Employee perceptions of managerial coaching and work engagement using the Measurement Model of Coaching Skills and the Utrecht Work Engagement Scale

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Abstract

This study explored the perceptions of an employee's manager as coach behaviour and the relationship to their perceived work engagement. The Measurement Model of Coaching Skills (MMCS) by Park and colleagues and the Utrecht Work Engagement Scale (UWES) were used as the tools to measure this relationship. The MMCS was also validated further in this study as there is limited psychometric data on this tool in the literature unlike the UWES. A total of 195 MBA students with work experience responded to the survey out of a possible 493 students. The results demonstrate a positive significant relationship between the respondents' perceptions of their manager's coaching behaviour and their own perceived work engagement. The MMCS also demonstrated acceptable psychometric properties, however, sub-scales failed discriminant validity. Most likely this is due to the difficulty in separating out discrete functions of the coaching role. As a result the composite score for the MMCS is recommended. The results add to the literature noting the benefits managerial coaching can have on organizational performance measures. Further development of managers is needed to enable them to become effective coaches as demonstrated by the below average result.

Key Words: Virtual Education, Leadership Development, E-Learning

Introduction

The research on various genres of coaching has increased over the past two decades with over 700 scholarly articles and dissertations on coaching noted in the literature (Grant, Passmore, Cavanagh, & Parker, 2010). Recent reviews, however, express concerns about the limited numbers of empirical studies in the literature (Fillery-Travis & Passmore, 2011; Grant, 2013). As a result, there have been calls by researchers for more investigations on the relationship between coaching and specific outcomes using quantitative methods (Baron & Morin, 2009; Bozer & Sarros, 2012; Fillery-Travis & Cox, 2014; Fillery-Travis & Passmore, 2011). In a meta-analysis of the literature on this subject, a range of positive outcomes (performance and skills, well-being, coping, work attitudes and goal-directed self-regulation) have been described as being influenced by work place coaching (Theeboom, Beersma, & van Vianen, 2014).

The bulk of research studies on coaching cluster into exploring the phenomenon as a whole and typically favour qualitative data exploration (Fillery-Travis & Cox, 2014). Research in the form of descriptive papers, case studies and practitioner articles espousing the benefits of coaching are common (De Meuse, Dai, & Lee, 2009; Theeboom et al., 2014). Use of validated outcome measures, as part of a strong theoretical foundation are usually lacking in studies (Grant, 2013). This is partly due to a disjointed body of literature on coaching (Theeboom et al., 2014) and a gap in the literature about which coaching scales exist and their associated psychometrics (Hagen & Peterson, 2014).

This research attempts to address this gap in the coaching research by investigating employee perceptions of managerial coaching on their perceived work engagement. This research is quantitative, cross-sectional, and uses two measures, the Measurement Model of Coaching Skills (MMCS) scale and the Utrecht Work Engagement Scale (UWES). Both have been validated in the literature although the latter more extensively. As a result the MMCS is also validated further as a secondary objective of this study since more validation efforts for instruments are critical for future research on the manager as coach (Dahling, Taylor, Chau, & Dwight, 2015).

There are three general areas of professional coaching that dominate the literature. These are executive coaching, life coaching, and managers who coach their subordinates as part of their role (managerial coaching). There is also a body of literature on peer coaching but this is outside the arena of professional coaching contexts. Life coaching and peer coaching are not discussed here due to space concerns. Executive coaching provides coaching to executives and managers in their work place and is usually carried out by an independent coach who may be external or internal to the organization. The key distinction is that the coach is outside of the executive's line of management. A comprehensive review of this coaching construct is also beyond the scope of this paper. However, readers with an interest in this type of coaching are referred to an early review of the executive coaching construct (Feldman & Lankau, 2005). An intensive description of this coaching construct is also available in the Handbook of Coaching where its distinctive features, background context and rationale are summarised (Stokes & Jolly, 2014). A recent meta-analysis of 17 studies encompassing 2,267 individuals on the effectiveness of workplace coaching (where internal or external coaches carry out the executive coaching) indicates that executive coaching produces positive effects on overall organizational outcomes and specific skill based and affective outcomes (Jones, Woods, & Guillaume, 2015). In this same meta-analysis, executive coaches internal to the organization were found to produce stronger effect sizes for outcomes than coaches external to the organization. Further, the exclusion of multi-source feedback led to more effective coaching outcomes. Face to face or blended techniques using e-coaching were equally effective.

The literature review here will focus on the third coaching construct noted above - managerial coaching – as this is the focus of the research in this study. Team coaching by the manager is excluded from this review.

Defining the Manager as Coach

A comprehensive description of the Manager as Coach (MAC) is provided in the Handbook of Coaching (A. Ellinger, Beattie, & Hamlin, 2014) for those wanting a detailed overview of this coaching genre. Further, a historical evolution of definitions and purposes of managerial coaching are provided in reviews of the literature (Beattie et al., 2014; Hagen, 2012). For example, in 1987, managerial coaching was defined as a day-to-day, hands on

process of helping employees recognize opportunities to improve their performance capabilities (Orth, Wilkinson, & Benefari, 1987) through to 2009 where it was defined as, a helping and facilitative process that enables individuals, groups/teams, and organizations acquire new skills, competence, and performance, and enhance their personal effectiveness, personal development or personal growth (Hamlin, Ellinger, & Beattie, 2009). This latter definition, however, overlaps with team coaching and business coaching.

Numerous terms are used to described managerial coaching such as hierarchical, developmental, employee or performance coaching (Beattie et al., 2014; Dahling et al., 2015). Much of the earlier research defined coaching as a process for improving performance by focusing on correcting work problems (Fournies, 1987). Today's manager has a much larger role in empowering subordinates, particularly with human resource functions increasingly being devolved to line managers (Beattie, 2006; A. Ellinger et al., 2014). 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 more 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). Core features of managerial coaching - which still 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 et al., 2015).

Literature

The empirical research related to the impact of the manager as coach (MAC) is argued to be limited (Agarwal R, Angst, & Magni, 2009; Beattie et al., 2014; Dahling et al., 2015; A. Ellinger et al., 2014; Gilley, Gilley, & Kouider, 2010) although more has been written on this topic in recent years (Beattie et al., 2014; Dahling et al., 2015). The scholarship in this area is underdeveloped (Hagen, 2012) with problems relating to the differentiation of the construct with other coaching genres and instruments that measure different aspects of manager behavior. Further, the value of managerial coaching is still very unclear with a weak understanding of the theoretical mechanisms that lead to coaching outcomes.

Managers who are considered effective coaches typically are very helpful, have a lesser need for control, have good emotional intelligence and empathy in working with staff, are open to their own learning and receipt of feedback, have high standards, a sense of wanting to help others to develop, and see performance as a learning process (A. Ellinger et al., 2014). Skills associated with managerial coaching have been described extensively in the literature ranging from listening skills, analytical skills, questioning skills, observation skills, and feedback skills (A. Ellinger et al., 2014). Further, it is a multi-dimensional construct requiring the creation of learning and trust (A. Ellinger et al., 2014; Ladyshewsky, 2010)

In a review of empirical literature on coaching (Hagen, 2012),the relationship between managerial coaching and specific outcome measures were all influenced in a positive direction and in many cases significantly. These outcome measures included: employee satisfaction and performance; organizational commitment; turnover intention; performance improvement; project management outcomes; customer satisfaction; sales performance; and employee

learning. The link between managerial coaching and work engagement directly does not appear to be explored in any detail in the literature (Bakker & Leiter, 2010; Hagen, 2012).

In order to measure the impact of the MAC on work engagement, a scale is needed that captures the dimension of being in this role. Several scales that measure dimensions of managerial coaching have been reviewed in the literature (Hagen & Peterson, 2014). Seven in total were identified in this review which were intended to measure managerial coaching within an organizational context and each was assessed against standards for educational and psychological testing. Three scales were found to measure managerial coaching appropriate to this study with adequate psychometric properties (A. D. Ellinger, Ellinger, & Keller, 2003; Gregory & Levy, 2010; Park, McLean, & Yang, 2008). The Ellinger et al. Coaching Behaviours Inventory had strong psychometric properties. However it was the most dated, and was intended to measure exemplary coaching behaviours using a single eight item measure. The Gregory and Levy Perceived Quality of the Employee Coaching Relationship Scale focussed on the coaching relationship and whilst it had some good psychometric properties, there were issues with respect to model fit. The Park et al. Measurement Model of Coaching Skills (MMCS) scale also had some good psychometric properties (strong links to literature, strong coefficient reliability scores and good fit indices) but was weak in its subject-to-item ratio. It does focus, however, on behaviours and skills important to coaching. Based on this review the Ellinger et. al. and Park et. al. scales appear to have the greatest level of efficacy (Hagen, 2012; Hagen & Peterson, 2014; Park et al., 2008) as they provide information on face validity, model fit and coefficient alpha scores.

Studies that have explore the link between managerial coaching and work performance (albeit not work engagement) generally demonstrate a positive relationship. One study surveyed a cross section of organizations asking employees to rate the influence of their manager's coaching on their work performance (A. D. Ellinger, Ellinger, Bachrach, Wang, & Elmadag Bas, 2011). A total of 408 responses were used to calculate the results. The manager's coaching behaviour was positively related to the employee's perception of their job performance, service quality and citizenship behaviour in the organization. In another organization wide survey (S. 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 organizational commitment. Their performance was also higher in comparison to staff who did not receive managerial coaching. Another similar study by (S Kim, 2014) this time in a private company, found similar results.

One large study using a convenience sample of 438 employees and 67 supervisors explored supervisory coaching behavior in an industrial setting (A. D. Ellinger et al., 2003) Supervisors self-rated their coaching behavior and employee performance and employees rated their supervisor's coaching behavior and their personal satisfaction. Coaching by the supervisor significantly predicted employee job satisfaction and performance although more effort was needed to develop the supervisor's coaching abilities. 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. They study found that coaching by the manager has a significant positive impact on employee performance.

The evidence from these studies suggest that managerial coaching does create value potential for the organization although the results depend on a range of factors (Agarwal R et al., 2009; Moen & Skaalvik, 2009). Yet, despite the increasing acknowledgement of the benefits of managers coaching their employees, many 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).

Work Engagement and Coaching

There are several measures assessing the impact of coaching on organizational performance. These measures include job satisfaction (Bozer & Sarros, 2012; Theeboom et al., 2014), goal-attainment expectancy, goal progress and commitment (Green, Oades, & Grant, 2006; Moen & Skaalvik, 2009) organizational commitment, enhanced performance, well-being, and work attitude (Theeboom et al., 2014). Employee engagement is an important part of an organization's success and competitive advantage and has become a popular term in the organizational development arena in the last 10 years even though there is a deepening disengagement of employees in the workplace (Saks & Gruman, 2014).

Engagement is a broad term that struggles to find a consensus in terms of its definition in the scientific community. Varying terms are being used to describe it and include: employee engagement; job engagement; and work engagement (Saks & Gruman, 2014; Simpson, 2009). Further, it overlaps with, but is distinguishable from, other more established constructs such as job satisfaction, organizational commitment and job involvement (Christian, Garza, & Slaughter, 2011) and is grounded in research on job burnout (Saks & Gruman, 2014).

There are two main definitions of engagement in the literature. In the early nineties the term engagement was described as,

> "the harnessing of organization 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) whereas the other most popular definition of work engagement - which is argued to be the opposite of job burnout yet distinct in its own right is "a positive, fulfilling, work related state of mind that is characterized by vigour, dedication and absorption" (Schaufeli, Salanova, V, & Bakker, 2002) p. 74. It is seen as an affective-cognitive state with pervasive and persistent elements and will vary between individuals depending on their disposition (Schaufeli & Bakker, 2010). However, a review of the literature suggests that this popular approach requires revisiting in light of growing research and interest in the field and concerns that the Schaufeli definition and 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 organizational 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 organizational commitment (Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004). Hence, if managerial coaching can enhance work engagement and the latter in turn can impact organizational performance

positively, then organizations should make stronger efforts to build coaching into the skill set of their managers.

Call for Research

Research exploring the manager as coach role, the optimal conditions for this type of coaching and its benefits to individuals and organizations is called for in the literature (Beattie, 2006; A. Ellinger et al., 2014). Coaching is something that should be embedded within the organizational culture, so that managers utilize everyday opportunities for developing employees who require this support (Clutterbuck & Megginson, 2004). Therefore, coaching in this study considers the manager's everyday interactions with their employees (rather than pre-set annual or bi-annual performance reviews) and how this influences work engagement. Given the discussion to date and the call for more empirical studies on coaching (Grant et al., 2010; Moen & Federici, 2012) one main hypotheses or objective was tested in this research with a secondary minor objective.

The first hypothesis or objective was to explore employee perceptions of the relationship between their current or most recent manager as coach and their own perceived work engagement.

> H1. There is a positive relationship between the manager as coach (MMCS) and work engagement (UWES).

As the reliability of the measures for MMCS have been tested in only a few contexts, the second minor hypothesis or objective seeks to confirm the reliability of the instrument in another setting and to measure the discriminant validity of the MMCS sub-themes as this has not been formally tested in the literature.

> H2. The 20 measures of manager as coach (MMCS), and the associated five sub-scales pass reliability and discriminant validity tests.

Methodology

Approval for the research was granted by Curtin 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 and complete the online survey. Survey Monkey was used as the tool. These 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). All students, regardless of mode of study, received a total of three invitations to complete the survey during the trimester.

Sample

The research used a sample of convenience of all Master of Business Administration (MBA) students with an active enrolment in the graduate school of business. A total of 493 students were invited to participate in this research. All students admitted in 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 and the impact they had on their work engagement. Students who were self-employed were asked to exit the survey unless they could recall a manager they worked with prior to self-employment.

Instrumentation

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 36 items: MMCS (20); UWES (9); and demographic questions (7) which is not excessive. 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. Lotteries lead to the highest response rate in an online environment in short and even in longer questionnaires (Deutskens et al., 2004).

Manager as Coach Scale (MMCS)

With recognition of the need for better understanding managerial coaching, researchers have developed and validated a measure for managerial coaching skills, the Measurement Model of Coaching Skills (MMCS) scale for use in organizations (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. They defined effective coaching, therefore, as the interaction of these five components, with the purpose of developing employees' expertise and eventually improving performance (McLean et al., 2005).

Work Engagement Scale (UWES)

The UWES is the most widely used work engagement scale (Schaufeli & Bakker, 2010) and has been tested extensively in the peer reviewed 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 its 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 and that the two are highly correlated with similar (but opposite) patterns of correlation (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). The three-factor structure of the UWES is superior to the one factor model even though the three dimensions of engagement are closely related with correlations usually exceeding .65 (Schaufeli & Bakker, 2010). In light of this, researchers use the composite score of the UWES as a single composite value for work engagement (Sonnetag, 2003) and for practical purposes should be used as an indicator of overall work engagement (Schaufeli et al., 2006). The Cronbach α of all three scales exceeds .80 and the Cronbach α for the composite score exceeds .90 demonstrating good internal consistency (Schaufeli & Bakker, 2010).

Data Analysis

Demographic data along with the answers to the questions on the surveys were captured in an excel spreadsheet and then analysed using SPSS and Amos. Construct reliability was measured with Cronbach's alpha for comparison with results in the literature but was also evaluated with a congeneric model due to concerns in the literature that Cronbach's alpha under estimates reliability. Discriminant validity was evaluated by comparing the average correlations between constructs with the average variance extracted (Fornell & Larcker, 1981). Under this approach discriminant validity between two constructs is established when the average variance extracted (AVE) of both constructs exceeds the squared correlation between the two constructs. Confirmatory factor analysis of the MMCS scale was undertaken with manager as coach as a second order factor with the five sub-scales. This follows the structure described in (Park et al., 2008). Confirmatory factor analysis fit statistics examined include chi-squared/df ratio, comparative fit index (CFI), global fit index (GFI), standardized root mean of residuals (SRMSR) and root mean square error of approximation (RMSEA).

Several strategies were also put in to place to reduce common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 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 neutralized potential method bias that might occur during the retrieval stage. The UWES was completed first and was hopefully an honest self-rating of their engagement in their current role (or previous role if unemployed or currently self-employed). The MMCS followed and if the relationship between MAC 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 and further bias.

As all the participants completing the survey have experience in the workplace, they should be able to answer questions based on direct experience. This which would reduce implicit theories or consistency motifs being applied because of uncertainty or lack of knowledge or experience in relation to a question. Implicit theories are patterns of thinking or biases that an individual has which they use in turn when making a decision or answering a question (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). Mind-setting prompts were placed throughout the survey to encourage participants to refocus on direct experience which again 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 two scales are also different which helps to reduce a response pattern that may emerge if the same scale was used. The UWES uses a 0 to 6 Likert scale with never to always being the anchors linked to the numbers. The MMCS also uses a 6 item scale, however, each question is anchored differently depending on the question. As a result it is less likely to enhance correlations between the two scales. See Figure 1 for an example question on the MMCS.

3. When I work with my manager, he/she ...

assumes that I understand expectations without clarification	☐ ☐ ☐ ☐ ☐ ☐ 1 2 3 4 5 6	discusses his/her expectations with me

Figure 1 Example MMCS Question with Anchors

As the survey was anonymous and delivered via a computer link the likelihood of a social desirability bias and leniency effect was also reduced. Anonymity is argued to be an effective strategy for reducing common method variance in these instances.

Finally, sensitivity of results to common method variance was examined by including another factor that loaded on all 20 MCSS and all 9 UWES measures (method 3A, Table 5, of . (Podsakoff et al., 2003). This method assumes some of the variance of all measurements can be explained by a common methods variance factor and adjusts the MCSS and UWES constructs by removing this variance.

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 final response rate for the study of 39.5%. The demographics of these 195 respondents are described here. Of the sample 63% 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 (having entered 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 many of the non-respondents to the survey, as they do not have a current manager so unless they can recall a recent manager would have been ruled out from completing 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).

The overall fit of the measurement model for MMCS had a chi-squared statistic of 318 on 160 degrees of freedom. The ratio χ^2/df of 1.99 is just below the threshold of 2 for a satisfactory fit. This is slightly better than the chi-squared statistic of 427 (ratio of 2.67) obtained by (Park et al., 2008). Other fit statistics were similarly satisfactory and reported here with the original scores from the (Park et al., 2008) study in brackets followed by the recommended values for a satisfactory fit (Hagen & Peterson, 2014; Park et al., 2008). The comparative fit index (CFI) was 0.925 (0.96; >.9) and the global fit index (GFI) 0.865 (0.81,

>.9). The standardized root mean of residuals (SRMSR) was 0.052 (0.063; <.05) and the root mean square error of approximation (RMSEA) was 0.071 (this was not reported in the (Park et al., 2008) study but should have a value <.08).

Table 1 provides the standardised regression coefficients between the five sub-scales and their respective measures. Means and standard deviations of the responses to the MMCS measures are also provided in Table 1 and suggest that while there is considerable variation in responses (all measures received all possible responses from 1 to 6) the mean responses for the most part are below the midpoint of 3.5. Table 2 provides correlations between the five sub-scales of MMCS.

The Manager as Coach measures (MMCS) displayed high construct validity with Cronbach's alpha of 0.94, similar to the 0.93 obtained by (Park et al., 2008). Cronbach's alpha values for each of the five sub-factors of MMCS were also similar those of (Park et al., 2008) with respective values of 0.78 (0.81) for open communication, 0.86 (0.88) for team approach, 0.85 (0.83) for values people, 0.75 (0.73) for accepts ambiguity and 0.78 (.78) for facilitates development (Park et al.'s values in brackets).

The sub-factor accepts ambiguity had the lowest alpha of 0.75 and this was primarily caused by the measure "When I am making career decisions, my manager stresses security/risk-taking", with correlations of only 0.27, 0.35 and 0.46 with the other three measures of this sub-factor. Reliability values from a congeneric model were all within 0.01 of these Cronbach's alpha values.

The five sub-factors of MMCS all failed tests of discriminant validity with two exceptions: the Values People sub-factor passed discriminant validity against the sub-factors of Team Approach and Accepts Ambiguity. The Values People sub-factor failed against Open Communication and Facilitates Development. Correlations between all of the sub-factors were typically high, with several exceeding 0.9 (Table 2). This suggests it may be better to view the MMCS and the measurement of coaching skill as a single construct rather than being composed of these five separate sub-constructs. Thus hypothesis H1 is partially supported in the sense that MMCS has high reliability. However we do not find support for the five sub-factors displaying discriminant validity.

The short form Work Engagement measures (UWES) used in this research also displayed psychometric properties consistent with those reported extensively in the literature (Bakker, Albrecht, & Leiter, 2010; Schaufeli & Bakker, 2010; Sonnetag, 2003). Cronbach's alpha for UWES was a satisfactory 0.89, however the absorption sub-scale had an alpha value of only 0.71 (vigor and dedication had alpha values of 0.81). Furthermore, absorption failed discriminate validity between both vigor and dedication. Correlations between the three sub-scales varied between .74 and .79. The two constructs MMCS and UWES displayed high discriminant validity suggesting they measure different constructs.

The correlation between the MMCS and UWES constructs is 0.28 and significantly different to 0 ($p = .002$). This positive correlation between the manager as coach and work engagement provides support for the second hypothesis. The result from adding the common variance factor into the analysis were still significant ($p = .001$) with a correlation between MMCS and UWES of 0.21. Thus while evidence for the second hypothesis remains, the strength of the relationship is weaker.

Table 1. Standardised regression coefficients (loadings) between MMCS measures and sub-scales

Sub-Scale	Measures	coefficient	Mean[1]	SD[1]
Open Communication				
	In facing new problems, my manager would rather listen to my opinion first.	0.70	3.5	1.7
	When I share my feelings with my manager, my manager appears to be comfortable.	0.74	3.9	1.6
	When a situation needs my manager's experiences, he/she willingly discusses them.	0.75	4.1	1.5
	When I work with my manager, he/she discusses his/her expectations with me.	0.59	3.3	1.6
Team Approach				
	As a part of a workplace group, my manager prefers to work for group consensus.	0.84	3.3	1.5
	When there is a work-related project, my manager usually assigns team tasks.	0.58	3.0	1.6
	When a decision is to be made, my manager prefers to participate with others to determine the outcome.	0.86	3.4	1.6
	When analyzing a problem, my manager tends to rely on group ideas.	0.84	3.3	1.6
Values People				
	When facilitating business meetings, my manager leaves time for relationship-building.	0.76	2.9	1.6
	In facing conflict between individual needs and tasks, my manager puts priority on meeting people's needs.	0.75	2.7	1.5
	In discussion with me, my manager focuses on my individual needs.	0.85	2.5	1.3
	In daily work, my manager considers people's needs outside the workplace.	0.74	2.7	1.4
Accepts Ambiguity				
	My manager views disagreement in the workplace exhilarating.	0.67	3.1	1.3
	My manager views differences of opinion as constructive.	0.84	3.8	1.6
	When my manager seeks solutions to problems, he/she tends to try new solutions.	0.60	3.1	1.4
	When I am making career decisions, my manager stresses risk-taking.	0.47	3.0	1.2
Facilitates Development				
	My manager actively provides opportunities for me to take more responsibility.	0.64	3.7	1.6
	To improve work performance, my manager constantly provides feedback.	0.64	3.3	1.6
	In order to improve my performance, my manager serves as a role model.	0.77	3.5	1.5
	My manager appears to view learning and development as one of his/her major responsibilities.	0.69	2.8	1.5

[1] means and standard deviations are calculated on the Likert scale values from 1 to 6. Coefficient is the Chronbach's Alpha.

Table 2. Correlations between the five sub-factors of MMCS

	VP	AA	OC	FD	TA
Values People	1	0.69	0.80	0.87	0.70
Accepts Ambiguity		1	0.95	0.93	0.75
Open Communication			1	0.94	0.89
Facilitates Development				1	0.77
Team Approach					1

Discussion

In response to a call for more empirical studies of coaching (Fillery-Travis & Passmore, 2011; Grant, 2013) using validated outcome measures (Grant, 2013; Theeboom et al., 2014) this study has explored the relationship between an employee's perception of managerial coaching and their perceived work engagement. This study suggests that employees perceived a positive relationship between managerial coaching and their work engagement. No doubt this is only one piece of a larger more complex interaction with other factors such as individual self-efficacy of the employee (Dahling et al., 2015), the organizational culture and workload also having an impact on work engagement. Exploring the inter-relationship between all of these factors in association with the importance of the manager as coach role is worthy of further research.

This positive relationship between managerial coaching and work engagement adds support to the literature which suggests that significant changes do occur in general well-being with coaching (Fillery-Travis & Passmore, 2011; Grant, 2013; Theeboom et al., 2014). While there was wide variation in the coaching abilities of those sampled, with some demonstrating a high level of competency and others not, the overall mean for coaching competence was generally below the midpoint suggesting there is still room for improvement in developing the coaching skills of many managers. Coaches who were more skilled were more successful at promoting goal achievement in their staff with variable frequency than those who were unskilled and coached frequently (Dahling et al., 2015). Hence, there is merit in providing training and development to managers to possess basic competencies in managerial coaching.

The sample for this cross-sectional study as well as the results also require some discussion as they have some influence on the outcomes of this research. The sample was predominately male with just over a third being female (37%). Further, 30% of the overall sample were working in the mining industry. This is reflective of the economic and geographic location of where this study was situated in Western Australia. At the time of this study the global financial crisis was having a negative impact on the mining sector and there was job uncertainty in the marketplace. All of these factors may have influenced the state of coaching taking place in workplaces by managers as their time may have been taken up dealing with the volatility of changes occurring in the sector. The mining sector itself, and the preponderance of male subjects in the study may also have influenced the results. As a result, repeat studies in different sectors with more gender balance would be appropriate.

This study also confirms that the MMCS overall is a reliable tool for measuring the skills of the manager as coach and possesses good construct validity matching those reliability estimates and fit indices published by the originators of the MMCS (McLean et al., 2005; Park

et al., 2008) and reported in a review of coaching scales (Hagen & Peterson, 2014). Only the sub-factor of "accepts ambiguity" had a lower alpha and this is likely confounded by one item which perhaps is more about career coaching and perhaps distinct from what the MAC might normally perform in their role.

The MMCS, however, does not pass an overall discriminant validity test for the five sub-scales. Only two scales (Team Approach and Accepts Ambiguity) passed discriminant validity against Values People sub-scales; all other pairs of sub-factors lacked discriminant validity. As a result, the overall score in the MMCS should be used to measure the effectiveness of the managerial coaching. This weakness in terms of discriminant validity between the composite categories likely stems from the high inter-relationship between the five approaches and coaching. They are all very integrated when thinking about performing the coaching role.

These results indicate that investment in training managers to be better coaches is a worthwhile endeavour for organisations to pursue. This study adds further support to the literature which suggests that coaching has a positive influence on performance measures in organizations {Hagen, 2014 #324}. In particular, it suggests that there is a positive relationship between managers who coach their employees and the employees' work engagement - as perceived by the respondents who completed the survey. The relationship between the manager as coach and work engagement has not been explored in any detail in the literature (Bakker & Leiter, 2010; Hagen, 2012).

The literature suggests that work engagement appears to influence organizational performance (Hakanen, Bakker, & Schaufeli, 2006; Schaufeli & Bakker, 2004). As a result, if the manager as coach can influence work engagement positively, this in turn should positively impact organizational performance. In an environment where the work engagement of staff is decreasing (Saks & Gruman, 2014) any effort to influence this positively is likely to reap benefits for the staff and the organization. This does, however, require managers and their superiors to invest in training and development so managers can develop the requisite skills to be effective coaches. Managers also need to conceptualize coaching as part of their role, particularly with human resources having a reduced function in many organizations (Beattie, 2006; A. Ellinger et al., 2014).

Limitations

The sample was a group of students studying management, hence, they may not necessarily be representative of the population and may have some implicit theories or expectations about their managers when answering the questions. Replicating the study using the general population may yield more generalizable results. The study is also only correlational and relied on self-report data so one cannot imply causation, only suggest that there is a relationship. More experimental study designs would have to determine whether there is a causation. Furthermore, the sample size of 195 in this study represents a sample to item ratio for the MCSS of just under 10. Larger samples may produce a superior subject to item ratio and therefore results with higher statistical accuracy.

The absorption factor of UWES exhibited lower internal reliability than typically reported in the literature (Cronbach's alpha of 0.71 rather than over 0.8). This suggests that in this context the measurement of work engagement might capture other factors, which is consistent with some of the recent criticisms of this tool in relation to job burnout (Saks & Gruman, 2014). In lieu of this, the results should be interpreted with some caution in light of some of the controversy concerning whether UWES measures a distinct construct or is the

opposite of burnout. However, the other factors and the overall construct of work engagement displayed high internal consistency.

While attempts were undertaken at both study design and statistical analysis stages to avoid common method variance impacting conclusions, this limitation remains as all measurement was taken within the one questionnaire. Finally, all measurements were of the respondents perceptions of their manager and work engagement.

Conclusion

This study has provided further support for the reliability and validity of the MMCS, a tool for measuring the coaching skills of managers. It is a reliable tool, best used as a composite measure because of issues associated with its discriminant validity. Coaching is a holistic process and is most likely best measured as a holistic competency. The MMCS can provide researchers with a tested empirical tool to measure the performance of managers in their coaching role. It can also be used to measure the impact of the manager's coaching on other variables within organizations and teams. This research found a significant relationship between the perceived coaching skills of the manager and the work engagement of the employee. There is still room for improvement in the abilities of managers to display important coaching skills in their role as manager and educational programs and training initiatives should work to build this competency in managers.

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