

Academic Paper

# The Interplay Between Organisational Learning Culture, The Manager as Coach, Self-Efficacy and Workload on Employee Work Engagement

Richard K. Ladyshevsky [✉](#) (Curtin University, Perth)

Ross Taplin [✉](#) (Curtin University, Perth)

## Abstract

A cross sectional convenience sample of 195 MBA students answered questions which explored the impacts of managerial coaching on work engagement. Measures of organisational learning culture (OLC), self-efficacy, manager quality and workload were considered as potential influences on work engagement. Analysis was carried out using structural equation modelling. Results indicate that the positive influence of managerial coaching on employee work engagement is mediated by OLC. Self-efficacy and workload also influence work engagement in a positive manner independently. Organisations that invest in the development of coaching skills of managers can enhance the OLC and thereby the work engagement of employees.

## Keywords

Organisational learning; manager as coach; self-efficacy; employee work engagement,

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## Introduction

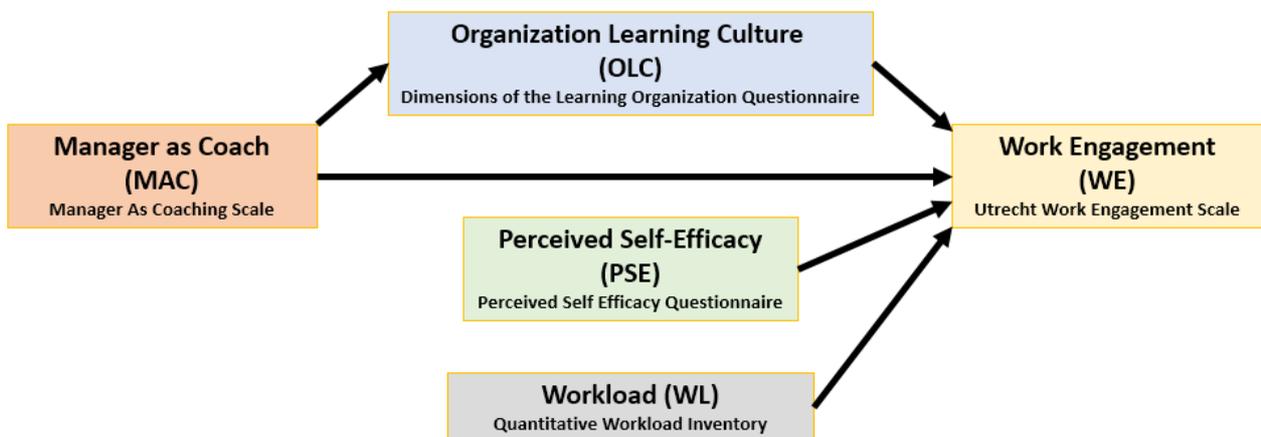
Despite the hundreds of scholarly publications on coaching over the past 20 years, the number of actual empirical studies in this field are low (Fillery-Travis & Passmore, 2011; Grant, 2013) albeit increasing. Researchers in the field have been calling for more research on coaching using quantitative methods (Baron & Morin, 2009; Bozer & Sarros, 2012; Fillery-Travis & Cox, 2014; Fillery-Travis & Passmore, 2011). Use of validated outcome measures, as part of a strong theoretical foundation are usually lacking in studies (Grant, 2013) partly due to a gap in the literature on what coaching scales exist and their psychometric properties (Hagen & Peterson, 2014). A large number of these publications tend to report on the phenomenon of coaching as a whole and trend towards qualitative investigations (Fillery-Travis & Cox, 2014) descriptive papers, case studies and practitioner articles (De Meuse, Dai, & Lee, 2009; Theeboom, Beersma, & van Vianen, 2014).

This research attempts to address this gap in the coaching research by investigating employee perceptions of managerial coaching on their work engagement along with the impact of other antecedent variables such as organisational learning culture, perceived self-efficacy and workload. These antecedents

are included because organisational factors have been shown to significantly predict work engagement (Simpson, 2009).

Managers are increasingly acting as coaches for their direct reports as part of a renewed approach to performance management (A. Ellinger, Beattie, & Hamlin, 2014). While the empirical research related to the manager as coach is growing, it is still limited (Agarwal R, Angst, & Magni, 2009; A. Ellinger et al., 2014; Gilley, Gilley, & Kouider, 2010; Peterson & Little, 2005). Research exploring the manager as coach role, the optimal conditions for this type of coaching and its benefits to individuals and organisations is called for in the literature (Beattie, 2006; A. Ellinger et al., 2014). Therefore, coaching in this quantitative cross-sectional study considers the manager's everyday interactions with their employees and how this influences work engagement. The conceptual diagram and hypotheses for framing the study are described below in Figure 1. The conceptual diagram illustrates the hypothesised direct and indirect impact of the manager as coach on work engagement. The direct impact stems from their daily interactions with those they coach. The indirect impact comes from their actions as coach and the impact this has on overall organisational learning culture, which in turn influences work engagement. There are, however, other factors that influence work engagement such as an employee's self-efficacy and the amount of workload they face on a day to day basis. These are also considered in this diagram.

**Figure 1: A Conceptual Framework for the Manager as Coach and Work Engagement**



## Hypotheses

1. There is a positive relationship between the manager as coach (MAC) and work engagement (WE).
2. There is a positive relationship between the manager as coach (MAC) and organisational learning culture (OLC).
3. The relationship between the manager as coach (MAC) and work engagement (WE) is mediated by organisational learning culture (OLC).

We also consider two control variables, self-efficacy and workload, and whether these impact work engagement and whether they are related to managerial coaching. Next we review the literature on the constructs used in this study.

## The Manager as Coach

A comprehensive description of the manager as coach is provided in The Complete Handbook of Coaching (A. Ellinger et al., 2014). Further, a historical evolution of definitions and purposes of managerial coaching are provided in reviews of the literature (Beattie et al., 2014; Hagen, 2012). Early descriptions of managerial coaching describe it as a strategy to improve the performance of staff (Fournies, 1987; Orth,

Wilkinson, & Benefari, 1987). Recent descriptions have moved towards describing managerial coaching as a more transformative process for the coachee, with personal growth part of capability improvement (Beattie et al., 2014; Hamlin, Ellinger, & Beattie, 2009).

Numerous terms are used to describe managerial coaching such as hierarchical, developmental, employee or performance coaching (Beattie et al., 2014; Dahling, Taylor, Chau, & Dwight, 2015). Managerial coaching is now seen as an important developmental interaction (Cavanagh & Grant, 2014; A. Ellinger et al., 2014; Williams, Palmer, & Edgerton, 2014) and a process of empowering employees to exceed prior levels of performance (Feldman & Lankau, 2005). Hence, in this research, managerial coaching is defined holistically as a process of helping employees to develop themselves for improving performance, elevating potential and increasing their vitality for the work they do (Cartwright & Holmes, 2006; Schaufeli & Bakker, 2010). This contrasts with more traditional roles of a manager such as assigning, clarifying and evaluating tasks performed by their subordinates. Core features of managerial coaching - which overlap with other coaching genres: are the formation of a helping relationship; a defined coaching agreement with development objectives; fulfilment of the agreement through a development process and providing tools, skills and opportunities to enable success (Jones, Woods, & Guillaume, 2015).

The empirical research on the manager as coach and its impact on organisational life is somewhat limited (Agarwal R et al., 2009; Beattie et al., 2014; Dahling et al., 2015; A. Ellinger et al., 2014; Gilley et al., 2010). While more is being written about the manager as coach (Beattie et al., 2014; Dahling et al., 2015) the scholarship in this genre of coaching is underdeveloped (Hagen, 2012) with problems relating to the differentiation of the construct with other coaching genres and the availability of robust instruments that measure different aspects of manager behavior.

Managers considered to be effective coaches are described as: helpful and interested in developing their staff; possessing good social intelligence; having less need to control staff; open to their own learning; and having high standards (A. Ellinger et al., 2014). The important skills for managerial coaching are also noted in the literature and include the following skills: listening; analytical; questioning; observation; and feedback (A. Ellinger et al., 2014).

In a review of empirical literature on coaching (Hagen, 2012), the presence of managerial coaching creates positive outcomes, many of them significant. These positive outcomes include: employee satisfaction and performance; organisational commitment; reductions in turnover intention; performance improvement; enhanced project management outcomes; customer satisfaction; and increased sales performance. The link between managerial coaching and specific definitions of work engagement (Schaufeli, Salanova, V, & Bakker, 2002) does not appear to be directly explored in any detail in the literature (Bakker & Leiter, 2010; Hagen, 2012), although a preliminary investigation between these two constructs demonstrated a significant positive relationship between the manager as coach and work engagement (Ladyshevsky & Taplin, 2017).

Studies that have explored the link between managerial coaching and work performance (albeit not work engagement) generally demonstrate a positive relationship. One study surveyed a cross section of organisations asking 408 employees to rate the influence of their manager's coaching on their work performance (A. D. Ellinger, Ellinger, Bachrach, Wang, & Elmadag Bas, 2011). The manager's coaching behaviour was positively related to the employee's perception of their job performance, service quality and citizenship behaviour in the organisation. In another organisation wide survey (Kim, Egan, Kim, & Kim, 2013) an electronic survey was distributed to 1315 employees of which 482 responded. The results demonstrated that employees who had coaching from their managers had greater role clarity, job satisfaction and organisational commitment.

One large study using a convenience sample of 438 employees and 67 supervisors explored supervisory coaching behaviour in an industrial setting (A. D. Ellinger, Ellinger, & Keller, 2003). Supervisors self-rated their coaching behaviour and employee performance and employees rated their supervisor's coaching behaviour and their personal satisfaction. Coaching by the supervisor significantly predicted employee job

satisfaction and performance. Another study surveyed 310 employees and 161 managers from 200 logistics providers (Elmadag Bas, Ellinger, & Franke, 2008). Coaching by the managers had a significant positive impact on employee commitment to service quality and job satisfaction. In another study on managerial coaching, researchers sent invitations out to 460 sales representatives, of which 176 responded and completed a survey tool (Pousa & Mathieu, 2014). The employees were asked to rate their manager's coaching skills along with their own performance. The study found that coaching by the manager had a significant positive impact on employee performance.

The evidence from these studies suggest that managerial coaching benefits an organisation (Agarwal R et al., 2009; Moen & Skaalvik, 2009). However, literature on the benefits of managerial coaching is often qualitative and the quantitative research may report relationships that are spurious. For example, relationships between managerial coaching and benefits may be due to perceptions of superior managers in general rather than coaching in particular, and the observed relationships may therefore arise from common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

## Work Engagement

Researchers note that there has been a deepening disengagement of employees in the workplace over the past 10 years (Saks & Gruman, 2014). Yet, employee engagement is an important part of an organisation's success and competitive advantage. In light of this, it has increasingly become a focus of organisational development initiatives. Engagement, however, is a broad term that struggles to find a consensus in terms of its definition in the scientific community. Varying terms are used to describe it and include employee, job or work engagement (Saks & Gruman, 2014; Simpson, 2009). Further, it overlaps with, but is distinguishable from, other more established constructs such as job satisfaction, organisational commitment and job involvement (Christian, Garza, & Slaughter, 2011) and is grounded in research on job burnout (Saks & Gruman, 2014).

We present two main definitions of engagement from the literature. In the early nineties the term engagement was described as

*"the harnessing of organisation members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances"* (Kahn, 1990) p 694.

This Kahn definition has a strong psychological element to it (Saks & Gruman, 2014). The other popular definition of work engagement is, "a positive, fulfilling, work related state of mind that is characterised by vigour, dedication and absorption" (Schaufeli et al., 2002) p. 74. It is seen as an affective-cognitive state with pervasive and persistent elements and varies between individuals depending on their disposition (Schaufeli & Bakker, 2010). However, a review of the literature suggests that the Schaufeli conceptualisation may not be distinct enough from job burnout (Saks & Gruman, 2014). Whilst there are overlaps between the absorption dimension across the two main definitions there are still disagreements between the two, particularly around Kahn's assertion that engagement involves bringing one's complete and true self to the performance of their role (Saks & Gruman, 2014).

There is a growing body of literature which supports the relationship between an employee's engagement at work and organisational performance outcomes (Simpson, 2009) such as job performance, client satisfaction, and financial return (Bakker & Leiter, 2010). Work engagement has also been associated with an increase in organisational commitment (Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004). Hence, if managerial coaching can enhance work engagement and the latter in turn can impact organisational performance positively, then organisations should make stronger efforts to build coaching into the skill set of their managers.

## **Organisational Learning Culture**

Research exploring the mediating effect on the relationship between coaching and outcomes such as work engagement has been identified in the literature as an area requiring more empirical investigation (Baron & Morin, 2009; A. Ellinger et al., 2014). In one qualitative study, managers noted that an organisational culture that supports learning was important to their own success as coaches (Misiukonis, 2011). Given the qualitative nature of this study, however, the directionality of these influences is difficult to ascertain. For example, do managers who coach build the learning culture or is a learning culture needed to enable managers to coach? The literature suggests that “climate and culture are built by leaders and other key people who learn from their experience, influence the learning of others, and create an environment of expectations that shapes and supports desired results that in turn get measured and rewarded” (Marsick & Watkins, 2003) p. 134. Creating such a positive environment would likely flow on to create higher levels of work engagement.

## **Workload**

Workload is an antecedent variable that can impact the climate for engagement (Bakker A, Albrecht, & Leiter, 2010). Excessive workload can have a negative impact on work engagement because of the inability of workers to complete job requirements effectively or with satisfaction. On the other hand insufficient workload can lead to lower engagement. Hence it is included as a control variable in the research to see how it might influence work engagement in the presence of managerial coaching.

## **Self-Efficacy**

Self-efficacy reflects an optimistic self-belief that one can perform a novel or difficult task, or cope with adversity in various domains of human functioning (Schwarzer & Jersualem, 1995). Self-efficacy represents the disposition of the employee and is an important determinant predicting an individual's likelihood to embrace development, learning and change (Bandura, 1997, 2001). Research indicates that self-efficacy predicts work engagement (Schaufeli, 2016). Further, high self-efficacy influences perceptions of the social context at work in a positive way, thus influencing work engagement (Schaufelli, 2016).

## **Method**

### **Participants**

The research used a sample of convenience of all students enrolled in an Australian Master of Business Administration (MBA) course. A total of 493 students were invited to participate in this research. All students admitted to the MBA course must have at least 3 years of work experience. Hence, they are all technically eligible to complete the self-report survey as it requires that the respondent report on their perceptions of their current manager's coaching skill and their own perceived work engagement. If they did not have a current manager (for example they were unemployed) they were asked to recall their most recent manager. Students who were self-employed were asked to exit the survey unless they could recall a manager.

Approval for the research was granted by the University's Human Research Ethics Committee. Students were provided with an information sheet describing the study along with information to ensure their consent. A link to a website was included if they chose to participate in the study whereby they could complete the online survey. Students were accessed directly in their classes by face to face invitation, or through announcements if enrolled in an online class. An email to all enrolled students was also sent (with another reminder 2 weeks later).

## Materials

### Manager as Coach Scales and the MMCS

Several scales that measure dimensions of managerial coaching have been reviewed in the literature (Hagen & Peterson, 2014). Three scales were found to measure managerial coaching appropriate to this study. The Coaching Behaviours Inventory has strong psychometric properties (A. D. Ellinger et al., 2003). However, it is dated and focuses its measurement on exemplary coaching behaviours using a single eight item measure. The Perceived Quality of the Employee Coaching Relationship Scale focusses on the coaching relationship (Gregory & Levy, 2010). While it has good psychometric properties, there are issues with respect to model fit. The Measurement Model of Coaching Skills (MMCS) scale possesses good psychometric properties (strong links to literature, strong coefficient reliability scores and good fit indices) but was weak in its subject-to-item ratio (Park, McLean, & Yang, 2008). It does focus, however, on behaviours and skills important to coaching. The MMCS was developed in response to a need for better understanding managerial coaching in organisations (McLean, Yang, Min-Hsun, Tolbert, & Larkin, 2005). Through a series of revisions and validation processes, five sub-scales of managerial coaching skills ultimately were developed using a 20 item scale (Park et al., 2008). The coefficient alpha was .93 overall and for the five sub-scales were: open communication (.81); team approach (.88); values people (.83); accept ambiguity (.73); facilitates development (.78). Confirmatory factor analysis and reliability tests for the MMCS provided statistical support for a reliable and valid measure, confirming the five sub-scales of managerial coaching. Further validation of the instrument suggests the sub-scales have weak discriminant validity and is best used as a composite score for measuring the performance of a manager as coach (Ladyshevsky & Taplin, 2017). Based on this review the MMCS appears to have the greatest level of utility (Hagen, 2012; Hagen & Peterson, 2014; Park et al., 2008).

### Work Engagement Scale

The Utrecht Work Engagement Scale (UWES) is the most widely used work engagement scale (Schaufeli & Bakker, 2010) and has been tested extensively in the literature (Bakker & Leiter, 2010). The UWES has a sub-scale for three engagement dimensions – vigour, dedication and absorption and has been validated internationally. There is agreement on two of the core dimensions, namely, energy and involvement/identification (Bakker & Leiter, 2010). Recently there has been some criticism of this scale with respect to the factor structure and the correlations between them with the suggestion that all three scales fit better in to one scale (Saks & Gruman, 2014). Further, there is some argument that there is considerable overlap between item content in the job burnout and UWES scales creating a strong, negative correlation between these scales (Cole, Walter, Bedeian, & O'Boyle, 2012).

The UWES contains 17 items (long version) 9 items (short version) and is scored on a 7 point scale ranging from “0” never to “6” always. The questions for the 17 and 9 item versions are available in the literature (Schaufeli, Bakker, & Salanova, 2006). Confirmatory factor analysis demonstrated superiority of the three-factor hypothesized structure of the UWES over an undifferentiated one factor model in several studies (Schaufeli & Bakker, 2010). However, the three dimensions of work engagement are closely related with correlations between them often exceeding .65. The composite score of the UWES, therefore, is recommended as a single value for measuring work engagement given these issues with discriminant validity (Ladyshevsky & Taplin, 2017; Schaufeli et al., 2006; Sonnetag, 2003). The Cronbach  $\alpha$  of all three scales exceeds .80 and the Cronbach  $\alpha$  for the composite score exceeds .90 demonstrating good internal consistency (Schaufeli & Bakker, 2010).

### Perceived Self-Efficacy (PSE)

Self-Efficacy was measured using Schwarzer and Jerusalem's (1995) Perceived Self-Efficacy Scale (PSE). There are 10 items in the PSE and each item refers to successful coping and implies an internal-stable attribution of success. In various research samples, the Cronbach's  $\alpha$  for the PSE ranged from .76 to .90, with the majority in the high .80s (Schwarzer & Jerusalem, 1995).

## **Organisational Learning Culture (OLC)**

The Dimension of the Learning Organisation Questionnaire measures organisational learning culture (Marsick & Watkins, 2003). Specifically it measures climate, culture, systems and structures that influence workplace learning. It takes the premise that individual level learning alone will not lead to improved knowledge and financial performance but that learning must be captured and embedded at a systems level. Over 200 companies have taken the OLC questionnaire (Marsick & Watkins, 2003). The instrument has proven reliability with alpha scores well above .70 (Marsick & Watkins, 2003). A short form of the questionnaire may also be used separately to provide an overall organisational learning culture score and this single score is used in this study.

## **Workload**

The Quantitative Workload Inventory scale (Spector & Jex 1998) was used to measure workload. This five item workload (WL) scale is designed to measure the quantity of work involved in a job. It does not measure the qualitative difficulty of undertaking a job. The researchers who developed this tool report an average internal consistency (coefficient alpha) of .82 across fifteen studies (Spector & Jex 1998).

## **Manager Quality**

Manager quality (MQ) relates directly to what a manager might traditionally be expected to do in their role. These include non-coaching activities such as telling employees what to do. The construct of MQ employed the following three items. How often do you find it difficult or impossible to do your job because of: (a) your supervisor; (b) lack of necessary information about what to do or how to do it; and (c) incorrect instruction (Spector & Jex 1998). A measure of manager quality was applied to ensure the manager as coach construct was not capturing relationships between manager quality generally and work engagement.

## **Procedures**

Parameters for creating the survey tool took into consideration many aspects of good online questionnaire design (Deutskens, De Ruyter, Wetzels, & Oosterveld, 2004). As these authors note, the most important aspects of running an online survey are follow-ups, incentives and the length/presentation of the survey tool. The survey contained 61 items with breakdown as follows MMCS (20); UWES (9); OLC (7); PSE (10); WL (5); MQ (3) and demographic questions (7). Two email follow ups were included beyond the initial invitation. An incentive to win a large gift certificate of \$300.00 was offered as a lottery.

Several strategies were also put in to place to reduce common method variance (Podsakoff et al., 2003). Up to one quarter of the variance in a research measure may be due to measurement error and may inflate or deflate the results (Cote & Buckley, 1987). Item ambiguity was reduced by using well established and tested instruments with strong reliability. The order of the different instruments helped to manage mood influence and neutralised potential method bias that might occur during the retrieval stage. The UWES was completed first and was hopefully an honest self-rating of their work engagement. The MMCS followed and if the relationship between manager as coach and subordinate was poor, thus creating some potential transient negative mood, it was less likely to spill over to ratings on the UWES. Demographic information was requested at the end of the survey.

To control for transient positive or negative mood biases, instructions at the beginning of each section of the survey reminded people to 'mind-set' themselves to their work overall and to not focus on any one particular positive or negative event. Assurances that there were no 'right' or 'wrong' answers and to answer honestly aided in reducing any evaluation apprehension (Hong, Chiu, Dweck, Lin, & Wan, 1999) whereas consistency motifs are tendencies to try to create consistency across all answers so one's responses appear rational (Podsakoff et al., 2003). The mind-setting prompts also assisted in reducing implicit theory bias which has been shown to manifest in leadership behaviour ratings (Podsakoff et al., 2003). The measures that are used on the scales are also different which helps to reduce a response

pattern that may emerge if the same scale was used. As the survey was anonymous and delivered via a computer link the likelihood of a social desirability bias and leniency effect was also reduced. Finally, the inclusion of manager quality was included to test whether relationships were due to common method variance, or manager as coach was capturing non-coaching aspects of the manager.

## Data Analysis

Some descriptive analysis was conducted in SPSS 24 while structural equation modelling was conducted in Smart PLS 2.0. PLS-SEM which has advantages over covariance based SEM, including being more suited to smaller sample sizes, less dependent on data distributional assumptions and more suited to prediction (Hair, Hult, Ringle, & Sarstedt, 2016). Construct validity was assessed using Cronbach's alpha and composite reliability, average variance explained (AVE), item loadings, and discriminant validity assessed with both the Fornell & Larcker (1981) and Heterotrait-Monotrait (HTMT) ratio method (Henseler et al., 2015). Structural coefficients were tested for statistical significance via bootstrapping (1000 samples).

## Results

Out of the 493 students contacted to complete the questionnaire, a total of 208 responded, yielding a 42% response rate. After data cleaning a total of 195 respondents had usable and complete data sets resulting in a final response rate of 39.5 per cent. The demographics of these 195 respondents include 63% who were male. In terms of age 4% were 21-25, 17% were 26-30, 31% were 31-35, 16% were 36-40, 14% were 41-45, 11% were 46-50, and 6% were over 50 years of age. With respect to previously completed educational qualifications, 57% hold a Bachelor degree, 35% have a Masters or Doctoral degree and 8% did not have a university qualification. This latter cohort having entered the program via a recognition of prior learning pathway. Sixty one percent were in their current role three or more years and only 18% were in their current role less than one year. Current positions of the respondents were 13% senior management, 39% middle management, 17% supervisor and 31% staff/employees (one of the 195 participants was currently unemployed). No participants were self-employed. The lack of self-employed and unemployed participants most likely explains some of the non-respondents to the survey, as unless they were able to recall a recent manager they were asked not to complete the survey. Consistent with local industry, 30% worked in mining, 11% in professional, scientific and technical services, 10% in financial and insurance services and the remaining spread amongst other work sectors as per the Australian and New Zealand standard industrial classification (Trewin & Pink, 2006).

Preliminary analysis of the measurement of the constructs provided no major issues. However, a few items had relatively low loadings on their respective constructs, resulting in average variance explained (AVE) values of 0.47 for MMCS and 0.42 for PSE. To improve measurement of these two constructs three of the 20 MMCS items and four of the ten PSE items were removed from further analysis (this increased the AVE above 0.5 but other results were similar if these items were not removed).

Table 1 summarises the measurement characteristics of the five constructs. Most variables have means close to the centre of the scale with standard deviations of about 1 Likert point. Perceived self-efficacy had the strongest positive scores above the mean whereas work engagement and workloads, while still very positive, were less strong. The managers' coaching skills and the measure of organisational learning culture hovered just above the mean.

**Table 1. Measurement characteristics of constructs.**

Construct	Scale	mean	st.dev	Cronbach's Alpha	Composite Reliability	AVE
MMCS	1 to 6	3.26	1.08	0.94	0.94	0.50
OLC	1 to 6	3.56	1.20	0.91	0.93	0.65
PSE	1 to 4	3.38	0.43	0.82	0.87	0.52
WL	1 to 5	3.39	1.04	0.90	0.92	0.71
UWES	0 to 7	4.24	0.89	0.89	0.91	0.54

All constructs displayed high discriminant validity, with correlations between items and their respective constructs all exceeding 0.61 while the correlations between items and other constructs never exceeding 0.49. All pairs of constructs passed the Fornell & Larker (1981) test, with the maximum squared correlation between constructs equal to 0.27 (between MMCS and OLC), well below all AVE values. Furthermore, HTMT ratios never exceeded 0.54, well below the 0.85 benchmark to satisfy discriminant validity (Henseler et al., 2015). All constructs are significantly correlated with UWES (Table 2). In particular, MMCS and UWES are significantly correlated (providing evidence for hypothesis H1). In addition, MMCS and OLC are correlated (providing evidence for hypothesis H2), as are OLC and PSE. Other correlations are statistically insignificant ( $p > .05$ ). OLC has the highest correlation with UWES.

**Table 2. Correlations between constructs**

	MMCS	OLC	PSE	WL	UWES
MMCS	1	<b>0.522</b>	0.083	-0.071	<b>0.260</b>
OLC	<b>0.522</b>	1	<b>0.236</b>	0.050	<b>0.500</b>
PSE	0.083	<b>0.236</b>	1	0.075	<b>0.329</b>
WL	-0.071	0.050	0.075	1	<b>0.380</b>
UWES	<b>0.260</b>	<b>0.500</b>	<b>0.329</b>	<b>0.380</b>	1

Bold correlations,  $p < .001$ ; otherwise,  $p > .05$

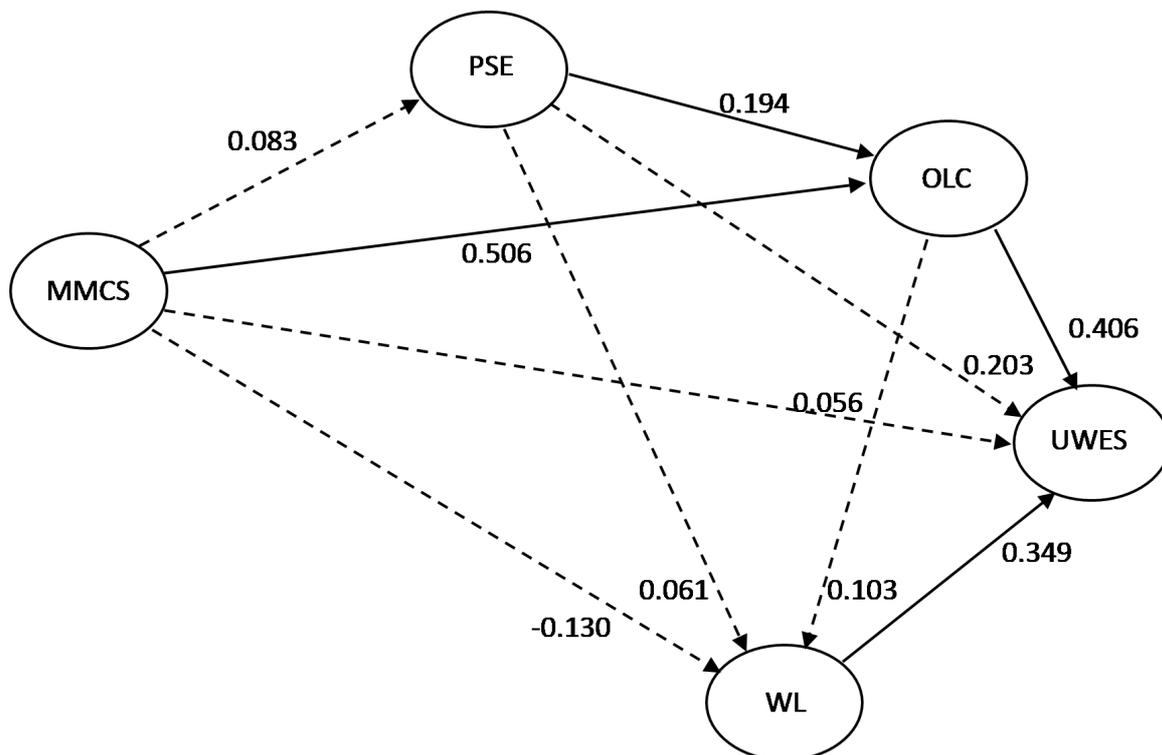
Structural relationships between the constructs are summarised in Table 3, including both estimated coefficients and bootstrap p-values. These relationships are also summarised in Figure 2, with path coefficients alongside each arrow (statistically insignificant relationships,  $p > .05$ , are shown as dashed lines). Work engagement (as measured by the UWES) is predicted significantly by OLC ( $p = .000$ ) and WL ( $p = .000$ ) but the relationship with PSE is insignificant ( $p = .054$ ). The direct relationship between MMCS and UWES is insignificant ( $p = 0.554$ ) when the other constructs are included to predict work engagement. However, MMCS has a strong relationship with OLC ( $p = .000$ ) and OLC has a strong relationship with UWES ( $p = .000$ ). These facts, together with the correlation between MMCS and UWES (Table 3), provide evidence in support for hypothesis H3 that the relationship between the manager as coach and work engagement is mediated by the organisational learning culture. The only other relationship that is statistically significant is the relationship between PSE and OLC ( $p = .024$ ). Note that, consistent with the insignificant correlations in Table 3, MMCS has no effect on PSE and WL. The total effect of MMCS on UWES is 0.26 and lower than the total effects of OLC (0.44), PSE (0.31) and WL (0.35) on work engagement.

**Table 3. Structural relationships between constructs**

Relationship	coef	SE	t-ratio	pvalue
MMCS -> OLC	0.506	0.086	5.860	0.000
MMCS -> PSE	0.083	0.118	0.703	0.482
MMCS -> WL	-0.130	0.142	-0.919	0.358
OLC -> WL	0.103	0.132	0.783	0.433
PSE -> OLC	0.194	0.086	2.256	0.024
PSE -> WL	0.061	0.136	0.449	0.653
MMCS -> UWES	0.056	0.095	0.592	0.554
OLC -> UWES	0.406	0.093	4.380	0.000
PSE -> UWES	0.203	0.105	1.923	0.054
WL -> UWES	0.349	0.086	4.073	0.000

**Figure 2. Estimated relationships between constructs**

Values are estimated coefficients. Solid lines are statistically significant ( $p < .05$ ) and dashed lines are statistically insignificant ( $p > .05$ ).



The Manager Quality (MQ) variable introduced to test whether effects of MMCS reflected specifically on coaching by the manager (rather than a manager's quality more generally) displayed high validity, with an AVE of 0.68, Cronbach's alpha of 0.77 and composite reliability of 0.86. Manager quality had a mean of 3.82 (on a scale from 1 to 5) and a standard deviation of 0.92. Manager quality also passed discriminant validity tests, with the highest HTMT ratio with other factors equal to 0.54. In particular, the HTMT ratio

between MMCS and MQ was only 0.17, suggesting a high level of discriminant validity between these managerial constructs.

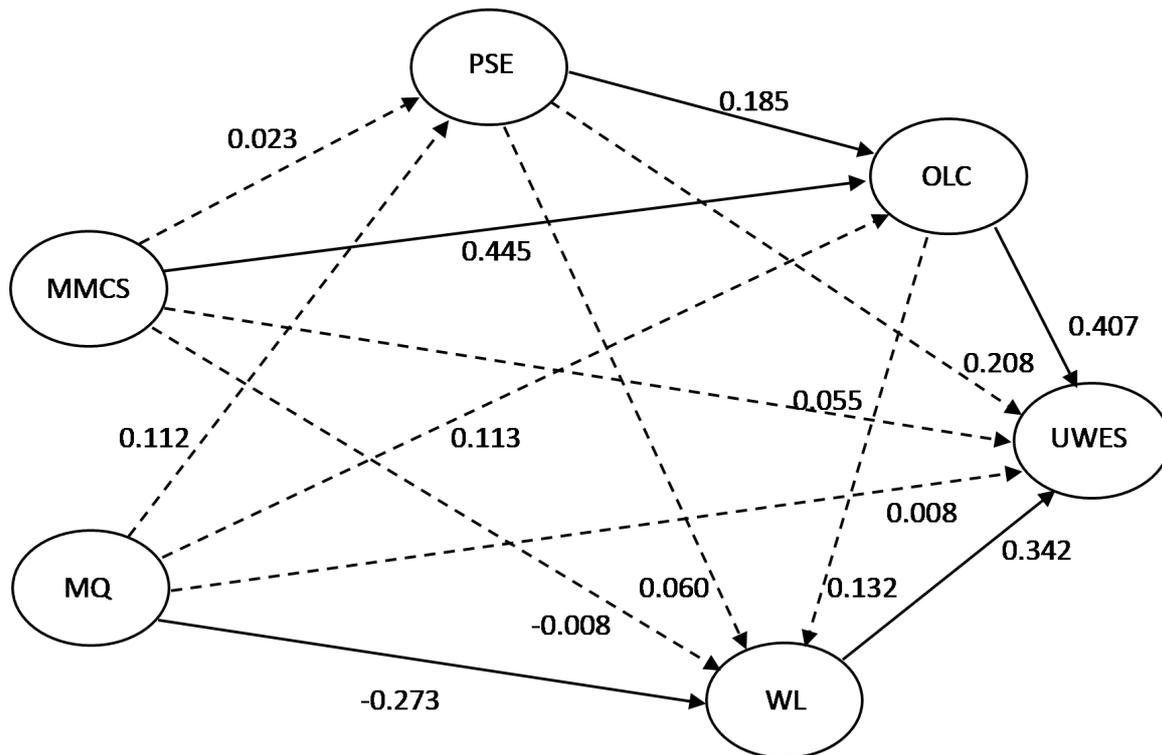
Several key observations are evident from the structural relationships between the constructs after MQ is added (Table 4 and Figure 3). First, the relationship between the original variables are similar to the previous results without MQ, so including an alternative measure of the manager's influence does not change the original conclusions. This provides additional support for the original conclusions. Second, while MMCS significantly influences OLC, MQ is significantly related to WL ( $p = .035$ ) but not to OLC ( $p = .249$ ).

**Table 4. Structural relationships between constructs including Manager Quality (MQ)**

Relationship	coef	SE	t-ratio	p-value
MQ -> OLC	0.113	0.098	1.154	0.249
MQ -> PSE	0.112	0.139	0.808	0.419
MQ -> WL	-0.273	0.130	-2.106	0.035
MMCS -> OLC	0.445	0.099	4.473	0.000
MMCS -> PSE	0.023	0.139	0.162	0.871
MMCS -> WL	-0.008	0.149	-0.053	0.958
OLC -> WL	0.132	0.121	1.084	0.278
PSE -> OLC	0.185	0.078	2.359	0.018
PSE -> WL	0.060	0.126	0.476	0.634
MQ -> UWES	0.008	0.107	0.076	0.939
MMCS -> UWES	0.055	0.106	0.513	0.608
OLC -> UWES	0.407	0.090	4.528	0.000
PSE -> UWES	0.208	0.108	1.920	0.055
WL -> UWES	0.342	0.087	3.958	0.000

**Figure 3. Estimated relationships between constructs including Manager Quality (MQ)**

Values are estimated coefficients. Solid lines are statistically significant ( $p < .05$ ) and dashed lines are statistically insignificant ( $p > .05$ ).



The inclusion of MQ has minimal effect on the direct effects between other constructs and the total effect of MQ on UWES is negligible ( $< 0.001$ ). This suggests that the effect of a manager on work engagement is through the manager's success as a coach rather than their quality in terms of instructions they provide to their reports.

## Discussion

The following conclusions can be made about the hypotheses for this research as laid out in the conceptual framework in Figure 1. First, in support of hypothesis 1 there is significant evidence of a positive relationship between manager as coach and work engagement, but only if no other variables are included as predictors of work engagement. In support of hypothesis 2, organisational learning culture has a significant, positive relationship with work engagement. Finally, the relationship between the manager as coach and work engagement is mediated by a positive organisational learning culture, providing support for hypothesis 3. What this signifies is that the manager as coach and the organisational learning culture influence work engagement in a positive manner, however, the manager as coach has an indirect role in that the manager as coach influences the organisational learning culture, which in turn provides stronger work engagement.

Although perceived self-efficacy and workload are both positively correlated with work engagement, only workload remains significantly related to work engagement when other variables (in particular organisational learning culture) are included as determinants of work engagement. Perceived self-efficacy, like manager as coach, only has an indirect effect on work engagement through organisational learning culture. Thus, organisational learning culture is enhanced by both managers acting as coaches for

employees and by a high level of employee self-efficacy. Workload is positively related to work engagement by creating what appears to be sufficient arousal to keep people engaged.

High manager quality reduces workload, presumably by making it easier for employees to do their job because of appropriate instruction. This in turn has a detrimental effect on work engagement, possibly because the challenge of making independent decisions concerning the work to be performed has been removed. This indirect effect, however, has a small practical magnitude. The major influence on work engagement is the organisational learning culture which is enhanced by the manager acting as a coach.

This research addressed the call for more research on workplace coaching (Agarwal R et al., 2009) given that managers are increasingly being asked to coach their direct reports (A. Ellinger et al., 2014). It made use of validated outcome measures which have been lacking in studies (Grant, 2013). This investigation also suggests that the manager as coach influences organisational learning culture in a positive way which in turn positively influences work engagement. Managerial coaching is argued to be an important practice in relation to quality of work-life (Ahmadi, Jalalilan, Slamzadeh, Daraei, & Tadayon, 2011) and this study supports this proposition with respect to increasing work engagement. The findings of this research also support the evidence in two meta-analyses which suggested that individually-centred impacts around building capacity in coaching are likely to create positive benefits on workplace performance for the entire organisation (Jones et al., 2015; Theeboom et al., 2014).

The coaching of staff by their managers is something that should be embedded within the organisation so that managers utilise everyday opportunities for developing employees who require this support (Clutterbuck & Megginson, 2004). Despite the published benefits of coaching, many managers still do not undertake this role because of a lack of time, a lack of skill or failure to see its importance (Beattie, 2006; A. Ellinger et al., 2014; Goleman, 2000). Training, therefore, is important for managers to develop this skill as other studies have demonstrated a need for this ongoing support. (A. D. Ellinger et al., 2003).

This research suggests that the managers in this study were below average or just at the midpoint for coaching skills as measured by the MMCS. It is arguable that lack of support in an organisation, particularly around development for coaching, would likely result in a lack of practice of this management competency (Collier, 1991; A. Ellinger et al., 2014). Recent research using a randomised control trial found that nurse managers who received leadership development and ongoing support to build their coaching skills were found to be putting these skills into practice more effectively 6 months post training (Rafferty, 2017).

There is a growing body of literature which supports the relationship between an employee's engagement at work and organisational performance outcomes (Simpson, 2009); particularly around job performance, client satisfaction and financial return (Bakker A et al., 2010). Hence, if managerial coaching within a strong organisational learning culture can enhance work engagement, so in turn will organisational performance outcomes improve. In light of this relationship, organisations should make a stronger effort to build coaching and learning into their work culture and management development initiatives.

## **Limitations and future research**

The participants in this study were post graduate students electing to study management, suggesting they may already have high vigour and dedication to learning. They were well educated prior to starting their degree and 70 percent were already in supervisory, middle management or executive roles. There was also strong self-efficacy which was found to be directly related to the UWES (Luthans F, Youssef C, & B, 2007). These are all independent from the manager as coach in driving work engagement. As a result, repeating this study in different populations groups with different educational levels and lower level positions would add to the research in this area.

Although constructs generally satisfied validity criteria, three of the 20 MCSS items and four of the 10 perceived self-efficacy items were removed to improve the average variance extracted above 0.5. While

conclusions were similar prior to the removal of these items, the validity of all the original items used to measure these constructs might be questioned.

Although SEM was used for statistical analysis, directions of causal relationships were assumed based on theory. Without performing a controlled experiment empirical evidence for these directions is not possible from this study. For example, this study assumes the manager as coach influences organisational learning culture, however, it is possible the influence is in the reverse direction with high organisational learning culture creating an environment that enables managers to act as coaches. Indeed, the manager as coach and the organisational learning culture may be complementary factors that reinforce each other.

The study also is framed around the manager as coach and their role in influencing work engagement. It is possible, however, that work engagement is generated from the subordinates themselves who seek coaching from their manager. Peer coaching between team members may also be occurring as a result of the manager creating the environment for coaching to happen. Qualitative research may be better suited to investigate causal relationships between these constructs.

Common method variance is a potential issue with studies of this nature, particularly when perceptions are measured, however, survey methods were undertaken to minimise this possibility. Furthermore, the consistency of results after a measure of manager quality was introduced alongside the manager as coach provides some comfort that common method variance did not influence results in this study.

## Conclusions

This study provides evidence that increased manager coaching skills has a positive impact on the organisational learning culture, which in turn, helps to increase work engagement. Organisations, therefore, should invest in development to ensure managers can put this skill into practice effectively and understand its relationship to learning and work engagement. While good quality management is always important for the workplace, managerial coaching can have an important impact on improving work engagement.

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## About the authors

**Richard Ladyshevsky** is Professor of managerial effectiveness at Curtin University Faculty of Business and Law, School of Management in Perth Australia. He is a Fellow of the Curtin Academy and the Higher Education Research and Development Society of Australasia. His research interests include coaching, online learning and work integrated learning. He works virtually from Victoria, BC, Canada.

**Ross Taplin** is a Professor in the School of Accounting, Curtin University, Faculty of Business and Law, and is a Senior Technical Advisor in Risk Analytics at Bankwest, and an accredited statistician (AStat) with the Statistical Society of Australia. His research concentrates on the development and application of quantitative research methods.