Boundary conditions of workplace coaching outcomes

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Boundary Conditions of Workplace Coaching Outcomes

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Abstract

Purpose

In order to address the need for greater understanding about the occupational and practice determinants of effective workplace coaching, this study examines the associations of two coaching practice factors (coaching format and external versus internal coaching provision), and coachees' job complexity with perceived outcomes from coaching.

Design/methodology/approach

A survey of 161 individuals who had received workplace coaching was conducted. Participants provided data on two outcome criteria (self-reported work well-being and personal effectiveness at work).

Findings

Analysis indicated that external coaches and blended format coaching were most strongly associated with work well-being outcomes. Our examination of interaction effects showed that coaching provided by external coaches was more strongly associated with outcomes for individuals working in the most complex job roles.

Originality/value

The original contribution of our findings are in terms of the implications for coaches, managers and HR practitioners by showing how coaching can be implemented differentially and most effectively based on desired outcome criteria and features of coachees' job situations.

Keywords

Coaching effectiveness; coaching outcomes; coaching practice factors; job complexity

Boundary Conditions of Workplace Coaching Outcomes

The proportion of organizations utilising workplace coaching as a learning and development tool over the last 40 years has risen dramatically (ICF, 2016) as many organizations recognize the potential benefits of workplace coaching such as improved leadership skills (Mackie, 2015) and enhanced job performance (Bozer, Sarros & Santora, 2013). However, the empirical evidence regarding variables that influence coaching outcomes has not increased at a comparable pace (Blackman, Moscardo & Gray, 2016). Consequently, little is known regarding the extent to which job features and coaching features (or practice factors) influence the effectiveness of coaching for different kinds of outcome criteria.

Recent meta-analytic findings (Jones, Woods & Guillaume, 2016; Theeboom, Beersma & Van Vianen, 2014) have demonstrated the effectiveness of coaching in generating improvements in learning and performance outcomes, and provided an initial exploration of the impact of specific design features of coaching (referred to as coaching practices factors) as moderators on outcomes in general. However, there are a lack of studies exploring whether coaching is more or less effective for individuals working in different occupations. In order to ensure that the right learning and development technique is selected for individual employees, understanding whether coaching, and indeed certain coaching practice factors, are more or less impactful based on coachees' job features is important evidence for practitioner decision making. Therefore, in response to significant gaps in the workplace coaching literature, we examine: a) if coaching practice factors are associated with outcomes for different kinds of criteria, b) if effectiveness is associated with job features of the coachee, and c) whether coaching practice factors and job features interact. To address these aims, in the present study, we examine the impact of coaching on affective and skill-based outcome

criteria (self-reported work well-being and personal effectiveness) and examine the associations between coaching practice factors and coachee job complexity on these criteria.

Our study makes two important contributions to the workplace coaching literature. First, by analysing workplace coaching outcomes at the specific level (i.e. affective and skill-based) rather than on coaching outcomes in general, the present study adds to our understanding of the unique impact that coaching practice factors have as a function of the outcome criterion. Meta-analytic findings have shown, like training (Arthur, Bennett, Edens & Bell, 2003), the effect of coaching varies systematically as a function of the outcome criterion being measured (Jones et al., 2016). Similarly, evidence supports the prediction that coaching practice factors moderate coaching outcomes in general. However, due to the limited number of studies included within the meta-analysis by Jones et al. (2016), they necessarily collapsed a variety of outcome criteria to provide an overall indication of the moderation of the impact of coaching by coaching practice factors. Our study addresses the limitation of a lack of detail on the interaction of the impact of coaching practice factors on specific outcome criterion. Consequently, we extend this finding to examine the specific associations between practice factors and two different levels of workplace coaching outcomes: affective and skills-based.

Second, we apply concepts of understanding job features in relation to understanding for whom is coaching most effective. We question the assumption that workplace coaching is equally effective for all people in all job roles, and rather propose that the effectiveness of coaching depends on an interaction of the features of coachees' occupations and the practice features of coaching. This more granular approach to examining workplace coaching provides an important contribution to theory and practice, addressing calls for a better understanding of workplace coaching (Feldman & Lankau, 2005; Grant, Passmore, Cavanagh & Parker, 2010). Practically, if we can understand how to maximise the impact of coaching,

practitioners and organizations can be better informed to make evidence-based decisions in relation to the management of learning and development investment.

Workplace Coaching and its Effectiveness

Workplace coaching is a one-to-one learning and development intervention that uses a collaborative, reflective, goal-focused relationship to achieve professional outcomes that are valued by the coachee (Smither, 2011). In the present study, we examine two outcome criteria: affective and skill-based. Affective outcomes of coaching include outcomes such as work well-being; self-efficacy; motivation and satisfaction. Affective outcomes are generally considered to be a valued outcome of coaching in their own right, with a number of empirical studies selecting affective outcomes as the primary criteria for change through coaching (e.g. Baron & Morin, 2009; Grant, Green & Rynsaardt, 2010; Luthans & Peterson, 2003). Theorising from the training literature also suggests that affective outcomes are important outcomes of learning as they are determinants to behaviour or performance (Kraiger, Ford & Salas, 1993). In addition to affective outcomes, coaching is also able to effectively promote skill acquisition and enhancement through the work-based application of improvement and development activities with outcomes such as leadership skills (Mackie, 2015) and communication skills (de Figueiredo et al., 2015).

Coaching Practice Factors

Previous research by Jones et al. (2016) explored the moderating effect of a variety of 'coaching practice factors'. This includes type of coach (i.e. internal or external coach); coaching format (i.e. face-to-face, telephone, videophone, e-mail or blended format (face-to-face and remote forms of coaching combined) and longevity of coaching. Jones et al (2016) found that whilst some of these coaching practice factors had a significant moderating effect on outcomes in general, they were unable to explore the moderating effect for specific criteria. Given the variation in effect size for the different levels of outcomes and the

evidence to indicate the significant impact of coaching practice moderators, it is likely that different practice factors will impact on different criteria to a greater or lesser extent. In the present study, we examine the association with outcomes for two coaching practice factors. These are 1) whether coaching is conducted by an internal or external coach, and 2) whether coaching is delivered solely face-to-face or in a blended format (e.g. face-to-face and telephone/videophone).

Internal versus external coaching and outcome criteria. Turning first to internal versus external coaching, researchers have proposed that an external coach offers increased assurances of confidentiality and impartiality (Machin, 2010; Sue-Chan & Latham, 2004). By contrast, insights gained from mentoring research suggest that mentors working externally to the mentee organization cannot provide the full range of career assistance functions that an internal mentor could (Haggard, Dougherty, Turban & Wilbanks, 2011). In the context of coaching, Frisch (2001) suggests that an internal coach has the ability to observe the coachee's progress and adapt the development objectives accordingly and Jones et al. (2016) found that internal coaches were most effective in the studies included in their meta-analysis, however could not test any moderation by criterion type.

We propose that the importance of an internal versus external coach is likely to vary depending on the nature of the objectives that the coachee wishes to address in coaching and the subsequent impact on outcomes. For example, a coachee struggling with issues at the affective level such as well-being, self-efficacy beliefs or job satisfaction, may be better supported by a coach who is working externally to the organization. We propose that this is due to the ability of an external coach to more effectively build a trusting relationship and a 'safe' climate with the coachee to effectively explore potentially sensitive development needs. The relational nature of coaching is often argued as being an essential component to successful outcomes from coaching (e.g. de Haan, Duckworth, Birch & Jones, 2013). For

example, Sherman and Freas (2004) report that the relational nature of coaching provides an individual, customized feel, with coaches providing candour, and honest feedback to the coachee in relation to their performance and behaviour. The importance of the relationship is further supported by research evidence on mentoring effectiveness. Mentoring is a similar, relational development intervention to coaching, with the literature highlighting the importance of the relationship between mentor and protégé in producing effective outcomes from mentoring (e.g. Eby, 2007; Ensher & Murphy, 2010). Much of the focus of the research in mentoring relationships has been on the reciprocal benefits to both mentor and protégé in mentoring. This reciprocal focus is unlikely to be as important in coaching compared to mentoring, due to the increased formality of coaching relationships (i.e. a contracted coach working with a nominated coachee). However, due to the similarities in the one-to-one, relational support in both coaching and mentoring, the establishment of a 'safe' climate to explore development needs is likely similarly important.

Further support for this argument can be seen in research into the relative efficacy of internal versus external employee assistance programmes (EAPs), where external EAP providers are viewed by employees as promoting feelings of confidentiality in comparison to internal providers (Csiernik, 1999). Furthermore, in relation to external versus internal outplacement counselling provision, external providers were viewed as being more credible, sophisticated and with greater expertise when compared to internal providers (Kilcrease, 2013).

We argue that when considered in the context of specific criterion outcomes, an external coach may be able to offer increased assurances of confidentiality and impartiality in relation to these affective issues, consequently permitting more open exploration of affective outcomes, such as workplace well-being. Skill-based and results outcomes on the other hand tend to have weaker associations with sensitive information and will therefore be influenced

to a lesser degree by the externality of the coach. If this proposition is supported, we would expect to see a difference in outcomes at the affective level when comparing external and internal coaches. Therefore, we propose that when workplace coaching is focused on potentially more sensitive, affective outcomes, greater assurances of confidentiality and impartiality offered by an external coach are likely to have greater importance:

Hypothesis 1. Affective outcomes will be higher for people receiving coaching from an external coach compared to people receiving coaching from an internal coach.

Coaching format and outcome criteria. The format of coaching in the context of coaching outcomes is a relatively new area of research (Lynden & Avery, 2016). Historically, coaching has been associated with face-to-face meetings, however research suggests that as many as 94% of coaches worldwide are conducting coaching over the telephone (Newnham-Kanas, Irwin & Morrow, 2011). To-date, there is little evidence to indicate the impact of the format of workplace coaching on outcomes, although findings from health coaching and mentoring are mixed, with some indications that face-to-face is superior to telephone (Yan, Wilber & Simmons, 2011) whilst others have demonstrated that both telephone and internet coaching or mentoring can generate positive impact on outcomes (de Janasz & Godshalk, 2013; Ensher & Murphy, 2010; Kyrgidou & Petridou, 2013). Initial research specifically focused on format of workplace coaching, suggests that when compared to face-to-face coaching, telephone or other formats of coaching (such as videophone or internet coaching) are equally as effective (Jones et al., 2016; Lynden & Avery, 2016; McLaughlin, 2013).

These initial studies suggest that format of coaching may be an area of research interest, particularly given the frequency that non-traditional formats of coaching are being utilised in practice. However, to-date, the existing research investigates format of coaching in either a qualitative, exploratory manner or in relation to broad and general coaching outcomes. As with type of coach, we propose that the importance of the format of coaching is

also likely to vary dependant on the level of outcome being measured. For example, in the same way that the relationship between an external coach and a coachee is likely to benefit from increased perceptions of a 'safe' climate for open exploration of affective outcomes, this safe relationship is also more likely to be successfully developed when the coach utilises some face-to-face sessions, as a degree of face-to-face contact is likely to be important in fostering a trusting relationship. However, due to the temporal, state-like nature of affective outcomes, coachees wishing to target outcomes at this level are also likely to benefit from the greater level of responsiveness a coach can offer when utilising more remote formats of coaching such as telephone, videophone or email. Whilst we would not suggest that a coach offering telephone or videophone coaching will be available for their clients at all times, we do suggest that the flexibility with telephone or videophone coaching would make the coordination of schedules easier and consequently improve the level of responsiveness a coach can offer. Therefore, we propose that a combination of face-to-face and remote coaching formats (i.e. blended coaching) is likely to be more effective for coachees seeking affective (e.g. improved well-being) outcomes from coaching. We hypothesize that:

Hypothesis 2. Affective outcomes will be higher for people receiving coaching provided in a blended format compared to people receiving coaching provided in solely face-to-face or telephone formats.

Job Features and Coaching Outcomes

So-called "learner effects" are widely researched in the training and learning literatures (Salas, Tannenbaum, Kraiger and Smith-Jentsch, 2012). Research on learner effects in coaching are by contrast at a more nascent stage, with studies examining the impact of coachee personality (i.e. Jones, Woods & Hutchinson, 2014); coachee self-efficacy (i.e. Baron & Morin, 2009); coachee motivation (i.e. Rekalde, Landeta & Albizu, 2015) and

coachee goal orientation (i.e. Scriffignano, 2011). However, as yet, an under researched area is the occupation of the coachee.

Meta-analytic evidence in the related field of training has demonstrated that the effect of training on outcomes differs as a result of the type of skill or task being 'trained' (Arthur et al., 2003). As the focus in workplace coaching is generally wider than in training, with a range of development objectives targeted across the period of the coaching intervention (Bono, Purvanova, Towler & Peterson, 2009), in the context of coaching it is more appropriate to examine characteristics at the job or occupation level rather than the task or skill level. In the present study, we focus on job complexity as a key occupation feature.

Job complexity. Complex jobs can be defined as jobs that are multifaceted and encourage employees to combine knowledge from various sources (Shalley, Gilson & Blum, 2009). Complex jobs are also characterized by the level of stimulating and challenging demands associated with the job (Hackman & Oldham, 1980). It has been argued that complex jobs require more intricate thought processes compared to simpler jobs (Farr, 1990) and require employees to exhibit greater levels of flexibility in how they work, consequently activating the use of advanced cognitive faculties and processes (Tierney & Farmer, 2002).

Job complexity is likely to be of particular significance in the context of coaching outcomes, because complex roles typically comprise more unique features and so demand more unique and customized learning and development. For example, historically, workplace coaching has been reserved for those working at the 'executive' level in the workplace (Sherman & Freas, 2004). Whilst this is likely to be linked to the high costs associated with one-to-one coaching, it is also likely that coaching is generally reserved for those working at a senior level due to the bespoke, customized nature of coaching when compared to other forms of training, learning and development. Seniority at work can be used to describe those working at a senior level of management or in the context of those working in highly

specialist or complex job roles. The more unique nature of the job role and the demands placed on the individual, may mean that generalised training has limited impact on outcomes (e.g. as observed in comparisons of the outcomes of general versus managerial training; Arthur et al., 2003). Consequently, we suggest that individuals working in more complex job roles are more likely to benefit from coaching due to the tailored, bespoke, high fidelity nature of this development intervention.

Coaching is considered to be a highly bespoke form of learning and development for a number of reasons. Firstly, the one-to-one nature of coaching inherently makes it bespoke to the coachee. Rather than being an 'off-the-shelf' developmental intervention, the coachee leads the coaching conversation, dictating the focus and direction of the discussion (Smither, 2011). Therefore the input from the coach is completely tailored to the needs of the coachee. Furthermore, a key characteristic of coaching is the requirement that coaches adapt the coaching approach, tools or techniques they utilise in order to adequately address the particular issue and context that the coachee presents. For example, Downey (1999) proposes that the form of a coaching conversation will depend on the situation and needs of the coachee. A point further supported by both McDermott and Jago (2005) and Stober and Grant (2006), who suggest that the foundation of highly effective coaching is a targeted and flexible approach matched to the coachees' needs and situation.

Individuals working in senior, complex job roles are required to combine knowledge from various sources in order to effectively respond to the multi-facet nature of their job (Shalley et al., 2008). One of the benefits of coaching is the function of bringing together existing knowledge to create new learning and inform decision-making (Andrews & Jones, in press; Walker-Fraser, 2011). This 'sense-making' role of coaching is likely to be particularly relevant for individuals in highly complex job roles who are required to utilise more intricate thought processes (Farr, 1990) and require greater cognitive agility (Appelbaum, Habashy,

Malo & Shafiq, 2012). The intra-and interpersonal skills required to effectively respond to the demands present in complex job roles, are, we propose, more effectively developed by a personalised developmental intervention, such as coaching, that can focus in and target on the specific challenges within the specific context at any given point in time. Therefore, we hypothesize that:

Hypothesis 3. Affective and skill-based outcomes from coaching will be higher for people working in the most complex job roles.

In hypotheses 1 and 2 we proposed that there will be a significant effect of coaching practice factors on coaching outcomes, in that we suggest that the employment of coaching practice factors will influence the degree of impact on outcomes in different ways. However, in relation to job complexity, we do not propose that a similar interaction with outcomes will be present. For example, coaching is likely to impact skill-based and affective outcomes for individuals working in highly complex jobs and those in less complex jobs. Consequently we expect more consistent effects on both affective and skill-based outcomes.

Interaction of coaching practice factors and job complexity. Whilst we propose that coaching generally is likely to have a greater impact on highly complex job roles, we also argue that the type of coach will interact with job complexity. For example, further to our earlier theorizing in relation to the importance of external coaches in relation to affective outcomes, we propose that for highly complex jobs, external coaches are likely to be more effective than internal coaches. The greater degree of seniority or specialism in the most complex job roles is more suited to a coach with more specialised skills and competencies, making it less likely that the specific blend or profile of skills could be available from an internal coaching pool. Therefore, we hypothesize that:

Hypothesis 4. Affective and skill-based outcomes from coaching will be higher for people in highly complex jobs when coaching is provided by an external coach.

Method

Participants and Procedure

Participants were 161 coachees. Participants were contacted through a UK professional network of coaching practitioners. Participants ranged in age from 20 to 70 (mean age = 41.48, SD = 10.12), and were mostly female (62.2%). The level of position in participants' respective organization of the sample was split between 56.1% not management; 21.3% middle management; 7.3% first line management and 5.5% senior management. The remaining 9.8% did not specify their level of position.

In relation to the coaching participants had received, 70.1% of the sample saw a coach external to their organization and 16.5% saw an internal coach (13.4% not specified), 45.7% of participants received coaching face-to-face, 32.3% had telephone coaching, and 13.4% had blended coaching (consisting of a combination of face-to-face, telephone, videophone and email coaching), 8.5% did not specify the format of coaching.

Measures

Affective coaching outcome: work well-being. Seven items were created for this study to assess participant's beliefs regarding the impact of coaching on affective outcomes (labelled 'work well-being'). An example item was "As a result of working with my coach, I believe that… e.g. I feel happier at work' (1 = strongly disagree to 5 = strongly agree; items reported in the appendix). Cronbach's alpha for this measure was .93.

Skill-based coaching outcome: personal effectiveness. Five items were created for this study to measure participant's views regarding the impact of coaching on skill-based outcomes (labelled 'personal effectiveness'). Self-reported measures of skill-based outcomes of workplace learning are identified as a valid strategy by Kraiger et al. (1993) and Jones et al. (2016). An example item was "As a result of working with my coach, I believe that…e.g. I am able to prioritise more effectively" (1 = strongly disagree to 5 = strongly agree; items

reported in the appendix). Cronbach's alpha for this measure was .91. We report confirmatory factor analyses of these scales in the Results section.

Job complexity. Participants were asked to state their occupation. This information was utilised to code for job complexity using the O*NET database (O*NET online, 2016). O*NET is the electronic database created by the U.S Department of Labor containing detailed information for all occupations. Each occupational record includes a 'job zone' category ranging from job zone one (little or no preparation needed) to job zone five (extensive preparation needed), which we used as an indicator of job complexity (see also Grotto & Lyness, 2010). Our coding procedure involved the following steps. Firstly, the occupations provided by participants on the survey were entered as search terms into the O*NET database. Searches typically returned multiple O*NET records and each record also provides a list of alternative job titles. When an exact match was retrieved, including in the list of alternative job titles, that record was selected. Where no exact match was retrieved, the most relevant alternative record was selected (following Woods & Hampson, 2010 and Woods, Patterson, Wille & Koczwara, 2016).

Based on this methodology, 14.6% of participants were employed in O*NET job zone five roles (the most complex job roles); 70% were employed in job zone four roles and 28.7% were in job zone three roles (14% not specified). As previously discussed, coaching is traditionally reserved for individuals working in senior or executive roles, therefore we did not expect to find any participants within our sample who had received coaching that worked in occupations classified as either job zone one (such as a cashier) or job zone two (such as a customer service representative). Our sample confirmed this as there were no participants identified as working in occupations classified as either job zone one or two.

Statistical Methods

A range of statistical methods were employed in the analysis. Independent samples t-tests were used to identify significant differences in the mean values of coaching outcomes grouped by coaching practice factors.

Multivariate linear regression by the ordinary least squares (OLS) was used to analyse the relations of coaching outcomes with multiple independent variables (e.g. the format of coaching and the level of job complexity). To include non-continuous variables in these analyses, dummy variables were created. To test moderation effects, we examined the interaction between relevant independent variables using multivariate regression.

Results

Confirmatory Factor Analysis.

Confirmatory factor analysis (CFA) was performed to cross-validate the two-factor structure of our outcome. Reflective and formative confirmatory factor analyses were conducted to ensure the distinctiveness of the dimensions of the perceived coaching effectiveness scales we used as our dependent variables. While reflective CFA signals that the indicators of a construct are caused by that construct, formative CFA indicates that the measured variables are causes of the latent variable (Badger Darrow & Behrend, 2017). We conceptualize our personal effectiveness construct as a reflective factor, in that we anticipate that the personal effectiveness dimensions are reflections of the overall personal effectiveness construct. Conceptualized in this way, we predict that the indicators for the personal effectiveness scale are manifestations of the construct and are conceptually interchangeable. However, for work well-being, we propose that a reflective-indicator model is not appropriate and instead we predict that causality flows from the dimensions to the work well-being construct. As our work well-being items are rather heterogeneous, for example, satisfaction, frustration, stress, motivation and engagement, we do not consider these to be indexes of a homogenous work well-being construct. Instead, for work well-being, the indicators

collectively define our work well-being construct, therefore the degree of participant work well-being does not cause variations in the individual indicators (such as feeling happier at work). When modelled in this way, the work well-being construct assumes that the indicators each capture different parts of the construct domain and the facets would not appear to covary (Badger Darrow & Behrend, 2017). Therefore, to check the appropriateness of modelling our construct in this way we compare the results for both a formative and reflective model of work well-being.

Confirmatory factor analyses was used to test the fit of our data to either a reflective or formative model for the work well-being construct (with personal effectiveness modelled as reflective in both instances). To compare the reflective measurement model with the formative measurement model, it was necessary to analyse them both with the same method (Miguel, Ornelas & Maroco, 2015). Therefore, the factor structure for both models was assessed using partial least squares structural equation modelling with SmartPLS 3.2.7 (Ringle, Wende & Becker, 2015). The procedure was conducted using the factor weighting scheme as a PLS algorithm with 300 iterations and a nonparametric bootstrapping procedure with 5,000 replications (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005).

For the reflective model, indicator reliability was obtained by squaring the loadings of indicators. Values greater than .70 are preferred, however, values of greater than .40 are acceptable in exploratory research (Hulland, 1999). Composite reliability was used to measure internal consistency reliability, with a value of greater than .70 indicating good reliability (Hair, Ringle & Sarstedt, 2011; Wong, 2013). The average variance extracted (AVE) of each latent variable was evaluated to check convergent validity with a value greater than .5 indicating satisfactory convergent validity (Hair et al., 2011; Wong, 2013). Discriminant validity was assessed by using the Fornell-Larker criterion and the heterotrait-monotrait ratio of correlations (HTMT; Fornell & Larcker, 1981; Henseler, Ringle, &

Sarstedt, 2015), whereby to provide evidence of discriminant validity, the square root of the AVE of each construct should be higher than the correlation between the two latent variables and both constructs should display HTMT values lower than the .85 threshold.

The validity assessment of the formative measurement model was based on two criteria: collinearity assessment and significance and relevance of the formative indicators (Rodrigues, Menezes & Ferreira, 2018). The multicollinearity was assessed by examining the variance inflation factor (VIF) values where strong correlations (of greater than 5) should be discarded (Hair et al., 2011; Wong, 2013). The decision of keeping or deleting any formative indicator relied on the analysis of the outer weight and outer loading of each indicator, followed by the bootstrapping procedure to assess their significance. According to Hair, Hult, Ringle and Sarstedt (2014), the indicator should be retained when either the outer weight is significant or if the outer weight is not significant but its outer loading is relatively high ($>$ .50). If the outer weight is not significant and its outer loading is low ($<$ .50) although is still significant, the indicator should be considered for deletion. Finally, if both the outer weight and outer loading are nonsignificant, the indicator should be removed from the model.

For both the reflective and formative models, model fit was assessed by examining the normed fit index (NFI) and the standardised root mean square residual (SRMR). For a good fit, NFI should be above .90 and SRMR should be less than .08 (Hair, Black, Babin & Anderson, 2010).

Reflective measurement model. First we tested the appropriateness of the model when conceptualizing both the personal effectiveness and work well-being constructs as reflective (see Figure 1). The assessment of the reliability of the indicators showed that all reflective indicators for both constructs had values greater than .40 and could therefore be retained. Both latent variables showed good reliability with composite reliability values of .90 for personal effectiveness and .92 for work well-being. Both constructs also showed

acceptable convergent validity with AVE values of .65 for personal effectiveness and .64 for work well-being. There was also evidence for the discriminant validity of the measures as the square root of the AVE for both constructs (personal effectiveness = .81; work well-being = .80) was higher than the correlation between the two latent variables (.65) and the HTMT values were lower than the cutoff of .85 (personal effectiveness = .80; work well-being = .65). A reflective model fit the data moderately well with NFI = .85 and SRMR = .07.

<center>FIGURE ONE ABOUT HERE</center>

Reflective and formative measurement model. Next we tested the appropriateness of the model when personal effectiveness was conceptualized as a reflective construct and work well-being was conceptualized as a formative construct (see Figure 2). To examine the correlations between factors we examined the VIF statistics, for the formative work well-being factor, all VIF statistics were less than 5 (WW1 = 2.20; WW2 = 2.48; WW3 = 2.90; WW4 = 3.44; WW5 = 1.78; WW6 = 2.45; WW7 = 2.58), indicating a low correlation between indicators, as would be expected in a formative factor. By examining the outer weights of the work well-being construct, only one item (WW6) showed a significant outer weight ($p = .02$) however all items had high ($> .60$) and significant ($p < .00$) outer loadings and therefore should be retained (Hair et al., 2014).

In terms of the model fit statistics for the combined reflective and formative model, the data indicates a moderately better fit when modelled in this way compared to both factors modelled as reflective constructs with NFI = .93 and SRMR = .05. The results therefore suggest that the combined reflective and formative model, as depicted in Figure 2, represents a better fit than the reflective model, and therefore we propose that our dependent variable should be conceptualized in this way.

<center>FIGURE TWO ABOUT HERE</center>

Hypotheses Testing

Descriptive statistics for all variables included in our study can be found in Tables 1 and 2. To test Hypothesis 1, a two-tailed t-test was conducted to compare work well-being scores of those coached by internal and external coaches. The results show that there is a significant difference in well-being scores for internal coaches ($M = 3.43$, $SD = 0.58$) and external coaches ($M = 3.72$, $SD = 0.63$, $t(140) = -2.20$, $p = 0.030$), with a Cohen's d of 0.48. The direction of difference shows that work well-being was higher for individuals coached by external coaches compared to internal coaches. Hypothesis 1 is supported.

TABLES ONE AND TWO ABOUT HERE

We next conducted regression analysis to compare work well-being for the different formats of coaching. Blended format is taken as the reference category and compared against face-to-face and telephone formats. Work well-being scores are significantly lower in face-to-face sessions compared to blended format sessions ($B = -0.402$, $p = 0.007$). Although the scores are also lower for telephone sessions, the differences are statistically non-significant ($B = -0.272$, $p = 0.080$). The results partially support Hypothesis 2, especially in respect of comparing blended with face-to-face sessions.

We adopt the same approach to examine job complexity and work well-being and personal effectiveness following coaching. Highly complex jobs (ONET job zone 5) are taken as the reference category and compared against less complex jobs (ONET job zone 3 and ONET job zone 4). Table 3 shows that highly complex jobs are not significantly different from the other job zones in terms of either work well-being or personal effectiveness following coaching. For instance, the difference between moderately complex jobs (ONET zone 4) and highly complex jobs (ONET zone 5) is -0.011 on the work well-being scale (which ranges from 1 to 5), and the p value is far from statistically significant ($p = 0.940$). The results show that the effectiveness of coaching is not associated with the level of job complexity. Hypothesis 3 is thus not supported.

TABLE THREE ABOUT HERE

Finally, we test whether affective and skill-based outcomes from coaching will be higher for individuals who work in highly complex job roles, when coaching is provided by an external coach. To this end we included both the main effects and interactive effects of the type of coach and job complexity in the regression analysis. As can be seen in Table 4 and Figure 3, there are significant and positive interactive effects between external coach and job complexity, and the pattern was similar for work well-being and personal effectiveness outcomes. The sign of the coefficients indicates that work well-being and skill-based outcomes are significantly higher for those working in highly complex jobs when coached by an external coach. The result supports Hypothesis 4.

TABLE FOUR ABOUT HERE

FIGURE THREE ABOUT HERE

Discussion

In this paper we respond to calls in the literature to conduct research that increases understanding of workplace coaching and in particular we explored the extent to which job complexity and coaching features (or practice factors) are associated with the effectiveness of coaching for different kinds of outcome criteria. (Feldman & Lankau, 2005; Grant et al., 2010).

Contrary to previous meta-analytic findings that suggest that internal coaches are more effective than external coaches at improving coaching effectiveness in general (Jones et al., 2016), we found that affective outcomes (work well-being) were higher when coaching was provided by external coaches compared to internal coaches. With respect to affective outcomes, we suggest that the coachee may wish to engage in greater levels of sharing of sensitive information, which may be better facilitated when the coach is external to the organization, thereby providing increased assurances of confidentiality and impartiality. A

further important factor to consider in this respect is coachee autonomy in selecting their coach. 'Get-to-know-you' meetings, where the coachee has an opportunity to meet with different coaches in order to decide which coach they would like to work with (Tulpa, 2015), are often set up when a coachee is selecting an external coach. Such choice is less likely when working with an internal coach, given that the pool of potential internal coaches is smaller than for potential external coaches. Coachees who receive coaching provided by an external coach may have therefore also had the opportunity to select the coach with whom they feel higher levels of rapport. This may also contribute to our finding that affective outcomes were higher for external coaches, as these coaching dyads may have experienced higher levels of rapport from an early stage in the coaching process compared to internal coaching dyads. We return to this point later in the limitations section.

We also found support for our second hypothesis (that affective outcomes were higher when coaching was provided by a blended format coaching). We suggest that the combination of face-to-face contact, through which a safe and open relationship can be fostered, and the responsiveness of remote contact, through which the temporal, state-like nature of affective issues can be responded to flexibly, explain this finding. Our results contribute to workplace coaching theory and research, as we offer initial evidence that coaching practice factors may be more or less effective depending on the type of outcome targeted in coaching. An additional factor that may be important to consider in relation to blended format coaching is that in addition to being a more responsive, flexible format of coaching, there is also the possibility that coaches that utilise a blended format of coaching may also be more likely to provide additional, between session support to their coachees which may further influence the impact of their coaching. For example, coaches that utilise a blended format rather than solely face-to-face or telephone formats may be more likely to respond to coachee questions or queries via email between 'official' coaching sessions. This

additional support may mean that coachees who are coached using blended format coaching may benefit from an increased total amount of coaching. This increased contact time with the coach could therefore also contribute to the impact of blended format coaching on affective outcomes. We will return to this point in our limitations section.

We proposed that it is important to understand features of the coachee's job in relation to coaching outcomes. In particular, we theorized that whilst in the training literature researchers have sought to understand the interaction between outcome and the nature of the task or skill to be learned, in coaching, due to the broader focus of development, the level of analysis should be at the job rather than at the task level.

We hypothesized that due to the diverse demands placed on individuals working in the most complex job roles, outcomes would be greater following coaching for these individuals because of its bespoke, customized nature. Our analysis did not support this prediction. We found that there was no significant difference for the impact of coaching on outcomes based on the three levels of job complexity in our sample, with coaching being equally beneficial for participants working across all job roles.

However, the picture changed when we examined the interaction of job complexity with internal versus external coaching. Supporting our hypothesis 4, we found that outcomes were higher when coaching was provided by external coaches for individuals working in highly complex jobs when compared to coaching provided by internal coaches or coaching provided by external coaches to coachees in less complex job roles. We hypothesised that given the increased complexity of the issues to be addressed, coachees would benefit from the greater specialised input offered from an external coach that is less likely to be available from an internal coaching pool. Our findings supported this prediction and suggest that for individuals working in the most complex job roles in particular, an external coach may be more effective. This result may reflect the importance of selection of coaches for specific

purposes. Each coach brings their own tacit understanding of particular job roles and organizations to the coaching relationship. While coaching is generally non-directive, this knowledge could inform the way that questions are asked or issues explored. Following this logic, there are two possible explanations for our finding. One, alignment of the coach with the coachee job context could be important, in that it is preferable for the coach to be specifically experienced within the specialised context of the coachee's job. Alternatively, it may be breadth and diversity of experience of the coach that is critical. That is, the external coach might be more effective at enabling problem solving that is not hindered by the constraints of the coachee's own organizational situation. Future research should seek to examine these alternatives.

Implications for Theory, Research and Practice

Our paper identifies conditions that are associated with coaching effectiveness, much needed in the learning and development literature. That is, rather than coaching being equally effective in all situations, our data suggest that effects vary across criteria, coaching format, source of coach (external or internal) and job complexity. Therefore, in the endeavour of realising a theory of coaching, researchers must seek to define mechanisms in such ways as to accommodate these factors.

Our findings also identify avenues for new empirical work in the area of coaching at work. For example, the differential impact of coaching across criteria in our data underline the need to understand the ways in which coaching works for different work outcomes. Perhaps more critically, our results suggest that in addressing such issues in research, it is important to examine the specific factors relating to the way in which coaching is delivered alongside different criterion types. In pursuing these lines of research, studies could be operationalized to extend both criteria (for example using objective results outcomes), and

coaching practice factors (for example, capturing frequency of coaching sessions or session duration).

A second major area for future empirical work is the profiling of coachees and the examination of the main effects of coachee job role and individual differences, and their interaction with characteristics of the coach. In our study, job complexity interacted with internal/external coaching provision, suggesting potential variation in the effectiveness of coaching based on coachee factors. Therefore, we suggest that the associations of coachee characteristics with coaching outcomes is not simple, and rather represents a more complex interplay with characteristics of the coach, and the coaching provided. This is consistent with a view of the bespoke nature of coaching (i.e. that what works in one coaching situation may not necessarily work in another).

Our findings have clear practical implications. Based on our analysis, we would suggest that individuals seeking to address affective issues from coaching utilise a workplace coach who is working externally to the organization and engage in coaching that is conducted in a blended format (combining face-to-face with remote formats of coaching). Coaches addressing affective issues with coachees could adopt blended methodology and, if working internally in an organization, consider whether an external coach might be more appropriate to deal with more sensitive coachee problems.

Based on our finding that people in complex roles reported more benefits from coaching by external coaches rather than internal coaches, organizations seeking coaching for people in such roles are advised to consider external providers. In particular, careful selection of the coach to ensure experience commensurate with the level of complexity of the coachee's job role is recommended.

Limitations

As with all research, certain limitations should be acknowledged. Our study utilised cross-sectional, self-report data which therefore does not permit us to draw inferences about causative relations. However, given that our independent variables are statements of facts (i.e. coaching features and occupation titles) rather than attitudinal variables, the risk of common method bias in explaining associations is reduced.

A second limitation is the granularity of our measurement of job complexity. Whilst the standardized profiling of job features in O*NET conveys important advantages (i.e. standardised comparison of different occupations unbiased by participant perceptions of job features), there are certain aspects of job content that cannot be gleaned. Relevant examples include job autonomy, role clarity or social (i.e. peer and supervisor) support. All could impact on the benefits attained from coaching, and therefore could be targets for follow-up studies. Our data nevertheless provide a first examination of the interaction of coaching practice factors and job complexity, underlining the potential understanding to be gained by pursuing this line further.

Thirdly, we utilised partial least squares (PLS) analysis to validate our outcome measure. Whilst there are many proponents of PLS (Henseler et al., 2014), particularly when utilising formative measurement (Peng and Lai, 2012; Willaby, Costa, Burns, MacCann & Roberts, 2015), PLS has also been critiqued (McIntosh, Edwards & Antonakis, 2014; Rönkkö & Evermann, 2013; Rönkkö, McIntosh & Antonakis, 2015; Rönkkö, McIntosh, Antonakis & Edwards, 2016), therefore it is important to acknowledge the limitations of PLS. Of particular relevance to the present study is the debate on the appropriateness of PLS as an approach to validating measurement models, with Rönkkö and Evermann (2013) proposing that the heuristics used for assessing PLS models (composite reliability and average variance extracted) are biased and overestimated. Whilst Henseler et al. (2014) provide a counter to Rönkkö and Evermann's (2013) criticisms, concluding that PLS is a superior approach to

SEM, McIntosh et al. (2014) reflect on this debate and provide a more balanced view, proposing that PLS is a suitable method to validate measurement models in the composite factor case, as is the case in the present study.

Finally, we identified potential confounds to our findings that warrant further exploration. In respect to our comparison of the impact of external versus internal coaches, we suggest that the increased levels of confidentiality and impartiality offered by an external coach can encourage the openness required to effectively address affective issues. It is also possible that our findings in relation to external coaches and affective outcomes reflect autonomy over the selection of an external coach, a feature that we did not record from our participants. Further research should seek to address this with a specific exploration of the role autonomy of coach selection plays in the effectiveness of coaching.

In respect to our comparison of the impact of the format of coaching, whilst we suggest that the increased responsiveness and flexibility afforded by coaches using a blended format of coaching positively influences the impact of coaching on affective outcomes, it is also possible that coachees who received blended format coaching benefit from an increased total amount of coaching support if the coach engages in additional email contact with the coachee between 'official' sessions. This increased coaching contact time could further explain the impact of blended format coaching on affective outcomes. Future research should seek to address this issue by measuring not only the frequency and duration of official coaching sessions but also the degree of unofficial, additional contact and support provided by the coach.

Conclusion

The continued growth in the practice of workplace coaching makes it an important focus of scholarly attention. Our study offers valuable new insights into the role of coachee job complexity and important coaching practice factors, that are associated with coaching

outcomes, and is the first to examine the interaction of these predictors. Our data indicate that different coaching practice factors are associated with differentiated benefits across criteria, and in the case of external versus internal coaches, are more or less beneficial dependent on the features of the jobs of coachees. Our findings lead us to conclude that whilst we know from past studies that there are generalizable benefits of workplace coaching, there are also between-criteria differences, and key coach-, practice- and coachee-specific factors that appear to moderate the benefits. It is our intention that our study therefore stimulates theorising and further empirical research in order to develop a comprehensive understanding of the factors that influence workplace coaching outcomes.

Appendix

Scale items in the work well-being and personal effectiveness scales

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As a result of working with my coach, I believe that:

Work well-being items (affective outcome)

I feel more satisfied in my job (WW1)

I feel less frustrated (WW2)

I feel happier at work (WW3)

I enjoy my job more (WW4)

I feel less stressed at work (WW5)

I am more motivated (WW6)

I feel more engaged (WW7)

Personal effectiveness items (skill-based outcome)

I am able to prioritise more effectively (PE1)

I am able to plan more effectively (PE2)

I am more organised (PE3)

I behave more assertively (PE4)

I am more flexible in the way I work to meet organisational objectives (PE5)

Note: Response scale: 1 = strongly disagree to 5 = strongly agree. Parentheses indicates the variable names shown in the CFA reported in Figures 1 and 2.

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Tables

Table 1

Descriptive statistics

	Mean	Standard Deviation	Percent	*N*
Work well-being	3.72	0.64		161
Personal effectiveness	3.68	0.61		161
Age	41.48	10.12		156
Gender (female)	0.65	0.48		157
Level of position				
Not management			62.16	92
First line management			8.11	12
Middle management			23.65	35
Senior management			6.08	9
Job complexity				
ONET (zone 3)			33.33	47
ONET (zone 4)			49.65	70
ONET (zone 5)			17.02	24
Coach type				
Internal coach			19.01	27
External coach			80.99	115
Coach format				
Face to face			50.00	75
Blended			14.67	22
Telephone			35.33	53

Note: Survey items reported in the appendix

Table 2

Pearson's correlation coefficients

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Work wellbeing	(0.93)															
2 Personal effectiveness	0.642***	(0.91)														
3 Age	0.001	-0.198*	—													
4 Female	-0.109	-0.130	-0.105	—												
5 None manager	0.013	0.015	-0.103	-0.031	—											
6 First line manager	0.030	0.087	-0.031	0.015	-0.381***	—										
7 Middle manager	-0.094	-0.098	0.082	0.051	-0.713***	-0.165*	—									
8 Senior manager	0.107	0.046	0.099	-0.046	-0.326***	-0.076	-0.142	—								
9 Low complexity	-0.037	0.013	-0.224**	0.063	0.051	0.216*	-0.128	-0.123	—							
10 Moderate complexity	0.021	0.070	-0.073	-0.109	-0.180*	-0.150	0.250**	0.089	-0.702***	—						
11 High complexity	0.018	-0.110	0.377***	0.066	0.175*	-0.071	-0.173*	0.036	-0.320***	-0.450***	—					
13 External	0.183*	0.150	-0.109	-0.038	-0.062	-0.173*	0.160	0.030	-0.140	0.352***	-0.287**	-1.000	—			
14 Face to Face	-0.169*	-0.156	0.266**	-0.139	-0.085	0.162	-0.013	0.009	0.130	-0.206*	0.111	0.453***	-0.453***	—		
15 Blended	0.199*	0.061	0.178*	-0.003	-0.044	-0.054	0.047	0.071	-0.128	0.020	0.133	-0.130	0.130	-0.415***	—	
16 Telephone	0.030	0.119	-0.409***	0.148	0.120	-0.128	-0.020	-0.061	-0.039	0.199*	-0.216*	-0.377***	0.377***	-0.739***	-0.306***	—

Note: *** $p<0.001$, ** $p<0.01$, * $p<0.05$ Survey items reported in the appendix. Cronbach's alphas are shown in the diagonal.

Table 3

Associations of job complexity with work well-being and personal effectiveness

	Work well-being	Personal effectiveness
	Unstandardized Coefficients	Unstandardized Coefficients
Job complexity (ONET zone 3)	-0.057	0.156
	(0.159)	(0.151)
Job complexity (ONET zone 4)	-0.011	0.187
	(0.149)	(0.142)
Constant	3.750***	3.533***
	(0.129)	(0.122)
Observations	141	141
R-squared (unadjusted)	0.001	0.013

Note: job complexity ONET zone 5 is taken as the reference category. ** $p<0.01$, * $p<0.05$.

Standard errors in parentheses. Survey items reported in the appendix

Table 4

Interactive associations of coaching format and job complexity with work well-being and personal effectiveness

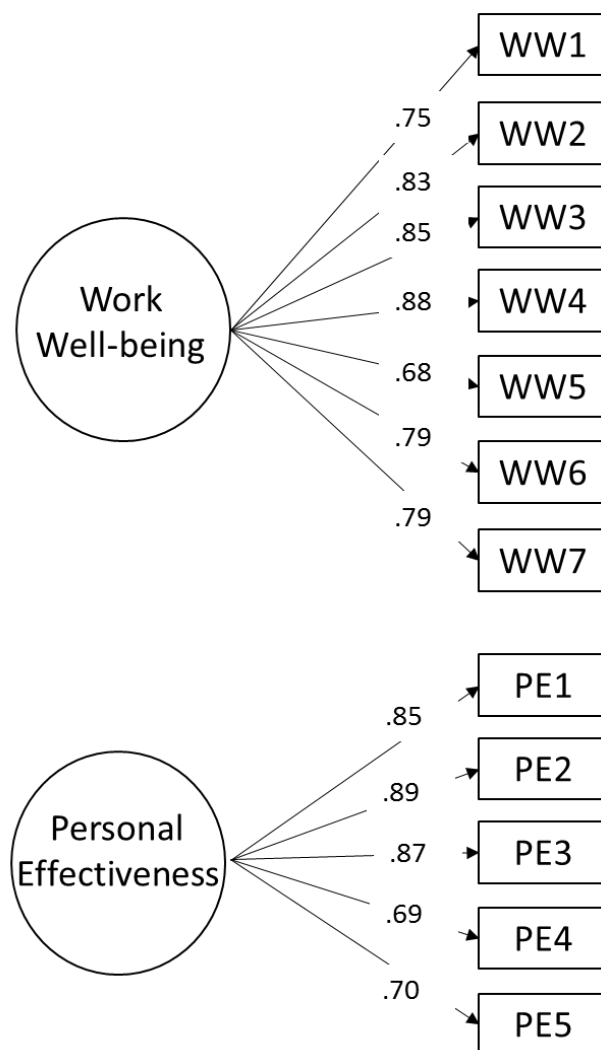|	Work well-being		Personal effectiveness	
	Unstandardized Coefficients		Unstandardized Coefficients	
External coach	0.026	-0.158	-0.027	-0.210
	(0.127)	(0.142)	(0.120)	(0.134)
Complex job (ONET zone 5)	0.035	-0.460	-0.180	-0.675**
	(0.144)	(0.233)	(0.137)	(0.220)
External coach x complex job		0.782**		0.782**
		(0.293)		(0.277)
Constant	3.700***	3.846***	3.729***	3.875***
	(0.116)	(0.126)	(0.110)	(0.119)
Observations	141	141	141	141
R-squared (unadjusted)	0.001	0.050	0.012	0.067

Note: the reference category for the categorical variables are: internal coaches, job complexity ONET zone 3 and ONET zone 4. *** $p<0.001$, ** $p<0.01$, * $p<0.05$. Survey items reported in the appendix. Standard errors in parentheses.
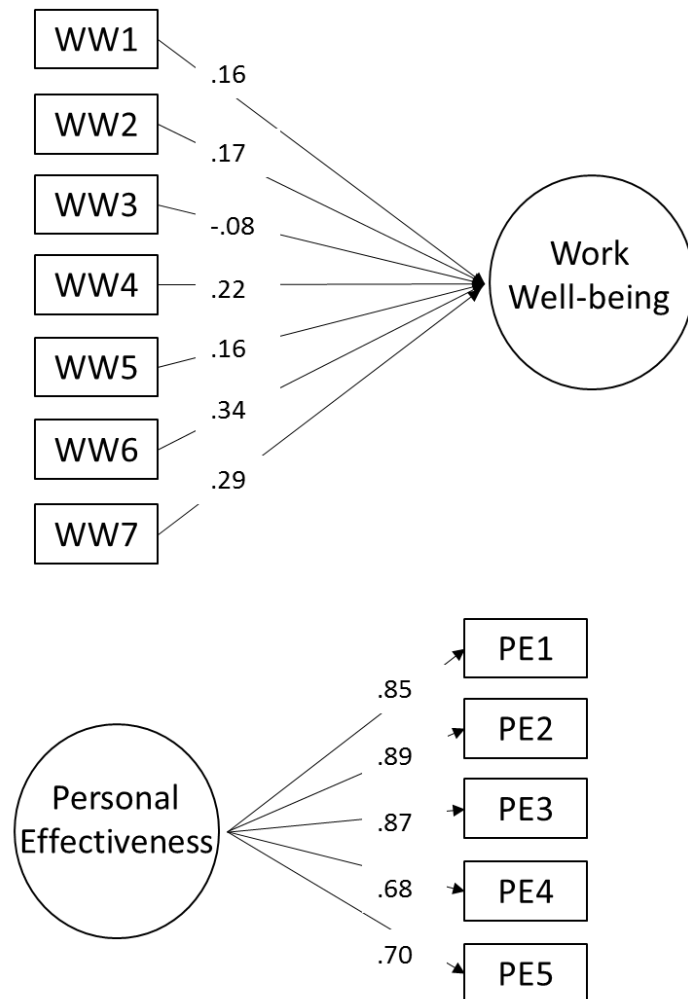
Figures

Figure 1

CFA model of both work well-being and personal effectiveness proposed as reflective constructs

Figure 2

CFA model of work well-being proposed as a formative construct and personal effectiveness

proposed as a reflective construct

Figure 3

Interaction effects of coaching format and job complexity on work well-being and personal effectiveness