (1995). Stress and stress management. *Advanced Management Journal*, 60(3), 10–24.
- Derks, D., & Bakker, A. (2010). The impact of e-mail communication on organizational life. *Cyberpsychology*, 4(1), 1–14.
- Derks, D., Brummelhuis, L.L., Zecic, D., & Bakker, A.B. (2014). Switching on and off...: Does smartphone use obstruct the possibility to engage in recovery activities? *European Journal of Work and Organizational Psychology*, 23(1), 80–90.

- Diener, E., Suh, E.M., Lucas, R.E., & Smith, H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302.
- Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D.-W., & Oishi, S. (2009). New measures of well-being. In E. Diener, *Social indicators research series: vol. 39. Assessing well-being: The collected works of Ed Diener* (pp. 247–266). Springer Science and Business Media. https://doi.org/10.1007/978-90-481-2354-4 12
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 41–54.
- Gasper, D. (2007). Human well-being: Concepts and conceptualizations. In M. McGillivray, *Human well-being. Studies in development economics and policy* (pp. 23–64). Palgrave Macmillan.
- Giallonardo, L., Wong, C., & Iwasiw, C. (2010). Authentic leadership of preceptors: Predictor of new graduate nurses' engagement and job satisfaction. *Journal of Nursing Management*, 18(8), 993–1003.
- Guest, D.E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*, 27, 22–38. https://doi.org/10.1111/1748-28583.12139
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2014). Multivariate data analysis (7th ed.). Pearson New International Edition.
- Halbesleben, J.R., Neveu, J.-P., Paustian-Underdahl, S.C., & Westman, M. (2014). Getting to the "COR": Understanding the role of resources in conservation of resources theory. *Journal of Management*, 40(5), 1334–1364.
- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44, 513–524. https://doi.org/10.1037/0003-066X.44.3.513
- Hobfoll, S.E. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84, 116–122.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 103–128.
- Hobfoll, S.E., Stevens, N.R., & Zalta, A.K. (2015). Expanding the science of resilience: Conserving resources in the aid of adaptation. *Psychological Inquiry*, 26, 174– 180.
- Hox, J.J. (2010). *Multilevel analysis techniques and applications quantitative methodology series* (2nd ed.). Routledge Taylor & Francis Group.
- Idris, M.A., Dollard, M.F., & Yulita. (2014). Psychosocial safety climate, emotional demands, burnout, and depression: A longitudinal multilevel study in the Malaysian private sector. *Journal of Occupational Health Psychology*, 19(3), 291–302.
- Ilies, R., Morgeson, F.P., & Nahrgang, J.D. (2005). Authentic leadership and eudae-monic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16(3), 373–394.

- Inceoglu, I., Thomas, G., Chu, C., Plans, D., & Gerbasi, A. (2018). Leadership behavior and employee well-being: An integrated review and a future research agenda. *The Leadership Quarterly*, 29, 179–202.
- Kagermann, H., Wahlster, W., & Helbig, J. (2013). *Recommendations for implementing the strategic initiative Industrie 4.0: Final report of the Industrie 4.0 Working Group.* Federal Minitry of Education and Research.
- 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.
- Kashdan, T.B., Biswas-Diener, R., & King, L.A. (2008). Reconsidering happiness: The costs of distinguishing between hedonics and eudaimonia. *The Journal of Positive Psychology*, 3, 219–233.
- Keyes, C.L. (2005). The subjective well-being of America's youth: Toward a comprehensive assessment. *Adolescent and Family Health*, *4*, 3–11.
- Khera, S.N., & Malik, S. (2017). Conceptualizing and measuring life priorities of Generation Y: evidences from Indian context. *Industrial and Commercial Training*, 49(2), 80–86.
- Kultalahti, S., & Viitala, R. (2015). Generation Y Challenging clients for HRM? Journal of Managerial Psychology Volume, 30(1), 101–114.
- Kuoppala, J., Lamminpaa, A., Liira, J., & Vainio, H. (2008). Leadership, job wellbeing, and health effects – A systematic review and a meta-analysis. *Journal* of Occupational and Environmental Medicine, 50(8), 904–915. https://doi.org/ 10.1097/JOM.0b013e31817e918d
- LeBreton, J.M., & Senter, J.L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4), 815–852.
- Lee, L.T. (2019, February 19). "No workplace is immune to mental disorders" Tan Sri Lee Lam Thye. *New Straits Times*. https://www.nst.com.my/news/ nation/2019/02/461627/no-workplace-immune-mental-disorders
- Luthans, F., & Avolio, B.J. (2003). Authentic leadership: A positive developmental approach. In K.S. Cameron, J.E. Dutton, & R.E. Quinn, *Positive organizational* scholarship (pp. 241–261). Barrett-Koehler.
- MacKinnon, D.P., Lockwood, C.M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 1–24. https://doi.org/10.1207/s15327906mbr3901_4
- Mathieu, J.E., Aguinis, H., Culpepper, S.A., & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *Journal of Applied Psychology*, 97(5), 951–966.
- Mathieu, J.E., & Taylor, S.R. (2007). A framework for testing meso-mediational relationships in organizational behavior. *Journal of Organizational Behavior, 28*, 141–172.
- Montano, D., Reeske, A., Franke, F., & Huffmeier, J. (2016). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. *Journal of Organizational Behavior*, 38(3), 327–350. https://doi.orog/10.1002/job.2124

- Mulki, J.P., & Locander, W.B. (2006). Emotional exhaustion and organizational deviance: Can the right job and a leader's style make a difference? *Journal of Business Research*, 59, 1222–1230.
- Nelson, K., Boudrias, J.-S., Brunet, L., Morin, D., Civita, M.D., Savoie, A., & Alderson, M. (2014). Authentic leadership and psychological well-being at work of nurses: The mediating role of work climate at the individual level of analysis. *Burnout Research*, 1, 90–101.
- O'Donovan, D., & Hayne, P. (2018). *Employee wellbeing research 2018: How employers, CEOs and government are driving new agendas*. Reba Group.
- Peterson, R.A., & Kim, Y. (2013). On the relationship between coefficient alpha and composite reliability. *Journal of Applied Psychology*, 98(1), 194–198.
- Pfeffer, J. (2018, September). *The overlooked essentials of employee well-being*. McKinsey & Company. https://www.mckinsey.com/business-functions/organization/our -insights/the-overlooked-essentials-of-employee-well-being
- Podsakoff, P.M., MacKenzie, S.B., & Podsakoff, N.P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review* of Psychology Volume, 63, 539–569.
- Pregnolato, M. (2010). *Total rewards that retain: A study of demographic preferences.* University of Cape Town.
- Prottas, D. (2013). Relationships among employee perception of their manager's behavioral integrity, moral distress, and employee attitudes and well-being. *Journal of Business Ethics*, 113, 51–60. https://doi.org/10.1007/s10551-012-1280-z
- Rahimnia, F., & Sharifirad, M. (2015). Authentic leadership and employee well-being: The mediating role of attachment insecurity. *Journal of Business Ethics*, 132, 363–377. https://doi.org/10.1007/s10551-014-2318-1
- Raudenbush, S.W., & Bryk, A.S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). SAGE.
- Raudenbush, S.W., Bryk, A.S., Cheong, Y.F., Congdon, R.T., & du Toit, M. (2011). HLM 7: Hierarchical linear and nonlinear modeling. Scientific Software International.
- Ryan, J. (2017). Generation Z vs. millennials: The 8 differences you need to know. https:// hrdailyadvisor.blr.com/2017/09/25/generation-z-vs-millennials-8-differences -need-know/
- Ryan, R., & Deci, E.L. (2001). On happiness and Human Potentials: A Review of research on Hedonic and Eudaimonic Wellbeing. *Annual Review of Psychology*, 52, 141–166.
- Schlechter, A., Thompson, N.C., & Bussin, M. (2015). Attractiveness of non-financial rewards for prospective knowledge workers: An experimental investigation. *Employee Relations*, 37(3), 274–295.
- Schwab, K. (2016, January 14). The Fourth Industrial Revolution: What it means, how to respond. The World Economic Forum. https://www.weforum.org/ agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-torespond/
- Schwab, K., & Sala-i-Martín, X. (2016). *The global competitiveness report 2016–2017*. World Economic Forum.

- Selig, J.P., & Preacher, K.J. (2008, June). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. http://www.quantpsy.org/medmc/medmc.htm
- Snijders, T., & Bosker, R. (2012). *Multilevel analysis: An introduction to basic and applied multilevel analysis* (2nd ed.). SAGE.
- Steger, M., Dik, B., & Duffy, R. (2012). Measuring meaningful work: The Work as Meaning Inventory (WAMI). Journal of Career Assessment, 20, 322–337.
- Toor, S.-U.-R., & 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, 299–313.
- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T., & Peterson, S. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management Volume*, 34(1), 89–126. https://doi.org/10.1177/0149206307308913
- Waterman, A.S., Schwartz, S.J., & Conti, R. (2008). The implications of two conceptions of happiness (hedonic enjoyment and eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*, 9(1), 41–79. https://doi.org/10.1007/ s10902-006-9020-7
- Wegge, J., Shemla, M., & Haslam, C. (2014). Leader behavior as a determinant of health at work: Specification and evidence of five key pathways. *German Journal of Research in Human Resource Management*, 28, 6–23.
- Weiss, M., Razinskas, S., Backmann, J., & Hoegl, M. (2018). Authentic leadership and leaders' mental well-being: An experience sampling study. *The Leadership Quarterly*, 29, 309–321.
- Western, M., & Tomaszewski, W. (2016). Subjective wellbeing, objective wellbeing and inequality in Australia. PLoS One, 11(10), 1–20.
- WHO. (2017, September). *Mental health in the workplace*. WHO. http://www.who.int/ mental_health/in_the_workplace/en/
- WorldatWork. (2007). The WorldatWork handbook of compensation, benefits and total rewards: A comprehensive guide for HR professionals. John Wiley & Sons.
- WorldatWork. (2015, May 15). WorldatWork introduces revised total rewards model. WorldatWork. https://www.worldatwork.org/docs/ worldatworkpressreleases/2015/worldatwork-introduces-revised-total-rewardsmodel.html.
- Zingheim, P.K., & Schuster, J.R. (2000). Total rewards for new and old economy companies. *Compensation and Benefits Review*, 32(6), 20–23. https://doi .org/10.1177/08863680022098091.