Coaching with self-determination in mind:
Using theory to advance evidence-based coaching practice

Gordon B. Spence, Australian Institute of Business Wellbeing, Sydney Business School, University of Wollongong, NSW 2000, Australia

Lindsay G. Oades, Australian Institute of Business Wellbeing, Sydney Business School, University of Wollongong, NSW 2000, Australia

Email contact: gspence@uow.edu.au

Abstract

The scholarly coaching literature has advanced considerably in the past decade. However, a review of the existing knowledge base suggests that coaching practice and research remains relatively uninformed by relevant psychological theory. In this paper it will be argued that Self-Determination Theory (SDT; Deci & Ryan, 1985) presents as a useful theoretical framework for coaching as it can help understand coaching practice at both macro and micro levels. The utility of SDT as a theoretical framework for coaching is explored, with particular attention given to the role that coaching would appear to play in the satisfaction of three basic psychological needs: autonomy, competence and relatedness. It is also argued that SDT provides a useful set of propositions that can guide empirical work and ground it in the firm foundations of a theoretically coherent, empirically valid account of human functioning and wellbeing. Suggestions are made for future directions in research informed by SDT.

Key words: **Coaching Practice, Self-Determination Theory, Psychological Needs**

Introduction

Coaching is fundamentally concerned with the enhancement of human functioning, achieved through the improvement of cognitive, emotional and/or behavioural self-regulation. According to Grant and Cavanagh (2011), "coaching is a goal directed activity" (p. 294) insofar as it is focused on the attainment of professional or personal outcomes valued by a coachee. Irrespective of whether these goals are focused on the acquisition of specific *skills* (e.g. public speaking), improved *performance* (e.g. goal setting, action planning) or are more *developmental* in nature (e.g. defining a personal approach to leadership), a coachee's success will depend on how well they can manage their thoughts, feelings and action in support of goal attainment. The process of personal change is, however, extremely challenging and often results in feelings of ambivalence and a host of other psychological and behavioural challenges that can impede the attainment of desired outcomes (e.g. avoidance, confusion; Miller & Rollnick, 2002).

According to Ryan, Lynch, Vansteenkiste and Deci (2011) motivation and personal autonomy are critical issues in behaviour change settings because "positive and lasting results most likely occur when a client becomes actively engaged and personally invested in change" (p. 194). We think this is particularly true in coaching contexts (where people are typically stretching for optimal

levels of functioning) and believe it is critically important for coaches to understand (and know how to work with) the psychological processes that impact upon personal motivation and readiness to change. Yet, as it will shortly be argued, motivational theory does not occupy a prominent place in the extant coaching literature and we feel it has much to contribute to the development of coaching practice and research.

This paper will provide a brief overview of Self-Determination Theory (SDT; Deci & Ryan,1985) and outline how it can enhance coaching practice through its focus on the psychological factors that impact human motivation. It will be argued that SDT is both a relevant theoretical framework for coaching practice and a useful perspective from which to develop research questions that can advance the field (as it has proven to be in a variety of life domains, see Deci & Ryan, 2002). A brief overview of the coaching literature is now provided before exploring the utility of SDT to practitioners and proposing some future directions for research.

The Current State of the Coaching Literature

The coaching literature has been replete with calls for the development of an evidence base that is scientifically rigorous, theoretically informed, unique to the field and relevant to the needs of its practitioners (A.M. Grant & Cavanagh, 2007; D. L. Stober, Wildflower, & Drake, 2006). In response there have been over 400 publications on coaching listed in the behavioural science and business databases since 2005, compared to only 131 such publications in the preceding 5 years (Grant, 2010). Although these recent publications continue to be dominated by reviews, surveys and opinion pieces, an encouraging increase in the number of peer-reviewed empirical studies is noted. Results reported in these studies suggest that coaching impacts an array of psychological characteristics and processes related to goal-directed self-regulation (for a summary of empirical findings see Grant & Cavanagh, 2011; Spence & Grant, in press).

Whilst encouraging, these findings should be interpreted cautiously for two reasons. First, a review of Grant's (2010) annotated bibliography indicates that the empirical coaching literature is still relatively small, with few replications and considerable methodological variability. Second, much of the research reported to date appears to lack firm theoretical foundations and seems to have occurred in the absence of clearly articulated, coherent research agendas. Consequently, the evidence-base for coaching can best be described as disparate, largely atheoretical and primarily composed of "one-off" findings. Coaching has some way to go before it could be accurately described as a mature field of study.

A close examination of the coaching literature revealed that 69 publications make some reference to coaching using some theoretical orientation (e.g. cognitive-behavioural solution-focus), practice model (e.g. motivational interviewing) or organizing construct (e.g. emotional intelligence). Table 1 lists these orientations and approaches. As shown, although few of these have been used as the basis of empirical investigation, the amalgam of cognitive-behavioural and solution-focused approaches (CB-SF) has been utilised in 6 of the 18 between-subjects studies reported to date (Grant, 2010). Also, although it is not shown in Table 1, SDT has influenced at least one study reported in the literature. In that study, Burke and Linley (2007) assessed the degree to which executive coaching influenced goal self-concordance in a sample of 26 senior business managers. Data supported their hypothesis

that the heightened self-awareness produced by coaching would lead to more autonomous goal striving.

A variety of other, less prominent coaching stances can also be found in the literature, albeit with two or fewer citations. These include Adlerian (Davison & Gasiorowski, 2006; Page, 2005), Gestalt (Karp & Handlon, 2006), narrative (Drake, 2007), person-centred (Joseph, 2006), attachment theory (Drake, 2009), emotion focused therapy (Greenberg, 2006), choice therapy (Claps, Katz, & Moore, 2005; Howatt, 2000), action frame theory (Cocivera & Cronshaw, 2004), behaviourism (Peel, 2005), and transactional analysis (Krausz, 2005). This suggests that many authors have been able to detect parallels between coaching and the central tenets, principles and processes of a preferred orientation. As such, the coaching literature is quite diverse and offers practitioners an array of perspectives that might be used as a basis for practice. This diversity does not, however, appear to be reflected in the research conducted to date. As such, one must conclude that many of the coaching frameworks and models currently in use are yet to be scrutinised by empirical means.

As has been noted elsewhere (e.g. Stober & Grant, 2006), this is problematic because the establishment of a rigourous and diverse evidence-base is critical to the professionalization of the field. As such, along with focusing on how SDT can inform coaching practice, this paper will also include an outline some research directions that we intend to pursue as a test of some of SDT's key propositions.

Why Self-Determination Theory?
In our experience SDT provides a useful set of ideas for guiding coaching practice. Fortunately, many of these ideas have also been extensively researched (see Deci & Ryan, 2000) and the utility of interventions informed by SDT has been established across a range of clinical and non-clinical contexts (Sheldon, Williams & Joiner, 2003). Indeed, given its wide application it is somewhat surprising that SDT has not occupied a more prominent place in the coaching literature. At least two reasons can be advanced for why SDT is a useful theoretical framework for coaching.

SDT provides a nuanced understanding of human motivation. SDT is a theory that focuses specifically on internal causation and sees motivation itself as an "issue" for processing in behaviour change settings (Ryan et al, 2011). As such, resistance or balking would be closely attended to by an SDT-informed practitioner and become an important area for exploration. This sits in contrast to other theories of human behaviour (e.g. behavourism), which locate the source of motivation outside the person and are less likely to see motivation as being a focal point of therapy, counseling or coaching. Rather these approaches are likely to see motivation as a pre-requisite for the change effort (i.e. the person comes "ready" for change) or as a component that cultivates readiness prior to the commencement of change attempts (Ryan, et al, 2011).

Table 1. *Summary of theoretical orientations and approaches represented in the coaching literature*

Theory or Approach	Authors	Count	Research?	Empirical references
Rational Emotive Behaviour Therapy (REBT)	Anderson (2002); Kodish (2002); Sherin & Caiger (2004)	3	No	
Psychodynamic approaches	Rotenberg (2000); Kilburg (2004); Allcorn (2006); Huggler (2007); Ward (2008)	5	No	
Cognitive Developmental (Adult)	Berger & Fitzgerald (2002); Astorino (2004); Laske (2006); Berger (2006); Akrivou (2008); Berger & Atkins (2009)	6	No	
Cognitive & Cognitive Behavioural (CBC/CBT)	Grant (2003a)†; Ducharme (2004); Auerbach (2006); Green,. Oades & Grant (2006)†; Libri & Kemp (2006); Green, Grant & Rynsaardt (2007)†; Spence & Grant (2007)†; Grant (2007)†; Neenan (2008); Smith (2008); Grant, Curtayne & Burton (2009)†; Karas & Spada (2009); O'Broin & Palmer (2009)	13	Yes	Grant (2003a); Green. et al (2006); Libri & Kemp (2006); Green, et al (2007); Spence & Grant (2007); Grant (2007); Grant et al (2009); O'Broin & Palmer (2009)
Mindfulness	Spence (2006); Passmore & Marianetti (2007); Topp (2007); Collard & Walsh (2008); Spence, Cavanagh & Grant (2008)†	5	Yes	Topp (2007); Spence et al (2008)
Strengths-Focused/Appreciative Inquiry	Linley & Harrington (2006); Gordon (2008); Linley, Woolston & Biswas-Diener (2009); Govindji & Linley (2007)	5	No	
Motivational Interviewing (MI)	Miller et al (2004); Bennett & Perrin (2005); Butterworth et al (2006); Passmore (2007); Ernst (2008)	5	Yes	Miller et al (2004); Bennett & Perrin (2005); Butterworth et al (2006); Passmore (2007); Ernst (2008)
Integrative models & approaches	Laske (1999); Abbott & Rosinski (2007); Barner & Higgins (2007); Palmer & Gyllensten (2008)	4	No	

† Indicates a blended Cognitive-Behavioural, Solution-Focused model

Whether coaches are conscious of it or not, motivational perspectives such as these have been prominent in coaching practice. They are most easily detected in the "coach readiness" self-assessments often promoted by practitioners (e.g. Fortgang, 1998), which typically recommend that the poorly motivated "make adjustments before coaching can be effective" (Fortgang, 1998, p.xvii). The use of simple screening tools like these sends a clear message to consumers, that is, motivation is a prerequisite for coaching and NOT a key focus of coaching. We disagree with such a view and would argue that coaches who possess a nuanced understanding of motivational processes can help coachees to explore issues related to their ambivalence towards change and goal ownership in ways that build readiness for change and generate energy for goal striving. From a practice standpoint, this also enables coaches to work with a wider variety of people and coaching presentations than would be possible if motivation was viewed as a pre-requisite for coaching.

SDT provides different perspectives for understanding coaching. The theory also provides a useful lens through which coaches can understand their practice at both macro and micro levels. At the macro level, the theory provides a metatheoretical account of the growth tendencies, innate psychological needs and socio-cultural factors that shape human personality, behavioural self-regulation and well-being (Ryan & Deci, 2000). Put more simply, the theory has a lot to say about the sort of conditions that are required if people are to "do well" and "feel good" throughout the course of their lives. At this level, coaching can be seen as representing a component of the broader conditions of a person's life.

At the micro level, SDT can help practitioners appreciate the importance of the working alliance and understand that, through the process of *relating*, interpersonal conditions can be created that are necessary for optimal growth and development. More specifically, from an SDT perspective, the use of core micro-skills such as active listening, expressing empathy, exploring successes, identifying personal strengths, encouraging volitional acts and other supportive gestures are important because of their potential to enliven developmental processes that are central to human flourishing (Keyes & Haidt, 2003).

SDT: Some basics

According to Deci and Ryan (2000), "it is part of the adaptive design features of the human organism to engage in interesting activities, to exercise capacities, to pursue connectedness in social groups, and to integrate intrapsychic and interpersonal experiences into a relative unity" (p. 229). Several of the ideas conveyed in this statement require elaboration because they help to illustrate how SDT can usefully inform coaching practice.

View of human nature. SDT adopts a positive view of human nature. In line with the basic tenets of humanistic psychology (Maslow, 1954), people are seen as possessing innate growth tendencies and (provided supportive socio-contextual conditions exist) they will naturally seek out experiences that promote growth and development. Whilst SDT explicitly acknowledges the existence of these innate tendencies, it also acknowledges the *organismic-*

dialectic of human experience (Deci & Ryan, 1985). Simply put, a dialectic is the juxtaposition of conflicting forces or ideas. The dialectic of interest in SDT is the conflict that exists between the inherent growth orientation of human beings and the disruptive power of various socio-contextual forces (e.g. excessive parental control, peer pressure, restrictive legislation) that act to thwart, block or stall these positive developmental tendencies (Ryan & Deci, 2000).

Basic psychological needs. The theory also proposes that a person's level of functioning and well-being depends upon the satisfaction of three basic psychological needs: autonomy, competence and relatedness (Deci & Ryan, 1985). According to SDT, people do well and feel their best when the socio-cultural *conditions* of their lives (i.e. family relationships, friendships, workplace culture, political system, cultural norms) support the innate needs of freely engaging in interesting activities (autonomy), producing valued outcomes via the use of their capacities (competence), *and* feeling closely and securely connected to significant others (relatedness).

Self-as-process. In SDT the self is not conceptualised as a fixed or rigid core (i.e. "self-as-object") that resides somewhere deep within the person. Rather, it is viewed as an active processor of experience, a dynamic psychic structure that continuously seeks to make meaning of the myriad internal and external events that comprise a person's life (i.e. "self-as-process") and to integrate them into a coherent, unified sense of self. Specifically, Deci and Ryan (1985) argue that this processor works best when the conditions of a person's life support satisfaction of the needs for autonomy, relatedness and competence.

It should be noted that SDT is not a single theory. Rather, it is a set of four related sub-theories that have evolved over four decades. Whilst each sub-theory has its own specific focus (see Table 2), all address interrelated psychological processes that are deemed important for psychological growth and development (for a comprehensive review see Deci & Ryan, 2000). As SDT views the satisfaction of basic needs as a prerequisite for human development and growth, attempts to understand coaching from this perspective are best focused on the extent to which coaching is helpful for satisfying basic needs for relatedness, competence and autonomy.

Sub-Theory	Scope
Basic Needs Theory	Ties optimal functioning and well-being to the joint satisfaction of 3 basic psychological needs: autonomy, competence and relatedness.
Cognitive Evaluation Theory	Focuses on how intrinsic motivation (IM) is enhanced by social-cultural factors that lead people to feel effective (e.g. positive feedback) and is diminished by factors that constrain personal choice (e.g. threats) and lead people to not see themselves as the initiators of their own action.
Organismic Integration Theory	Argues that extrinsically motivated behaviours can be regulated with differing levels of volition (i.e. external, introjected, identified, integrated) and proposes that these behaviours can, and usually do, become more self-endorsed over time (through internalisation and integration processes).
Causality Orientations Theory	Describes three general motivational orientations; *Autonomous Orientation* (based on personal interests and self-endorsed values), *Controlled* Orientation (based on controls that govern how one should behave), and an *Impersonal Orientation* (based on the belief that one's efforts will be ineffectual).

Table 2. Overview of SDT mini-theories

SDT and coaching practice

To illustrate how SDT can be useful from a practice perspective, the following section will be organised into two parts. The first will focus on how the coaching relationship, and the conversations that comprise it, can function as a partial satisfier of the basic psychological needs outlined in SDT. The second will focus on how the coaching process can stimulate autonomous functioning by providing a degree of continuity for basic need satisfaction over time.

Before proceeding with this analysis, a point of clarification is needed. It is not being suggested that coaching is capable of providing full satisfaction for a coachee's basic psychological needs or that a coach is somehow responsible for producing such satisfaction. Rather, we are suggesting that coaches have the opportunity to create (with the coachee) an atmosphere in coaching that enhances needs satisfaction based on what it assists the coachee to think about, what it helps them to feel and what is supports them to do.

1. In-session: Basic need satisfaction during coaching conversations.

As mentioned, SDT recognises that the socio-cultural conditions of a person's life often stifle human development and growth. Based on this observation, the presence of a coach could be understood as representing a general improvement in these conditions, provided the coachee is related to in a way that values their core values and developing interests (autonomy support), acknowledges their capacities and strengths (competence support), and is characterised by genuine caring, trust and honesty (relatedness support). According to Deci and Ryan (2000), relationships with these features create a platform for effective human action and help to support the complex meaning-making processes that represent the development of the self.

It should be noted that whilst the SDT model of change assigns importance to the satisfaction of all three basic needs, the satisfaction of autonomy is considered primary. As Ryan et al (2011) point out, "once people are volitionally engaged and have a high degree of willingness to act, they are then most apt to learn and apply new strategies and competencies" (p. 231) and, more generally, act in ways that lead to satisfying psychological outcomes (Deci, 1995). To put it another way, as one's sense of autonomy increases, so does the likelihood they will make decisions to "engage in interesting activities, to exercise capacities, and pursue connectedness in social groups" (Deci & Ryan, 2000, p. 229). The question of how coaches can contribute to the satisfaction of basic needs will now be briefly explored.

Autonomy support. Many coaching models place the coachee at the centre of decision making processes as a way of encouraging client ownership of their development and growth (e.g. Berg & Szabo, 2005). Whilst coaches will typically look to the coachee to provide impetus for any goals set throughout the course of a coaching engagement, this principle is also applied within sessions. For example, the use of simple process models like the Goal-Reality-Options-Wrap up model (GROW; Whitmore, 1996) encourage coachees to take ownership of their behaviour change process by inviting them to set the agenda for each conversation. In our experience this invitation can, however, be quite disconcerting for some coachees either because they are: i) confused about what to focus on, ii) not used to being asked to take ownership for their own development, iii) suspicious of the coaching process or fearful it might not work, or iv) holding an expectation that the coach is the expert who will decide (and direct) what needs to be done. Whatever the reason(s), coaching models like GROW are autonomy supportive insofar as they imply that the coachee is free to choose what gets done and, moreover, that choice will be respected and valued.

Competence support. In keeping with the core assumptions of humanistic psychology, coaching assumes that people are essentially capable and possessive of potential that will emerge in the presence of supportive conditions (Grant, 2003b). An approach widely used in coaching to uncover latent potential is the solution-focused (SF) approach (O'Hanlon & Beadle, 1996). This approach assumes that people are inherently capable, are doing their best, and, most likely, already enacting some aspect of the change they seek (even if it is only small). As such, SF coaching tends to orient people towards what they are doing well, things that are working, personal strengths/resources and their utilisation. The use of SF techniques can then be seen as an attempt to create conditions that foster feelings of competence. These feelings can be further strengthened through the use of various psychometric tools (e.g. strengths inventories) or more informal methods (e.g. achievement journals), which can be helpful for raising awareness of positive personal attributes that may have been long forgotten, ignored or devalued. A coachee might also be encouraged to ponder ways in which these capacities might be better utilised within the context of their life.

Relatedness support. It has been proposed that coaching is founded on core Rogerian, person-centred principles (Stober & Grant, 2006) that are reinforced through the use of key micro-skills such as active listening, empathy, unconditional positive regard, attentive and responsive body language, etc (Zeus & Skiffington, 2002). From an SDT perspective these skills create an atmosphere conducive to satisfying the need for relatedness, through the development of a warm, trusting relationship focused on the coachee's salient concerns. It is important to note that whilst a coachee may have close relationships outside coaching, s/he may not consistently feel heard, understood, valued and/or genuinely supported within those relationships. If not, they are unlikely to feel strongly and positively connected to others and in an attempt to satisfy this basic need, may attempt to connect by acting in accordance with the preferences of others, rather than one's own. For example, Peter decides not to pursue an exciting internal promotion due to his concern that Warwick (his line manager for 3 years) might see it as an act of betrayal. In situations like this, coaching may help an insecurely connected person to feel safe enough to explore more self-concordant forms of action and to manage the relational implications of such action.

Case formulation. Whilst evidence on the use of case formulations within clinical contexts is equivocal (Kuyken, Fothergill, Musa, & Chadwick, 2005), there are at least three reasons why an SDT-informed case formulation might be useful in coaching. First, it could help guide questioning in the early stages of coaching and support a purposeful, theory-guided exploration of the degree to which a coachee's interactions with the world result in the satisfaction of basic needs. Second, explicitly mapping out the coachee's experience (and sharing it with them) can be useful for helping them see when, where and how these needs are, or are not, being satisfied.

Finally, it can assist the coach to select, develop, and propose appropriate intervention strategies. For example, employees are often expected to direct energy and effort towards performance goals imposed by employers. In such situations it is not uncommon for people to feel controlled or coerced, with few options other than compliance. A good case formulation is likely to reveal a diminished sense of autonomy and indicate the potential usefulness of autonomy support strategies in coaching. In line with concept of autonomy support outlined by Deci et al (1994) this might include the coach assisting the coachee to try and understand what credible *rationale* might exist for such goals (and/or encourage them to seek out explanations), genuinely *acknowledging* how they feel about the goals (and/or help them to express these feelings in a way that might elicit acknowledgement from others)*,* and/or helping the coachee to engage their circumstances with a greater sense of *choice* (either by choosing what the goal(s) will mean to them or what approach they might take towards goal attainment). Such strategies have been found to enhance autonomous need satisfaction in situations where personal choice is compromised (see Deci, Eghrari, Patrick & Leone, 1994). Additional support for autonomy can also be provided by minimising controlling language, including the use of imperatives such as "must" and "should". This can help to reduce the pressure felt by people to enact specific behaviours and support the establishment of one's own reasons and values as the basis for action (Ryan, et al, 2011).

2. Across sessions: Basic need satisfaction throughout the coaching process

The working alliance is key to the attainment of successful outcomes in coaching (Peltier, 2001). This is because the establishment of a warm, encouraging, affirming relationship has much to do with how much hope, courage, and resilience can be mustered to support goal striving and behaviour change in the broader context of one's life. Consistent with the findings from research into subjective vitality (see Ryan & Deci, 2008), it would be expected that whenever a coaching relationship is supportive of basic psychological needs (as outlined above), a coachee is likely to feel a greater or renewed sense of energy and capacity to act in accordance with core aspects of the developing self.

Goal setting and goal striving. The coaching process can be understood as a self-regulatory cycle that commences with the establishment of a goal, the articulation of an action plan and participation in an ongoing reflective cycle based on actions taken between one coaching session and the next (Spence & Grant, 2007). Whilst for some their goals are clear and obvious, for many they are not and a coach can help to resolve a variety of concerns such as not knowing what goals to set, struggling to strive towards goals set by others, and/or managing fluctuations in goal-related motivation.

The developmental processes described in SDT are helpful for understanding how coaching might enhance well-being. According to the theory, whilst the organismic-dialectic makes most behaviour extrinsically motivated (as opposed to intrinsically motivated), people adopt goals for a variety of reasons (see Table 3) that can be plotted along a continuum of self-regulation varying from extrinsic regulation to intrinsic regulation. Furthermore, these motivational underpinnings greatly impact how much effort and energy people direct towards goal attainment and how much satisfaction is gained from their attainment. More specifically, it contends that externally regulated or controlled goals (those adopted primarily for money, praise, etc) struggle to be maintained over time and tend to be experienced as controlling or coercive. In contrast, more integrated or autonomous goals (those aligned with one's values and interests) tend to energise greater long term effort and result in feelings of congruence (Sheldon & Elliot, 1998).

Most importantly, the theory proposes that people can (and do) move towards more self-determined action over time, via processes of *internalisation* and *integration* (Deci & Ryan, 1985). Internalisation refers to the process whereby a person "takes in" an external value or regulation but does not necessarily identify with it or accept it as their own, whereas integration refers to this same internalising process but accompanied by a valuing of the activity and an acceptance of responsibility for enacting it. According to SDT, internalisation and integration are developmental processes that are catalysed by socio-cultural conditions that support the satisfaction of the three basic needs. This proposition has received considerable empirical support (Deci & Ryan, 2002).

Table 3. *Varying levels of goal ownership associated with extrinsic motivation*

Reason	Type	Motivation
External	Controlled	Striving because somebody else wants you to or thinks you ought to, or because you'll get some kind of reward, praise, or approval for it.
Introjected	Controlled	Striving because you would feel ashamed, guilty, or anxious if you didn't. Rather than striving because someone else thinks you ought to, you feel this is a goal that you should strive for.
Identified	Autonomous	Striving because you really believe in the importance of the goal. Although this goal may once have been taught to you by others, now you endorse it freely and value it wholeheartedly.
Integrated	Autonomous	Striving because of the fun and enjoyment the goal provides you. While there may be good reasons to adopt the goal, the primary reason is simply your interest in the experience itself.

Adapted from Deci and Ryan (2000)

These findings have important implications for coaches because they suggest the possibility of facilitating helpful shifts in the underlying motivation for particular goals. This is particularly salient for individuals faced with the challenge of working towards goals that are not self-generated (as often occurs in organisational settings) and are accompanied by a diminished sense of ownership. When imposed goals become problematic for a person, a coach may facilitate this shift through the use of autonomy support strategies (as described earlier) to help the coachee better understand both the goal and their relationship to it. Ultimately an SDT-informed coach will be interested in helping a coachee to explore what deeper personal relevance such goals might have and what choices they might be able to exercise in relation to them. For example, Peter might have goal to jog for 2 hours a week and hold it largely for external reasons (i.e. medical advice). However, his reason for holding the goal might change over time as he discovers ways in which the goal unexpectedly expresses his values (e.g. positive modelling for his children) or developing interests (e.g. enjoyment in running).

Whilst somewhat simplistic, this example illustrates the important psychological processes of internalisation and integration, which can occur when individuals are encouraged to reflect on their goals and explore ways that they might be more freely endorsed. As depicted in Figure 1, this amounts to a self-regulatory shift away from external and introjected forms of motivation and towards identified and integrated forms of motivation, which represent the values and interests of the developing self.
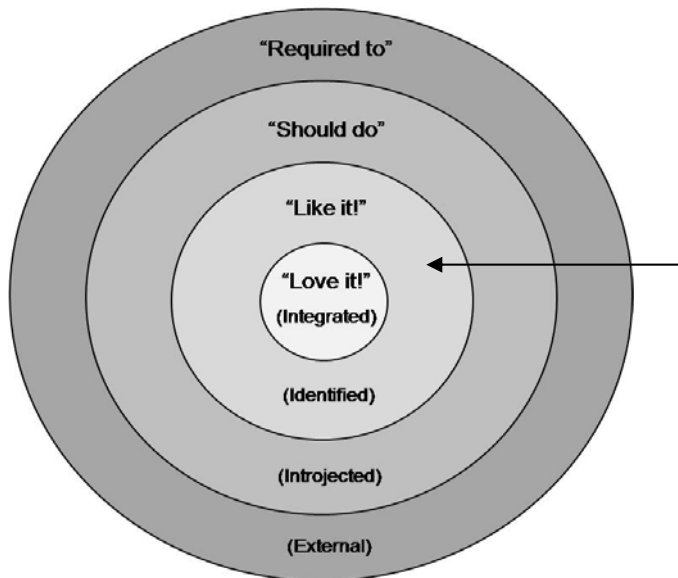
Figure 1. **Spatial representation of different forms of extrinsic regulation.**

Supporting more self-determined living. The developmental trajectory described above suggests that by helping people through the process of internalisation and integration, coachees are more likely to become better at not only noticing the *quality* of their goal motivation (i.e. the reasons for adoption) but also, potentially, better at transforming how they experience goal striving, either by reframing the personal meaning of externally regulated goals, or by making decisions to disengage from goals that lack intrinsic interest and/or engage with goals that are. Whilst such decisions are likely to be associated with a greater sense of perceived autonomy, they may also facilitate feelings of competence (due to either the presence of latent abilities or through the subsequent acquisition of new skills and abilities).

This reveals the interdependent nature of basic needs, a dynamic most clearly seen in the relationship that exists between autonomy and relatedness. That is, the preferences people have about what they commitment to in life (based on interests or values) often conflicts with the preferences of significant others (e.g. parents, spouse, boss, teacher). When this happens tension is created and it will often be resolved by the person prioritising their need for social connection (relatedness) over their need to freely choose a course of action (autonomy).

When goal setting is underpinned by this type of "trade-off", people are less likely to feel authentic, enthusiastic and vital about their goals, and more likely to be associated with feeling of pressure and tension (Deci & Ryan, 2000). A coach can be enormously helpful in situations like this because they can assist the person to understand the nature of these

dynamics and find other ways of resolving interpersonal tensions such that psychological functioning and well-being is optimised.

Future directions for research

As suggested earlier, SDT provides a detailed account of the psychological processes associated with optimal functioning and wellbeing. Whilst this is useful for guiding practice, it is equally useful for generating testable research hypotheses that could substantially advance the empirical coaching literature.

One avenue for research would be to use correlational designs to determine the extent to which coaches create conditions that are conducive to the satisfaction of autonomy, competence and relatedness needs. Whilst it is likely the majority of coaches believe they create these conditions as a matter of course, this aspect of the coaching relationship has yet to be explored. Thus the question "do coaches create conditions in coaching that are conducive to optimal development and growth" requires some attention. Efforts to answer this question might include simple cross-sectional designs that measure the degree to which coachees experience coaching sessions as being supportive of their basic psychological needs.

This type of study could be extended by also collecting data from the coaches themselves and then correlating this data with the data from the coachees. Such a study has the potential to influence coach training and education. For example, if negative correlations were observed between coach and coachee on measures of perceived supportiveness, this might indicate a need for additional coach training in core skills that are likely to enhance perceptions of autonomous, competence or relatedness support.   An obvious research option would be to explicitly study the impact of coaching on psychological need satisfaction and coachee outcomes (e.g. goal attainment), most particularly the question of whether coaching facilitates internalisation and goal self-integration or self-concordance. That is, does coaching help people gain a greater sense of ownership over their goals and to what degree is that associated with more goal-directed effort, enhanced goal attainment and greater well-being? (as has been previously reported in laboratory studies; e.g. Sheldon & Elliot, 1998).

In a workplace setting such questions might be examined via the use of coaching programs designed using an autonomy support framework (e.g. the rationale-acknowledgement-choice model). This might entail recruiting poorly engaged employees (who are more likely to be struggling with imposed organisational goals) and using a simple pre-post design to assess whether participation in autonomy supportive work-related conversations (i.e. coaching) leads people to identify more with their goals and be more energised and committed towards them. This question could also be explored using alternative mechanisms of support. For example, Williams, Lynch and Glasgow (2007) found that a computer assisted program was helpful for creating an autonomy supportive

context and improving treatment outcomes for diabetics. Such methods may also prove useful in organisational settings, where work pressures may make it difficult for managers to provide employees with this sort of coaching support on a regular basis, or in situations where employees are not comfortable to access the available support.

Conclusion

The extant coaching literature indicates that coaching practice and research have, to date, advanced without explicitly drawing on relevant, established theories of human motivation. This paper set out to outline one such theory, Self-Determination Theory, and show how aspects of it are helpful for informing coaching practice and for guiding future research in the field. We hope that the ideas discussed herein are helpful for stimulating thinking about some of the psychological processes that are active during coaching and what sorts of questions are important to address through scientific methods.

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Dr Gordon Spence - Gordon is a lecturer at the Australian Institute of Business Wellbeing, Sydney Business School, University of Wollongong. His academic interests include the psychology of optimal performance and wellbeing, with a particular focus on motivation, mindfulness and the application of evidence-based coaching within organisational contexts.

Dr Lindsay Oades - Lindsay is Director of the Australian Institute of Business Wellbeing. He has expertise in the area of mental health/psychological recovery and its measurement, and has published widely on the efficacy of the Collaborative Recovery Model (which he was instrumental in developing). Lindsay's recent work has focused on relating workplace wellbeing and applications of positive psychology to business performance.