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Charles Baron, Mario Cayer,

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Fostering post-conventional consciousness in leaders: why and how?

Charles Baron and Mario Cayer

Department of Management, Laval University, Québec, Canada

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Abstract

Purpose – The purpose of this paper is to clarify why and how leadership development programs should be used to foster post-conventional consciousness in their participants.

Design/methodology/approach – Starting from the observation that current and future organizational challenges may be met with particular efficacy by leaders who operate in the post-conventional stages of consciousness, this paper offers a comprehensive review of the work on consciousness development, the process by which it occurs, the distinctive abilities of leaders who have reached post-conventional stages of consciousness and, finally, two practices which favour the emergence of these stages, namely mindfulness meditation and Bohm dialogue.

Findings – The paper shows how these two practices – little-used in the management field – make it possible to reconcile the two main approaches to consciousness development: the recognition of one's cognitive, affective and operative patterns and their suspension in favour of a more direct contact with reality, in the here and now.

Practical implications – The paper highlights guiding principles for integrating such practices into leadership and management development programs.

Originality/value – Although the value of post-conventional stages of consciousness in management and leadership roles is the subject of increasing discussion, to the authors' knowledge no work has yet thoroughly examined practices that foster post-conventional development *per se*.

Keywords Leadership, Consciousness, Cognition, Management development, Change management

Paper type Conceptual paper

1. Introduction

It is difficult to exaggerate the scope and complexity of the challenges faced by contemporary organizations. If only to assure their short-term survival, today's organizations seem condemned to constantly maximize their economic efficiency and profits; to understand and adapt to rapid changes in technology, markets and competition; and to innovate and reinvent themselves periodically. Moreover, organizations are confronted with much more pressing and clear expectations from the public and from governments to assume their responsibilities as corporate citizens. Lastly, according to the scientific community, organizations will soon have to adjust to the impacts of climate change, such as drastic scarcities of energy, water and raw materials; a transformation of the world economy; and increased geopolitical instability.

In this era of uncertainty and frequent crises, leaders have extremely important roles to play in promoting their organization's adaptation (Heifetz *et al.*, 2009). Among other responsibilities, they are called on to help their collaborators make sense of these new challenges; to develop and articulate with those collaborators the practices that are



more suited to the complexity of their changing environment; and to tap into the collective intelligence of their staff.

To take on these responsibilities, many senior managers feel the need to continue their professional development far beyond their initial university training: in 2000 alone, Ready and Conger (2003) estimate that \$50 billion were invested in leadership training and development. However, many question the efficacy, or even the value, of the professional development programs that are most popular among leaders and managers; they are even sometimes viewed as one of the causes of the current ethical and economic crises (Bennis and O'Toole, 2005; Gosling and Mintzberg, 2006; Starkey and Tempest, 2008).

In a comment that is quite applicable to the less-than-productive efforts observed in management and leadership development, Kegan (1994) stated that "the expectations on us [in modern life] demand something more than the acquisition of specific skills or the mastery of particular knowledge. They make demands on our minds, on how we know, on the complexity of our consciousness". Accordingly, Kegan and Lahey (2009) believe that leadership development efforts should be much less concerned with teaching the knowledge and capabilities associated with leadership, and much more focused on the leaders' process of personal development.

It is within this context that this article will address three objectives. The first consists of describing the field of consciousness development, the main stages of development, which have been recognized, and two complementary ways of fostering the process of consciousness development, which were identified from a review of the literature. The second objective is to underscore the pertinence to leaders of reaching or striving for post-conventional stages of consciousness. Finally, our third objective is to explain how two practices that are little-used in the context of leadership and management development – namely, mindfulness meditation and Bohm dialogue – have the potential to foster the progression from conventional to post-conventional stages of consciousness or, at least, to enable their practitioners to have momentary access to the insights that become available at those stages.

2. The field of consciousness development

The scientific study of consciousness development traces its origins to the seminal work of Jean Piaget (1948, 1954) on the cognitive development of children and adolescents. Approaching human epistemology with the eyes of a biologist, Piaget astutely observed that the development of our meaning-making systems evolves in an organic way. He highlighted that human cognitive development takes the form of a meaning-making process that becomes progressively more complex and that creates increasingly differentiated, vast and integrated definitions of self and of the world. Piaget also noticed that a feedback loop makes it possible to constantly refine and adjust one's understanding of self and the world to account for the ever-changing sensory data coming from one's experiences. Further, he observed that – because of this relatively successful "mapping" of reality using meaning-making structures – the individual eventually assumes that their meaning-making structures or "maps" are true replicas of the world. People thus tend to develop a tacit conservatism that diminishes the exploratory potential of perception. Fortunately, an accumulation of data that does not fit with one's meaning-making structures can lead to their reorganization and the emergence of a qualitatively different meaning system. It is

these moments of emergence of new meaning systems that correspond to the stages of development described by Piaget.

Having questioned and gone beyond Piaget's assumptions that human development is essentially cognitive and that it stops in adulthood, most contemporary research in this field now documents a remarkably similar hierarchical sequence of developmental stages that may be reached throughout life (Wilber, 2000). Comparable to personal epistemologies or worldviews, these stages of consciousness are generally defined as meaning-making systems that are simultaneously cognitive, affective and operative (Cook-Greuter, 1999; Wilber, 2000). Primarily cognitive, a stage of consciousness incorporates into a coherent whole all of the various meaning-making structures developed or assimilated throughout one's life in order to adapt to one's environment or fulfill one's potential. Each stage also includes the ontological experience linked to the worldview with which one identifies. Indeed, one's stage determines one's emotional stakes, as well as one's ability to modulate or control his or her emotional experience. Moreover, it determines one's deep intentions, that is what one sees as the purpose of life, the needs one acts on and the goals one is moving towards (Cook-Greuter, 1999).

The hierarchy of the stages of consciousness is composed of four main levels, known as pre-conventional, conventional, post-conventional and transcendent (Miller and Cook-Greuter, 1994). We will describe here each level of consciousness using Torbert's typology (1987, 1994, 1999, 2004), which appears to be the best-documented for the management field and for post-conventional development.

The pre-conventional level refers to the stages usually reached in childhood. Subject to impulses and the need for survival and safety, these stages allow the person to develop the basis of their identity and to arrive at a coherent understanding and experience of self and the world. However, these stages do not confer enough affective maturity nor cognitive complexity to make one's way and to function in modern society. For that matter, less than 5 percent of managers remain at this level (Rooke and Torbert, 2005). The next level of development, the conventional level, refers to the so-called Diplomat, Expert and Achiever stages in which the person internalizes the shared ways of seeing, thinking and acting that are considered true by his or her community. At the Diplomat stage, a salient need for affiliation is met by compromise and obedience, to the detriment of critical distance from the group's perspective and will. At the Expert stage, where most managers (38 percent) are found (Rooke and Torbert, 2005), this need for affiliation is met by demonstrating one's expertise and one's unique contribution to the group, to the detriment – at this stage – of critical distance from the point of view of established authorities and experts. The 30 percent of managers who reach the Achiever stage become aware that their experience is shaped by their representations and achieve a personal integration of the conventions. Nonetheless, as they have a tendency to base their self-esteem on their ability to control their life and to be self-determined, they are not able to seriously question their way of seeing, much less to admit that their system of thought could be incomplete. Holding to a worldview typical of modern science, they think that the world can be fragmented into separate objects, understood in terms of unidirectional causal relationships and controlled unilaterally. Consequently, this stage does not favour either recognition of their colleagues' contextual knowledge and autonomy or openness to transforming their own ways of seeing, thinking and acting.

The post-conventional level refers to the Individualist, Strategist and Alchemist stages in which the individual is motivated by more salient altruistic and existential needs, such as self-actualization and generativity. From this point on, individuals do not hesitate to question the conventions and meaning structures that limit their own understanding, experience and possibilities or those of others. Furthermore, on noticing the degree to which they participate in the construction of their representations of reality and the degree to which these constructions are limited, they attempt to hone the quality of attention they give to their surroundings and develop a more accurate understanding *with* others. Less subject to their need for control, post-conventional individuals are also better able to recognize and deal with the organic rhythm, autonomy and interdependence of systems (Koplowitz, 1984). In addition, managers and leaders who continue their development to the Strategist and Alchemist stages (approximately 4 percent of managers, according to Rooke and Torbert, 2005) are often motivated by a systemic, long-term vision of organizational development. Indeed, they are recognized as being especially effective agents of organizational learning and change. Finally, the transcendent level refers to one or more extremely rare stages of consciousness in which the ego has been transcended, and, which have scarcely been studied by developmental psychologists (Alexander *et al.*, 1990).

With respect to the hierarchical theories of adult development, there is a persistent prejudice that these theories confer a higher intrinsic value on people in the more advanced stages. This conclusion, or even fear, seems fuelled by the fact that some authors – notably Ken Wilber (Paulson, 2008) – are harshly critical of certain stages, in that their limitations appear to be related to many social and global problems. However, the contribution of developmental theories seems to lie precisely in the empathy that they elicit with regard to self and others. The stages these theories describe are not static types of people, but rather qualitatively different ways of thinking, feeling and acting present in each of us, whether as potentialities or well-integrated abilities. Indeed, the hierarchical and integrative organization of the stages of consciousness is often illustrated as an ascending spiral in which each stage transcends the limitations and incorporates the strengths of the stages previously attained. Finally, although most of the time we operate in a given stage of consciousness, certain practices can give us access – momentarily – to more complex perspectives that are associated with higher stages. Thus, while remaining in the same stage of consciousness, it is possible to experience higher states of consciousness.

3. The process of consciousness development

Robert Kegan (1982, 1994) formulated a theory of the process of consciousness development, which is recognized for both its parsimony and its clinical sensitivity. It underscores that adult development presupposes the recognition and critical examination of our ways of seeing, thinking and acting – usually those characteristic of our stage, which we unconsciously adopt and with which we identify. In addition, Kegan observed that, this process of recognition, and critical examination, could be facilitated, by a holding environment, that fulfills very precise functions.

3.1 *The subject-object principle*

Kegan (1982, 1994; Kegan and Lahey, 2009) revealed an important principle at the core of the adult development process that he calls subject-object. He observed that each

stage of consciousness could be more clearly defined in terms of what it allows the individual to see (objects of awareness) and what the individual sees through (the lenses through which one sees or to which one is subject). For example, individuals who have reached the second conventional stage of consciousness, the so-called Expert stage, are able to easily communicate their opinion of the technical quality of a colleague's work (an object of awareness), because they are less subject to the need for group approval and the conformist strategies that hold sway in the previous stage, the so-called Diplomat stage. However, because Experts secure their position through their expertise and distinctive skills, they will resist questioning their own analytical framework, with which they identify and to which they are now subject. According to Kegan and Lahey (2009, p. 51), consciousness development occurs when one is able "to look at what before one could only look through, so that a way of knowing or making meaning becomes a kind of 'tool' that we have (and can control or use) rather than something that has us (and therefore controls and uses us)". The irony is that each time an individual is able to objectivize (i.e. develop critical detachment and separate oneself from certain ways of seeing, thinking and acting), they gain support from and become subject to a new meaning system – one which is certainly more complex, inclusive and sustainable, but which nonetheless has its own limitations.

3.2 Holding environments to support the process

Consciousness development is a difficult and often painful process that is rarely deliberate, but more often brought about by experiencing a gap between the complexity of one's meaning structures and the complexity of the challenges one is facing (Kegan, 1982, 1994). That said, development could be facilitated by the availability of what Winnicott (1965) called holding environments. In this regard, Kegan (1982) argues that no human being can be considered independently of the social environment in which they develop. Indeed, internalizing the ways of seeing, thinking and acting of one's environment continues to determine, for better or worse, one's vision and experience of self, others and the world. Consequently, continuing one's development in adulthood requires exposure to psychosocial environments that support questioning of the beliefs "which hold us (with which we are fused) and which let go of us (from which we differentiate)" (Kegan, 1982, p. 116). Whether they take the form of mentoring relationships, psychotherapy, teams, cohorts or other supportive situations, holding environments fulfill three main functions, namely:

- (1) *Recognizing and confirming*: Recognizing the experience the person is subject to and confirming that the meaning system behind that experience is coherent and understandable.
- (2) *Challenging*: Enabling the person to recognize the limitations of his or her meaning system and differentiate themselves from it.
- (3) *Remaining in place*: Supporting the person in the reintegration of the meaning systems from which they have differentiated themselves and in the emergence of a more encompassing subject-object relationship. Thereafter, those structures, which the person previously considered to be unquestionable truths can be reintegrated as possibilities.

Furthermore, the sustainability of this support process presupposes the establishment of an alliance with the person's salient needs and sincere respect for his or her

autonomy, limitations and self-protective mechanisms, as well as sensitivity to their fluctuations. In contrast, interventions which attempt to control or force a person's development, even subtly, to fit a normative ideal prove to be not only counter-productive, but unethical (Meehan Souvaine, 1999). Indeed, just as one does not make a flower grow faster by pulling on it, such interventions are likely to elicit self-protective strategies that will jeopardize openness toward future growth.

3.3 Ways of fostering one's own consciousness development

A review of the literature allowed the identification of two learning processes that are likely to foster the development of one's consciousness. These two processes consist of differentiating from and refining one's meaning structures, on the one hand, and suspending those meaning structures in favour of a more direct contact with reality, on the other.

Recognizing, critically examining and reframing meaning structures. The first way of fostering the development of one's own consciousness is well described in western work on consciousness development and adult education (Bohm and Edwards, 1991; Bohm and Peat, 1987; Kegan, 1982, 1994; Kegan and Lahey, 2009; Langer, 1989, 1997; Mezirow, 1991, 2000). The supporters of this approach encourage the recognition, critical examination and modulation of the meaning structures that shape and limit – unbeknownst to us – our adaptation and self-actualization. Indeed, adult educators such as Mezirow and Kegan have devoted their careers to arguing and theorizing about how we can be transformed through critical examination and reframing of the ways of seeing and thinking that stem from our socialization. Similarly, Bohm (Bohm and Edwards, 1991; Bohm and Peat, 1987) pointed out the importance of recognizing and critically examining our collective assumptions in order to articulate ways of being and thinking that are more creative and better adapted to the complexity of the systems we are part of. In that vein, Bohm claimed that most of our collective knowledge is thoroughly infected with misinformation, pollutes human experience and contributes to the “endarkment” of human consciousness.

Focused on recognizing, and reframing individual, and collective meaning structures, this somewhat cognitivist approach to consciousness development does not help us to see beyond these structures. Consequently, it is more effective when combined with another approach that is found at the confluence of the psychology of perception, phenomenology and spiritual writings – an approach, which is based on suspending our preconceptions and improving our connection with our moment-to-moment experience.

Suspending one's preconceptions and experiencing more direct contact with reality. Put forward by Gibson (1977, 1979), Rosch (1999, 2008) and Varela (Depraz *et al.*, 2003; Varela, 2000; Varela *et al.*, 1991), the second way of fostering one's own consciousness development focuses on developing our ability to grasp the essence of phenomena without going through a mental analysis. Going counter to many positivist postulates, this approach helps attenuate the experience of subject-object duality in favour of unprecedented creativity.

Considered one of the most important psychologists of the twentieth century in the field of visual perception, Gibson (1977, 1979) observed that the process of perception is direct and does not depend on conceptualization. He described a process of attunement with the environment and resonance with our sensory and psychosomatic experience

that allows us to get to the essence of phenomena, to grasp their “structural invariants”, without relying on meaning structures. In the same vein, Rosch’s research on conceptualization and categorization (1978, 1999) showed that our concepts are the result of an organic and creative process and that they emerge at the interface between the mind and the world, which, far from being separate, constantly interact. Accordingly, she argues in favour of recognizing a form of intelligence that is well-documented in various spiritual traditions, called the “beginner’s mind”. This form of intelligence involves suspension of preconceptions and gives access to direct knowledge, which is imbued with basic wisdom (Rosch, 2008). This deeper level is said to be accessed by letting go of the information and habits that have cluttered up our surface mind – made up of ordinary concepts, emotions, desires, fears and so on – and by relaxing and surrendering to what emerges. Unfortunately, this aspect of the human mind is largely ignored by modern psychology and cognitive sciences, which rely largely on limited and superficial computer analogies (Rosch, 2008). Finally, Depraz *et al.* (2003, see also Varela, 2000, and Varela *et al.*, 1991) observed that the process of becoming aware by which “one identifies the invariant element of an object out of a number of relative and contingent features” (p. 21) requires the cultivation of direct perception and access to inner wisdom through four phases: suspending our prejudice that what appears to us is truly the state of the world, so as to change how we pay attention to our own lived experience; redirecting our attention from what we are dealing with externally (the content of experience) to consider the internal act which lets us have access to it (the process of experience); letting go of our active search for truth to stay open to and accept what is emerging from our reflection on our lived experience; and recognizing the intuitive evidence that arises. Distinguishable by its given-ness, intuition refers to an experience not mediated by any conceptuality, in which objects show up in person (Depraz *et al.*, 2003).

Overall, this second way of fostering one’s own consciousness development seems to give rise to states of consciousness that are characteristic of the very advanced stages of consciousness, in which the subject-object duality subsides. These valuable experiences can momentarily increase the soundness of our decisions and indicate the path toward continued personal development.

4. Why foster the development of post-conventional consciousness in leaders?

Kegan (1982, 1994) has long held that to deal with the complex demands of the modern world effectively and serenely, we need to have reached the equivalent of the last conventional stage of consciousness in Torbert’s typology, that is, the Achiever stage. Consequently, researchers have focused on describing and documenting the capacities typical of these higher stages of consciousness (Drath, 1993; Kuhnert and Lewis, 1987; Strang and Kuhnert, 2009). However, in 2009, Kegan and Lahey specified that, although reaching the equivalent of the Achiever stage helps employees cope with the new demands of the working world, it is only on reaching the equivalent of the Strategist stage that executives are able to take on the responsibility of promoting the ongoing adaptation and transformation of their organization. In making that observation, Kegan has added his voice to those of the many practitioner-researchers specializing in the personal development of leaders, who hold that leaders need to have attained the post-conventional stages in order to support the adaptation and

development of their organizations (Beck and Cowan, 1996; Cook-Greuter, 2004; Fisher *et al.*, 2000; Joiner and Josephs, 2007; Rooke and Torbert, 2005). Here, we summarize the main empirical results accumulated to date on the capacities associated with the higher stages of conventional consciousness (including the Achiever stage) and the post-conventional stages, with regard to organizational learning, change and effectiveness.

Two studies support the notion that leaders who have reached the higher stages of consciousness are better facilitators of organizational learning. Merron *et al.* (1987) observed that managers at higher stages are more likely to redefine the problems they face, question the underlying assumptions in the definition of the problem, and treat the immediate problem as a symptom of a deeper underlying problem. In contrast, those at lower stages tend to accept the given definition of the problem, treat it as an isolated event, and neglect its underlying causes. In addition, Fisher and Torbert (1991) showed that managers who have reached the Strategist stage are better able to convince subordinates and superiors to consider alternative ways of seeing, thinking and acting. Indeed, Strategist leaders collaborate more closely with their subordinates, explore their points of view, and seek cognitive frameworks that will integrate the various views. When taking action, they often reframe and negotiate their ways of seeing as well as their ways of collaborating. Finally, again according to Fisher and Torbert's observations (1991), Strategist managers are better at reaching a shared understanding of reality with their own superiors.

Leaders who have reached the higher stages of consciousness also appear to be better agents of change. In a study involving a dozen company executives who were followed over an average of four years, Rooke and Torbert (1998) observed that those who had reached the post-conventional stages were seen as leaders of organizational learning and participated in significantly more organizational transformations. The authors attribute this difference to the exercise of transformational power (Torbert, 1999), which enables leaders to build on mutuality and on the voluntary initiatives of their colleagues. In the same vein, Bushe and Gibbs (1990) showed that 11 internal consultants at the Strategist stage were recognized as more competent agents of change than 53 other consultants who were assessed as being at lower stages of development.

Finally, leaders who have reached higher stages of consciousness are described as being more effective and productive. For example, in a study of CEOs and middle managers of large successful companies (gross revenues of over \$5 billion), Eigel (1998) observed a clear correlation between the managers' mental complexity and their work competence, as estimated by their performance and their ability to challenge existing processes, inspire a shared vision, manage conflict, solve problems, delegate, empower others and build relationships. Similarly, in a longitudinal study of West Point college students conducted over four years, Bartone *et al.* (2007) showed that consciousness development was a predictor of several peer, subordinate and supervisor ratings of leadership performance (see also Lewis *et al.*, 2005, and Forsythe *et al.*, 2002). Their findings suggest that a certain level of psychosocial maturity contributes to effective leadership. Indeed, the authors believe that leadership development programs that focus on developing skills and abilities, while ignoring basic psychosocial development levels and processes, are likely to be ineffective in achieving the desired results. Similarly, Harris and Kuhnert (2008), as well as Strang and Kuhnert (2009) showed that

the higher stages of consciousness were predictive of more effective leadership practices, as evidenced by higher 360-degree feedback ratings from superiors, peers and subordinates. Harris and Kuhnert (2008) also found that individuals who led from the higher stages were described by peers and subordinates as more effective in every leadership dimension on a 360-degree feedback questionnaire, namely, managing performance, leading change, catalyzing teams, cultivating talent, inspiring commitment, creating vision, contextual grounding and personal grounding. Further, they noted that the “very best leaders occupy the leadership development level 5” (p. 50), which corresponds to the Strategist stage.

The studies presented in this section are still of an exploratory nature, with undeniable limitations including small sample sizes, under-representation of the post-conventional stages and their sometimes anecdotal nature (McCauley *et al.*, 2006). Nonetheless, their conclusions clearly suggest that reaching the post-conventional stages of consciousness is linked to the ability of leaders to foster organizational learning and change and to achieve high performance. However, according to large-scale studies using the Leadership Development Profile (Cook-Greuter, 2004, $n = 4510$) and the Subject-Object Interview (Kegan, 1994, $n = 292$), it appears that approximately 85 percent of the working population – including managers and leaders – has not reached the post-conventional stages of consciousness. Consequently, it is worth examining the best means of supporting progression from the conventional to the post-conventional stages, or at the very least, the best means of eliciting higher states of consciousness momentarily.

5. How to foster the development of post-conventional consciousness

Two specific practices appear particularly conducive to supporting managers and leaders in their progression towards post-conventional stages, namely, mindfulness meditation and Bohm dialogue. These practices are likely to fulfill the three functions of a holding environment by promoting the recognition, critical examination and reframing of one’s meaning structures, as well as their suspension in favour of a more direct contact with reality.

5.1 *The practice of mindfulness meditation*

Recently, the psychological construct of mindfulness has received a great deal of attention and has even been proposed as a common factor for personal growth across all schools of psychotherapy (Shapiro and Carlson, 2009, Shapiro *et al.*, 2006). Often reduced to the formal practice of meditation, mindfulness is “inherently a state of consciousness” which involves consciously attending to one’s moment-to-moment experience (Brown and Ryan, 2003). In terms of consciousness development, the benefits of mindfulness are on two levels: helping to recognize and refine meaning structures with regard to the external world (which is more appreciated in western thought) and helping to gain direct knowledge of the real (more appreciated in eastern thought) (Weick and Putnam, 2006).

Adopting a western vision of mindfulness, Langer (1989) holds that the development of mindfulness is essential since we spend almost all our lives substituting conceptual order for our sensory experiences. We imagine the world by creating categories, rigid identities and rules of action and interpretation in our attempt to grasp the why and how of things. Although this allows us to impose order on a

somewhat chaotic reality and to function better in this world, we end up simplifying and falsifying that reality. These categories become so deeply ingrained that we forget that they are only representations and mistake them for reality itself. In contrast, “when we are mindful, we view a situation from several perspectives, see information presented in the situation as novel, attend to the context in which we are perceiving the information, and eventually create new categories through which this information may be understood” (Langer, 1997, p. 111).

Eastern traditions place more importance on becoming mindful to recognize and cope with what is, in the present moment. These traditions emphasize that when we pay attention to our mind we realize that it is usually reaching into the past or the future rather than focusing on the present. Furthermore, Eastern thought uses many metaphors to describe the restlessness of the mind, such as a horse that seems free to come and go as it pleases or as a monkey jumping from branch to branch with no apparent goal. It is thus understandable that Varela *et al.* (1991) state that mindfulness techniques are designed to “lead the mind back from its theories and preoccupations, back from the abstract attitude, to the situation of one’s current experience [...] to experience what one’s mind is doing as it does it, to be present with one’s mind” (pp. 22-3).

The pertinence of mindfulness to fostering post-conventional consciousness. The vast majority of research on mindfulness has focused on the impact of clinical interventions on well-being, and health (Brown *et al.*, 2007). The most widely known application of mindfulness is probably the Mindfulness Based Stress Reduction (MBSR) program developed 25 years ago by Kabatt-Zinn (1982), which has been followed more recently by other approaches such as Mindfulness-Based Cognitive Therapy (Segal *et al.*, 2002) and Acceptance and Commitment Therapy (Hayes *et al.*, 1999; Hayes *et al.*, 2004). The MBSR program was originally designed to help patients suffering from chronic pain manage their stress and emotions, but it is now used with a much more diverse clientele. Those who participate are taught a variety of meditation techniques, such as seated meditation, yoga and body scan meditation, which can all help people handle the stressful situations of everyday life more consciously and calmly, rather than with automatic reactions. Drawing heavily on MBSR, Mindfulness-Based Cognitive Therapy (MBCT) was developed to help prevent relapses in depressive individuals. It assists the individual to recognize the physical sensations, negative thought patterns and emotions that trigger relapses and to then change their relationship with those phenomena. Although Acceptance and Commitment Therapy was developed independently of the MBSR and MBCT, it nonetheless has much in common with those two approaches. Initially designed to help persons with specific mental health disorders such as anxiety and depression, it is increasingly used to assist people who are struggling with stress in the absence of such disorders. Its main goal is to lead the individual to escape the impasse in which they find themselves by accepting their emotions instead of avoiding them and by identifying the values that would allow them to commit to a more satisfying life.

The beneficial effects of these interventions are well documented. Randomized clinical trials of MBSR with healthy and patient populations have shown that it is effective in reducing self-reported distress, stress symptoms and mood disturbances, while several studies also suggest that mindfulness improves pain control and improves quality of life (Grossman *et al.*, 2004; Greeson, 2009; Baer, 2003). Mindfulness is also

increasingly recognized for its applications to management practices, particularly for its contributions to the improvement of concentration and contact with one's experience (Sethi, 2009), of awareness of the limitations of one's thinking and decision-making processes (Weick and Putnam, 2006) and of listening skills (Ucok, 2006).

Just as Buddhists have believed for centuries, some modern scholars have arrived at the conclusion that mindfulness is an excellent method for consciousness development. Among others, Shapiro *et al.* (2006) hold that mindfulness enables a shift of perspective on one's experience and meaning structures that makes it possible to recognize them for what they are and to "reperceive" them. Through this process, "one is able to disidentify from the contents of consciousness (i.e. one's thoughts) and view his or her moment-by-moment experience with greater clarity and objectivity" (p. 377). This process allows one to take a step back and simply witness the drama of personal narrative or life story instead of being enmeshed within it and ensnared by it. Reperceiving can thus be described as a rotation in consciousness in which what was previously "subject" becomes "object" (Kegan, 1982). Therefore, the practice of mindfulness appears as "a continuation of the naturally occurring human developmental process whereby one gains an increased capacity for objectivity about one's own internal experience" (Shapiro *et al.*, 2006, p. 378). Furthermore, many studies have shown that mindfulness has a significant impact on the three major dimensions of consciousness development, namely, cognitions, emotions and the motivations underlying actions. Among other effects, this capacity improves self-reflexive awareness, monitoring of negative emotions and behavioral regulation in the service of both adaptive ends and human flourishing (Baer, 2003; Brown *et al.*, 2007; Segal *et al.*, 2002).

Because this practice helps one become more mindful of moment-to-moment thoughts, feelings and behaviours, it has been described as essential to the development of post-conventional consciousness in leaders and managers (Joiner and Josephs, 2007; Rooke, 1997; Rooke and Torbert, 2005). Further, Fisher *et al.* (2000) observe that reaching the post-conventional stages requires widening one's awareness, i.e. becoming aware of what is going on within oneself and in the world instead of assimilating reality according to unquestioned assumptions and habits.

Conditions for integration. The development of mindfulness does not require simply becoming aware and putting minimal mindfulness instructions into practice. In fact, Rosch (2007, p. 261) says that she knows of "no cases where anyone has developed a meditation practice without considerable input". Among other things, beginners need teachings, to know what they should do, and teachers, who help them to understand, and overcome the pitfalls that can prevent progression. For example, for many people the first reaction to the practice of mindfulness meditation *per se* is to feel that they cannot do it, because their mind wanders or because they get bored. It is then that the teacher is called on "to remind them how frequent these obstacles are and to convey an attitude of non-judgment, inclusiveness, and of caring compassion" (Rosch, 2007, p. 261). Beginners also need to be part of a community of other practitioners with whom they can share their struggles and victories, which may be quite concrete (e.g. improved sleep; better listening) or related to new states of consciousness (e.g. more stable moods; greater awareness of emerging possibilities; higher tolerance of uncertainty; attentiveness to the totality of one's experience when in the thick of the action). Combining these conditions seems to be essential for the practice of

mindfulness to fulfill the three functions of holding environments described by Kegan (1982, 1994), namely, to enable individuals to identify the thoughts, issues and intentions they may be subject to; to critically examine them (while being compassionate with themselves); and to reframe them, through better awareness of what is and with the support of a peer group.

5.2 *The practice of Bohm dialogue*

Toward the end of his career, the eminent quantum physicist David Bohm formulated a type of dialogue aimed at supporting consciousness development (Bohm and Edwards, 1991; Bohm *et al.*, 1991). His writings and the form of dialogue he proposed were the forerunners of many approaches to organizational development that tap into collective intelligence to resolve systemic and complex problems (Briskin *et al.*, 2009).

According to Bohm, the essential cause of the endless crises affecting mankind is our ignorance of the nature of our thought process. First, Bohm *et al.* (1991) observed that humans make poor use of their capacity for abstraction, which often degenerates into fragmentation. Although knowledge about an object is based on an extraction of the object's main characteristics, this knowledge must stay closely connected to its context to remain appropriate and meaningful. In this regard, Bohm (1980) says that "this ability to separate himself from his environment and to divide things ultimately leads to a wide range of negative and destructive results . . . to men acting in ways that break themselves and the world up" (pp. 2-3). A second limitation of the thought process is that it rarely notices its own participation to the perception process. What Bohm means by this is that thought creates "things" out of a flow of sensations but denies that they are its own creations (Cayer, 1997). Indeed, our thought process gives us the impression that we are the ones who decide what we want to do with the "received" information. Finally, the third aspect of the thought process we generally fail to recognize is its shared nature. Our prejudices, beliefs and assumptions – as well as what we consider our self- or group-interests – come in large part from our family upbringing, education and the society in which we live. In other words, much of the mind's content is collective and this content is communicated subtly between people. Paradoxically, we identify with these shared assumptions and values to the point that we consider them as truths and refuse to challenge them. Thus, tacit shared beliefs and values are often undiscussable things that block deep, honest, heart-to-heart communication (Bohm, 1996).

To Bohm, humans have an innate capacity for collective intelligence that must be nurtured if we are to learn together and to coordinate our actions. So Bohm (1996), designed a dialogue process that aims to restore "a free flow of meaning among and through a group of people" (p. 1). The participants, generally between 20 and 40 in a group, would be allowed and encouraged to talk freely about their perceptions, assumptions, values and interests. This process helps them to acknowledge the individual and cultural assumptions that hinder communication or the development of a pool of common meaning. Participants can then recognize the extent to which they are attached to and identify with these assumptions, and realize how these assumptions filter and distort their perception of reality. Moreover, they can understand that acquiring knowledge or changing their belief system for another will not suffice in dealing with complex problems. Indeed, Bohm dialogue raises our awareness that it is better to make our assumptions and interests explicit when facing

complex problems, in order to eventually see beyond them. In addition, the dialogue group shares and represents many phenomena that occur in a larger society: pressure to conform to the norm, fear of being judged or excluded from the group, polarization of opinions, and the various roles that are played, such as leader, follower, protester, and so on. After a while, these phenomena appear in the group and may come to dominate it: some will be anxious about not having a pre-established agenda while others will take stands that might lead to defensive reactions in the group. Because we identify with our opinions and we do not want to lose face in front of a group, opinions will be defended, sometimes unrelentingly. The participants experience frustration, rage, conflicts and anxiety – all common emotions in our society. What is important is that the participants not try to escape, deny or even analyze these phenomena, but rather attempt to observe and explore how collective thought works and how relations between human beings occur (Cayer, 2007).

The pertinence of dialogue to fostering post-conventional consciousness. Bohm dialogue is somewhat like a collective meditation, in that it attempts to recognize, critically examine and reframe shared meaning structures, and to suspend them to make direct contact with the shared experience of the participants. Indeed, Bohm *et al.* (1991) described these two facets of the dialogue process. On the one hand, they hold that it requires openly expressing our opinions and judgments, as well as inquiring into the disagreements, conflicts and frustrations those might generate. Dialogue then becomes a means of exploring the basic assumptions adopted by individuals and society, of recognizing their inconsistencies, and of observing the defense mechanisms that keep these assumptions from changing. On the other hand, the awareness of the collective assumptions is described as a result of attention to the “here and now”, a subtle intelligence that allows the thought process to be grasped at the very moment it is using an assumption (Cayer, 2004). According to Bohm, this form of intelligence allows one to go beyond the content/process duality or, even more, beyond the subject/object duality, which is the basis of the tendency of the mind to fragment the world into parts. Thus, the dialogue helps the participants to become aware of how the thought process is involved in their relationship to reality and to no longer be blind to these effects.

Like mindfulness meditation, Bohm dialogue also seems to fulfill the three functions of a holding environment. First, the “opportunity to express, hold or change one’s opinions, beliefs and ideas without fear of reprisals” (Bohm *et al.*, 1991, p. 5) fulfills the function of recognition of one’s personal experience and its intelligibility. Next, “this receptive and open space of attention creates the conditions for nondefensive inquiry” (Gunnlaugson, 2007, p. 144) and fulfills the function of challenging one’s meaning-making systems. Finally, the opportunity to co-construct a new, richer meaning structure through contact with a group that meets on a regular basis appears to fulfill the last function of a holding environment, that of remaining in place and sustaining reintegration. Moreover, Scharmer (2007) noted that dialogue exchanges – in which one feels resonance with the experience of others and in which one recognizes the limits of shared conditioning – make it possible to have more direct contact with reality.

Finally, Bohm dialogue appears to be a means of consciousness development that is particularly pertinent for progression to the post-conventional stages. By challenging participants’ assumptions, airing and listening to multiple points of view, revealing paradoxes and ambiguities, and stressing the importance of the process and interconnectedness, Bohm dialogue cultivates capacities that are typical of

post-conventional leaders. Further, Rooke (1997) sees the opportunity to question the assumptions and habitual functioning of a group as highly conducive to the development of post-conventional consciousness. Lastly, Cayer (1997) observed that Bohm dialogue promotes reflection on and transformation of one's ultimate objectives and personal values, as well as those of the group, a form of third level reflexivity (Bateson, 1972), which is characteristic of the post-conventional stages (Torbert, 2004; Fisher *et al.*, 2000).

Conditions for integration. In a manner almost identical to that of mindfulness meditation, there appear to be three conditions that must be met for productive engagement in Bohm dialogue: the presence of a guide, the transfer of teachings and sustained contact with a peer group. While Bohm dialogue is designed to allow for the free play of thought and the expression of feelings among equals, a facilitator is often necessary (Cayer, 2004). His or her guidance is useful to transmit teachings from time to time about the particularities of the practice of Bohm dialogue (even if it is only to explain the phenomena of flow and collective intelligence, the purpose of the process, or the most common pitfalls), to explain what is happening when the group is facing a difficult situation, and to point out individual or collective manifestations of awareness of the moment-to-moment thought process. Moreover, the facilitator – through his or her attitude and interventions – should educe the most honest and open interaction possible. Indeed, dialogues that elicit significant insights are generally those in which the participants take the risk of exposing rifts and politically incorrect positions (e.g. “I believe that I am a racist” or “I cheated on the woman I love”) and in which concern for mutual understanding exceeds that of finding a solution or a final agreement. In such successful dialogues, the participants may enter into new states of consciousness that are associated with the experience of collective intelligence, in which the internal dialogues of each participant blend with that of the group, the origin of ideas becomes difficult to retrace, the collective patterns become visible (e.g. “We are the system that makes us suffer”), and the participants leave with the impression of being transformed to various degrees. Moreover, it is generally agreed that it is vital that dialogue be practiced on a sustained and regular basis if changes are to occur. Learning to observe one's process of thought, to become conscious of one's beliefs and assumptions, and to gain confidence in the group and the process of dialogue are all activities that need some time to be mastered. Furthermore, sustained contact with a dialogue group is likely to fulfill one essential function of a holding environment, that of remaining in place and sustaining reintegration.

6. Conclusion

With this paper, we attempted to offer a clear and comprehensive review of current knowledge about stages of consciousness, their hierarchical organization and the best ways of fostering their development. This endeavour seems particularly pertinent at this time, when developmental theories – which are, after all, very complex – are gaining in popularity and could easily suffer the fate of information passed down the line in the Telephone Game, becoming increasingly remote from their original formulation (Ross, 2008). In addition, we went to some lengths to highlight the unique characteristics of the post-conventional stages, their undeniable value for organizational leaders, and two practices that support their emergence, namely, mindfulness meditation and Bohm dialogue. Certain guiding principles that optimize

the integration of these practices into management and leadership development programs were also examined. Among the most important, participation in such programs should be voluntary and involve regular meetings, during which individuals can share their difficulties and victories, benefit from advice tailored to their experience and be exposed to teachings and exercises that promote recognition and suspension of their cognitions, emotions and deep intentions. An example of a teaching of this type is the process developed by Kegan and Lahey (2009) to help leaders recognize and critically examine the fears and major assumptions that operate as immunity to change. A second example is the U process that Scharmer (2007) proposed to respond wisely and creatively to challenges, which consists of suspending one's habitual ways of thinking and opening one's mind (by seeing what truly is), heart (by sensing the experience of the stakeholders) and will (by being fully present to what is emerging in one's whole experience and in the field). Finally, the integration that is possible through the practice of mindfulness meditation and Bohm dialogue is also facilitated by contact with peers who are grappling with similar difficulties and who, as a group, can fulfill the functions of a holding environment.

6.1 The practicality of fostering post-conventional consciousness in leaders. Various factors come to bear on the practicality of fostering post-conventional consciousness in leaders – factors, which tend either to support or limit the implementation of programs to promote consciousness development. First, in an era marked by rapid change and unprecedented institutional crises (Scharmer, 2007), leaders and managers are called on to exercise judgment regarding the ways of seeing, thinking and acting that they adopt. Moreover, if they intend to deal with the complexity of their organization effectively and serenely, or to contribute to its development, leaders have much to gain by taking charge of their own consciousness development (Kegan and Lahey, 2009), whether by recognizing, critically examining and refining of the meaning structures to which they are subject; by suspending those meaning structures in favour of a more direct contact with reality; or through an increased awareness of their own complexity. Mindfulness meditation and Bohm dialogue appear to yield insights that are extremely relevant to those objectives. In addition, these practices contribute to the emergence of a more post-conventional consciousness, whether permanently (through access to higher stages) or transiently (through access to higher states of consciousness). It also seems advisable to make more room for teaching such practices within the most common training and educational programs in the business world, including MBA programs. Furthermore, these practices should be regarded as having considerable legitimacy by institutions that combine educational and social missions, as is the case for most universities. In recognition of its relevance, some academic programs already teach mindfulness meditation to law students (Riskin, 2002, 2004) and medical students (Epstein, 2003; Krasner *et al.*, 2009).

There are, however, also reasons that such training may be seen in a negative light. For example, it is likely that most boards of directors would be reluctant to encourage such practices among the executive officers of their organizations. Indeed, mindfulness and Bohm dialogue are liberating practices that may lead managers and executives to act according to their own conscience more often, or to push their organization to change according to their values and the needs of all stakeholders. More importantly, these practices can lead managers to redefine their power relationship with the board and with their subordinates – from one of obedience to the interests and vision of a

minority to one of continuous reconciliation of the varied interests and visions of the group. That said, modern organizations seem increasingly interested in using organizational development approaches based on collective intelligence to solve complex system problems (Briskin *et al.*, 2009). Notably, the theoretical foundations of such approaches appear to be closely related to those of mindfulness and Bohm dialogue. For example, Appreciative Inquiry (Cooperrider *et al.*, 2003, 2008) engages individuals to come together to seek, identify and enhance the generative forces within their organizational system, and the World Café (Brown *et al.*, 2005) calls on an organization's various stakeholders to rethink the challenges they face and possible creative solutions – regardless of their status or the group to which they belong. Both these approaches are now being used by a growing number of organizations (Calabrese, 2006; Chalis, 2009; Hess *et al.*, 2006; Jones *et al.*, 2010; Jongeneel and Randall, 2009; Tan and Brown, 2005; van Vuuren and Crous, 2005). Another approach that is increasing studied in the context of organizational change (Kaeufer *et al.*, 2003, Kahane, 2007) is the Theory U process (Scharmer, 2007), which leads stakeholders and leaders to set aside their preconceptions in order to reach a new understanding of the challenges they share, to understand the experience of the various actors in the system and finally, to promote the emergence of insights into the best course of action. In summary, although boards of directors might still hesitate to foster the consciousness development of organizational leaders, we are already witnessing a transition in the field of organizational development towards approaches that share much of the same spirit, means and aims as mindfulness meditation and Bohm dialogue.

6.2 Future research

Executive development, in our view, would benefit from additional studies on whether the progression of leaders and managers from conventional to post-conventional stages can be supported and promoted; on the practices and conditions that are able to foster this progression; and on the impact of those practices on leadership and management skills. Such research would help overcome some of the limitations of previous research linking consciousness development and leadership. Most authors who have addressed leadership development (e.g. McCauley and Van Velsor, 2004) have sought to identify the conditions that support the transition from the Diplomat and Expert stages to the Achiever stage, and have left aside consideration of the transition to the post-conventional stages. Moreover, the most recent studies examining the link between the stage of consciousness of leaders and their efficacy (Harris and Kuhnert, 2008; Strang and Kuhnert, 2009; Kuhnert and Lewis, 1987; Bartone *et al.*, 2007) have not specifically examined the post-conventional stages. Further, it appears that no experimental research has successfully attempted to support consciousness development to the post-conventional level. Indeed, only four published studies report having succeeded in fostering a significant change in adult consciousness development (Alexander *et al.*, 1990; Hurt, 1990; MacPhail, 1980; Manners *et al.*, 2004) and none of these studies dealt with the post-conventional level. Finally, there is as yet no statistical evidence documenting the impact of the development of consciousness toward the post-conventional stages on the acquisition of advanced leadership and management skills such as the adoption of an integrated and holistic approach to organizational development (Anderson, 2006; Cacioppe and Albrecht, 2000).

Because they give rise to reflections that go far beyond the habitual concerns about organizational survival and performance, the practice of mindfulness meditation and Bohm dialogue are far from being quick fixes. This doubtless explains why these practices have been largely left out of executive development programs. Be that as it may, they can most certainly help leaders and managers to overcome the limitations of their worldview in order to take more fully into consideration the growing complexity of organizations and their societal context. In light of the drastic changes that humanity appears destined to experience in the coming decades, it is difficult to imagine a more important endeavour for those who aspire to lead us.

References

- Alexander, C., Druker, S. and Langer, E. (1990), "Introduction: major issues in the exploration of adult growth", in Alexander, C. and Langer, E. (Eds), *Higher Stages of Human Development*, Oxford University Press, New York, NY, pp. 3-32.
- Anderson, R. (2006), "The leadership circle profile: breakthrough leadership assessment technology", *Industrial and Commercial Training*, Vol. 38 No. 4, pp. 175-84.
- Baer, R. (2003), "Mindfulness training as a clinical intervention: a conceptual and empirical review", *Clinical Psychology: Science and Practice*, Vol. 10, pp. 125-43.
- Bartone, P., Snook, S., Forsythe, G., Lewis, P. and Bullis, C. (2007), "Psychosocial development and leader performance of military officer cadets", *The Leadership Quarterly*, Vol. 18, pp. 490-504.
- Bateson, G. (1972), *Steps to an Ecology of Mind*, Ballantine, New York, NY.
- Beck, D. and Cowan, C. (1996), *Spiral Dynamics: Mastering Values, Leadership, and Change*, Blackwell Publishing, Malden, MA.
- Bennis, W. and O'Toole, J. (2005), "How business schools lost their way", *Harvard Business Review*, Vol. 83 No. 9, pp. 96-104.
- Bohm, D. (1980), *Wholeness and the Implicate Order*, Routledge, London.
- Bohm, D. (1996), *On Dialogue*, Routledge, London.
- Bohm, D. and Edwards, M. (1991), *Changing Consciousness: Exploring the Hidden Source of the Social, Political and Environmental Crisis Facing Our World*, HarperCollins, San Francisco, CA.
- Bohm, D. and Peat, F. (1987), *Science, Order and Creativity*, Routledge, London.
- Bohm, D., Factor, D. and Garrett, F. (1991), *Dialogue: A Proposal*, available at: www.infed.org/archives/e-texts/bohm_dialogue.htm (accessed 21 April 2010).
- Briskin, A., Erickson, S., Ott, J. and Callanan, T. (2009), *The Power of Collective Wisdom and the Trap of Collective Folly*, Berrett-Koehler, San Francisco, CA.
- Brown, J., Homer, K. and Isaacs, D. (2005), *The World Café*, Berrett-Koehler, San Francisco, CA.
- Brown, K. and Ryan, R. (2003), "The benefits of being present: mindfulness and its role in psychological wellbeing", *Journal of Personality and Social Psychology*, Vol. 84, pp. 822-48.
- Brown, K., Ryan, R. and Creswell, J. (2007), "Mindfulness: theoretical foundations and evidence for its salutary effects", *Psychological Inquiry*, Vol. 18 No. 4, pp. 211-37.
- Bushe, G. and Gibbs, B. (1990), "Predicting organization development consulting competence from the Myers-Briggs type indicator and stage of ego development", *Journal of Applied Behavioral Science*, Vol. 26 No. 3, pp. 337-57.

-
- Cacioppe, R. and Albrecht, S. (2000), "Using 360° feedback and the integral model to develop leadership and management skills", *Leadership & Organization Development Journal*, Vol. 21 No. 8, pp. 390-404.
- Calabrese, R. (2006), "Building social capital through the use of an appreciative inquiry theoretical perspective in a school and university partnership", *International Journal of Educational Management*, Vol. 20 No. 3, pp. 173-82.
- Cayer, M. (1997), "Bohm's dialogue and action science: two different approaches", *Journal of Humanistic Psychology*, Vol. 37 No. 2, pp. 241-66.
- Cayer, M. (2004), "The five dimensions of Bohm's dialogue", in Banathy, B. and Jenlink, P. (Eds), *Dialogue as a Means of Collective Communication*, Springer, New York, NY, pp. 161-91.
- Cayer, M. (2007), "The experiences of long-term practitioners of Bohm's dialogue", in Jenlink, P. and Banathy, B. (Eds), *Dialogue as a Collective Means of Design Conversation*, Springer, New York, NY, pp. 319-64.
- Chalis, A. (2009), "An appreciative inquiry approach to RN retention", *Nursing Management*, Vol. 40 No. 7, pp. 9-13.
- Cook-Greuter, S. (1999), "Post-autonomous ego development: a study of its nature and measurement", unpublished dissertation, Harvard, Boston, MA.
- Cook-Greuter, S. (2004), "Making the case for a developmental perspective", *Industrial and Commercial Training*, Vol. 36 No. 7, pp. 275-81.
- Cooperrider, D., Withney, D. and Stavros, J. (2008), *Appreciative Inquiry Handbook: For Leaders of Change*, Berrett-Koehler, San Francisco, CA.
- Cooperrider, D., Sorenson, P., Yaeger, T. and Withney, D. (2003), *Appreciative Inquiry: Foundations in Positive Organizational Development*, Stipes, Champaign, IL.
- Depraz, N., Varela, F. and Vermersch, P. (2003), *On Becoming Aware: A Pragmatics of Experiencing*, John Benjamins, Philadelphia, PA.
- Drath, W. (1993), *Why Managers Have Trouble Empowering: A Theoretical Perspective Based on Concepts of Adult Development*, Center for Creative Leadership, Greensboro, NC.
- Eigel, K. (1998), *Leader Effectiveness: A Constructive Developmental View and Investigation*, University of Georgia, Athens, GA.
- Epstein, R. (2003), "Mindful practice in action (I): technical competence, evidence-based medicine, and relationship-centered care", *Families, Systems & Health*, Vol. 21 No. 1, pp. 1-9.
- Fisher, D. and Torbert, W. (1991), "Transforming managerial practice: beyond the achiever stage", *Research in Organizational Change and Development*, Vol. 5, pp. 143-73.
- Fisher, D., Rooke, D. and Torbert, W. (2000), *Personal and Organisational Transformations through Action Inquiry*, Edge Work Press, Boston, MA.
- Forsythe, G., Snook, S., Lewis, P. and Bartone, P. (2002), "Making sense of officership: developing a professional identity for 21st century Army officers", in Snider, D.M., Watkins, G.L. and Matthews, L.J. (Eds), *The Future of the Army Profession*, McGraw-Hill, New-York, NY, pp. 357-78.
- Gibson, J. (1977), "The theory of affordances", in Shaw, R. and Bransford, J. (Eds), *Perceiving, Acting, and Knowing: Toward an Ecological Psychology*, Lawrence Erlbaum, Hillsdale, NJ, pp. 67-82.
- Gibson, J. (1979), *The Ecological Approach to Visual Perception*, Houghton Mifflin, Boston, MA.
- Gosling, J. and Mintzberg, H. (2006), "Management education: as if both matter", *Management Learning*, Vol. 37 No. 4, pp. 419-27.

- Greenson, J. (2009), "Mindfulness research update: 2008", *Complementary Health Practice Review*, Vol. 14 No. 1, pp. 10-18.
- Grossman, P., Niemann, L., Schmidt, S. and Wallace, H. (2004), "Mindfulness-based stress reduction and health benefits: a meta-analysis", *Journal of Somatic Research*, Vol. 57, pp. 37-43.
- Gunnlaugson, O. (2007), "Exploratory perspectives for an AQAL model of generative dialogue", *Integral Review*, Vol. 4, pp. 44-58.
- Harris, L. and Kuhnert, K. (2008), "Looking through the lens of leadership: a constructive developmental approach", *Leadership & Organization Development Journal*, Vol. 29 No. 1, pp. 47-67.
- Hayes, S., Strosahl, K. and Wilson, K. (1999), *Acceptance and Commitment Therapy: An Experiential Approach to Behavior Change*, Guilford, New York, NY.
- Hayes, S., Bissett, R., Roget, N., Padilla, M., Kohlenberg, B. and Fisher, G. (2004), "The impact of acceptance and commitment training and multicultural training on the stigmatizing attitudes and professional burnout of substance abuse counselors", *Behavior Therapy*, Vol. 35 No. 4, pp. 821-35.
- Heifetz, R., Grashow, A. and Linsky, M. (2009), "Leadership in a (permanent) crisis", *Harvard Business Review*, Vol. 87 Nos 7/8, pp. 62-9.
- Hess, D., Everett, G., Tuchmann, L. and Dossey, B. (2006), "Holistic nurses and the New Mexico Board of Nursing", *Journal of Holistic Nursing*, Vol. 24 No. 2, pp. 132-8.
- Hurt, B. (1990), "Psychological education for teacher-education students: a cognitive-developmental curriculum", in Erickson, V. and Whitely, J. (Eds), *Developmental Counselling and Teaching*, Brooks/Cole, Monterey, CA, pp. 339-47.
- Joiner, B. and Josephs, S. (2007), *Leadership Agility: Five Levels of Mastery for Anticipating and Initiating Change*, Jossey-Bass, San Francisco, CA.
- Jones, A., Hansen, C., Hobbs, K., Chamorro, H., Conway, E. and Hubbard, L. (2010), "Collaborating for change: community-based research and political advocacy", *Hinckley Journal of Politics*, Vol. 11 No. 1, pp. 49-57.
- Jongeneel, A. and Randall, P. (2009), "Using World Café to rebuild optimism at Renault Trucks UK", *SCM*, Vol. 13 No. 4, pp. 28-31.
- Kabatt-Zinn, J. (1982), "An out-patient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: theoretical considerations and preliminary results", *General Hospital Psychiatry*, Vol. 4, pp. 33-47.
- Kaeufer, K., Scharmer, O. and Versteegen, U. (2003), "Breathing life into a dying system: recreating healthcare from within", *Reflections*, Vol. 5 No. 3, pp. 1-12.
- Kahane, A. (2007), "The language of power and the language of love: solving tough problems in practice", *Reflections*, Vol. 8 No. 3, pp. 1-10.
- Kegan, R. (1982), *The Evolving Self: Problem and Process in Human Development*, Harvard University Press, Cambridge, MA.
- Kegan, R. (1994), *In over Our Heads: The Mental Demands of Modern Life*, Harvard University Press, Cambridge, MA.
- Kegan, R. and Lahey, L. (2009), *Immunity to Change: How to Overcome It and Unlock Potential in Yourself and Your Organization*, Harvard Business Press, Boston, MA.
- Koplowitz, H. (1984), "A projection beyond Piaget's formal operations stage: a general system stage and a unitary stage", in Commons, M., Richard, F. and Armon, C. (Eds), *Beyond Formal Operations: Vol. 1. Late Adolescents and Adult Cognitive Development*, Praeger, New York, NY, pp. 279-95.

- Krasner, M., Epstein, R., Beckman, H., Suchman, A., Chapman, B., Mooney, C. and Quill, T.E. (2009), "Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians", *JAMA*, Vol. 302 No. 12, pp. 1284-93.
- Kuhnert, K. and Lewis, P. (1987), "Transactional and transformational leadership: a constructive developmental analysis", *Academy of Management Review*, Vol. 12 No. 4, pp. 648-57.
- Langer, E. (1989), *Mindfulness*, Addison-Wesley, Reading, MA.
- Langer, E. (1997), *The Power of Mindful Learning*, Addison-Wesley, Reading, MA.
- Lewis, P., Forsythe, G., Sweeney, P., Bartone, P., Bullis, C. and Snook, S. (2005), "Identity development during the college years: findings from the West Point longitudinal study", *Journal of College Student Development*, Vol. 46, pp. 357-73.
- McCaughey, C.D. and Van Velsor, E. (2004), *The Center for Creative Leadership Handbook of Leadership Development*, 2nd ed., Jossey-Bass, San Francisco, CA.
- McCaughey, C., Drath, W., Palus, C., O'Connor, P. and Baker, B. (2006), "The use of constructive-developmental theory to advance the understanding of leadership", *The Leadership Quarterly*, Vol. 17, pp. 634-53.
- MacPhail, D. (1980), "The moral education approach in treating adult inmates", *Criminal Justice and Behavior*, Vol. 16, pp. 81-97.
- Manners, J., Durkin, K. and Nesdale, A. (2004), "Promoting advanced ego development among adults", *Journal of Adult Development*, Vol. 11 No. 1, pp. 19-27.
- Meehan Souvaine, E. (1999), "Developmentally constructive action: a case for the mutually informing potential of action science and constructive-developmental theory", Harvard, Boston, MA, unpublished dissertation.
- Merron, K., Fisher, D. and Torbert, W. (1987), "Meaning making and management action", *Group & Organization Studies*, Vol. 12 No. 3, pp. 274-86.
- Mezirow, J. (1991), "How critical reflection triggers transformative learning", in Mezirow, J. (Ed.), *Fostering Critical Education in Adulthood: A Guide to Transformative and Emancipatory Learning*, Jossey-Bass, San Francisco, CA, pp. 1-20.
- Mezirow, J. (2000), "Learning to think like an adult: core concepts of transformation theory", in Mezirow, J. (Ed.), *Learning as Transformation*, Jossey-Bass, San Francisco, CA, pp. 3-34.
- Miller, M. and Cook-Greuter, S. (1994), *Transcendence and Mature Thought in Adulthood*, Rowman & Littlefield, Lanham, MD.
- Paulson, D. (2008), "Wilber's integral philosophy: a summary and critique", *Journal of Humanistic Psychology*, Vol. 48 No. 3, pp. 364-88.
- Piaget, J. (1948), *The Moral Judgement of the Child*, Free Press, Glencoe, IL.
- Piaget, J. (1954), *The Construction of Reality in the Child*, Routledge & Kegan Paul, London.
- Ready, D. and Conger, J. (2003), "Why leadership-development efforts fail", *MIT Sloan Management Review*, Vol. 44 No. 3, pp. 83-8.
- Riskin, L. (2002), "The contemplative lawyer: on the potential contributions of mindfulness meditation to law students, lawyers and their clients", *Harvard Negotiation Law Review*, Vol. 7 No. 1, pp. 1-66.
- Riskin, L. (2004), "Mindfulness: foundational training for dispute resolution", *Journal of Legal Education*, Vol. 79, pp. 79-90.
- Rooke, D. (1997), "Organizational transformation requires the presence of leaders who are strategists and magicians", *Organization & People*, Vol. 4 No. 3, pp. 16-23.

- Rooke, D. and Torbert, W. (1998), "Organizational transformation as a function of CEOs' developmental stage", *Organization Development Journal*, Vol. 16 No. 1, pp. 11-28.
- Rooke, D. and Torbert, W. (2005), "Seven transformations of leadership – leaders are made, not born, and how they develop is critical for organizational change", *Harvard Business Review*, Vol. 83 No. 4, pp. 67-76.
- Rosch, E. (1978), *Cognition and Categorization*, Erlbaum Associates, Hillsdale, NJ.
- Rosch, E. (1999), "Reclaiming concepts", *The Journal of Consciousness Studies*, Vol. 6 Nos 11-12, pp. 61-77.
- Rosch, E. (2007), "More than mindfulness: when you have a tiger by the tail, let it eat you", *Psychological Inquiry*, Vol. 18 No. 4, pp. 258-64.
- Rosch, E. (2008), "Beginner's mind: paths to the wisdom that is not learned", in Ferrari, M. and Potworowski, G. (Eds), *Teaching for Wisdom: Cross-cultural Perspectives on Fostering Wisdom*, Springer, Amsterdam, pp. 135-62.
- Ross, S. (2008), "Using developmental theory: when not to play telephone games", *Integral Review*, Vol. 4 No. 1, pp. 33-46.
- Scharmer, O. (2007), *Theory U: Leading from the Future as it Emerges*, Society of Organizational Learning, Cambridge, MA.
- Segal, Z., Williams, J. and Teasdale, J. (2002), *Mindfulness-based Cognitive Therapy for Depression: A New Approach to Preventing Relapse*, Guilford, New York, NY.
- Sethi, D. (2009), "Mindful leadership", *Leader to Leader*, Vol. 51, Winter, pp. 7-11.
- Shapiro, S. and Carlson, L. (2009), *The Art and Science of Mindfulness: Integrating Mindfulness into Psychology and the Helping Professions*, American Psychological Association, Washington, DC.
- Shapiro, S., Carlson, L., Astin, J. and Freedman, B. (2006), "Mechanisms of mindfulness", *Journal of Clinical Psychology*, Vol. 62 No. 3, pp. 373-86.
- Starkey, K. and Tempest, S. (2008), "A clear sense of purpose? The evolving role of the business school", *Journal of Management Development*, Vol. 27 No. 4, pp. 379-90.
- Strang, S. and Kuhnert, K. (2009), "Personality and leadership developmental levels as predictors of leader performance", *The Leadership Quarterly*, Vol. 20, pp. 421-33.
- Tan, S. and Brown, J. (2005), "The World Café in Singapore: creating a learning culture through dialogue – part II: cross-cultural diffusion of large group interventions", *The Journal of Applied Behavioral Science*, Vol. 41 No. 1, pp. 83-90.
- Torbert, W. (1987), *Managing the Corporate Dream: Restructuring for Long-term Success*, Dow Jones-Irwin, Homewood, IL.
- Torbert, W. (1994), "Managerial learning, organizational learning: a potentially powerful redundancy", *Management Learning*, Vol. 25 No. 1, pp. 57-70.
- Torbert, W. (1999), *The Power of Balance – Transforming Self, Society, and Scientific Inquiry*, Sage, San Francisco, CA.
- Torbert, W. (2004), *Action Inquiry: The Secret of Timely and Transforming Leadership*, Berrett-Koehler, San Francisco, CA.
- Ucok, O. (2006), "Transparency, communication and mindfulness", *Journal of Management Development*, Vol. 25 No. 10, pp. 1024-8.
- van Vuuren, L. and Crous, F. (2005), "Utilising appreciative inquiry in creating a shared meaning of ethics in organisations", *Journal of Business Ethics*, Vol. 57 No. 4, pp. 399-412.

- Varela, F. (2000), "Steps to a science of inter-being: unfolding the *dharma* implicit in modern cognitive science", in Watson, G., Batchelor, S. and Claxton, G. (Eds), *The Psychology of Awakening*, Samuel Weiser, York Beach, ME, pp. 71-89.
- Varela, F., Thompson, E. and Rosch, E. (1991), *The Embodied Mind: Cognitive Science and Human Experience*, MIT Press, Cambridge, MA.
- Weick, K. and Putnam, T. (2006), "Organizing for mindfulness: eastern wisdom and western knowledge", *Journal of Management Inquiry*, Vol. 15 No. 3, pp. 275-87.
- Wilber, K. (2000), *Integral Psychology*, Shambhala, Boston, MA.
- Winnicot, D. (1965), *The Maturational Process and the Facilitating Environment*, International Universities Press, New York, NY.

Further reading

- Isaacs, W. (1993), "Taking flight: dialogue, collective thinking and organizational learning", *Organizational Dynamics*, Vol. 22 No. 2, pp. 24-39.
- Isaacs, W. (1999), *Dialogue: The Art of Thinking Together*, Currency, New York, NY.

Corresponding author

Charles Baron can be contacted at: charles.baron@mng.ulaval.ca

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