



The ideal self as the driver of intentional change

Richard E. Boyatzis

*Weatherhead School of Management, Case Western Reserve University,
Cleveland, Ohio, USA, and*

Kleio Akrivou

*Department of Organizational Behavior, Case Western Reserve University,
Cleveland, Ohio, USA*

Abstract

Purpose – If the ideal self is the emotional driver of intentional change, the purpose of this paper is to explore the components of a person's personal vision and how it comes from their ideal self.

Design/methodology/approach – Based on the concept of the ideal self from intentional change theory, the paper examines a variety of theoretical foundations, from psychoanalytic to positive psychology. Each views the ideal self and its components as deficiencies needing therapeutic intervention or the heights of human experience and intrinsic motivation.

Findings – The ideal self is a primary source of positive affect and psychophysiological arousal helping provide the drive for intentional change. Many current frameworks or theories examine only portions of this model and, therefore, leave major components unaddressed. The ideal self is composed of three major components: an image of a desired future; hope (and its constituents, self-efficacy and optimism); and a comprehensive sense of one's core identity (past strengths, traits, and other enduring dispositions).

Originality/value – Intentional change is hard work and often fails because of lack of sufficient drive and the proper intrinsic motivation for it. This model of the ideal self creates a comprehensive context within which a person (or at other fractals, a group or system) can formulate why they want to adapt, evolve, or maintain their current desired state.

Keywords Self development, Change management, Individual psychology, Leadership development

Paper type Conceptual paper

Much has been written about the importance of our dreams or aspirations in motivating change or development (Oettingen, 1996; Snyder, 2000a, b; McClelland, 1985; Lewin and Dembo, 1947). Some of this comes from the goal setting and goal orientation literature (Locke and Latham, 1990; Van Der Walle *et al.*, 2001), and reaching as far back as Lewin and Dembo's (1947) conceptualization of levels of aspiration as contrasted to a person's level of activation. In recent years, a person's "vision" and visualization of desired behavior (Taylor *et al.*, 1998) have been described as an element in sports performance (Snyder *et al.*, 2002), academic performance (Curry *et al.*, 1997), psychotherapy (Schechter, 1974), and helping recovery from illness and surgery (Moyers, 1993; Matthews *et al.*, 2004). Related psychological concepts, such as hope, efficacy, optimism and positive expectations, have helped to elaborate selected processes by which the person may look to the future, and a hopeful and/or positive future, and drive the popularity of positive psychology (Seligman and Csikszentmihalyi, 2000). Yet, little theoretical work has been done to integrate these ideas or research.



In this article, we offer a theoretical model of the ideal self. It is proposed that the ideal self is the driver of intentional change in one's behaviour, emotions, perceptions, and attitudes. The ideal self is the first discovery of intentional change theory (i.e. ICT) as described in the first article in this special issue (Boyatzis, earlier in this issue). Because of misguided and incomplete models of how to stimulate desired, intentional change, the ideal self is perhaps the least understood of all of the components of ICT.

The ideal self

The ideal self is a psychological component of the self (Baumeister, 1998, a, b; Higgins, 1989a) partially conscious and partially unconscious, varying from individual to individual. It is both privately conceptualised and socially influenced (in Nasby, 1997; Schechter, 1974). The traditional psychoanalytic therapeutic model sees idealisation as a defensive function of the self and thus in need of therapeutic intervention (in Schechter, 1974). Within the perspective of positive psychology, the ideal self (IS) is not considered a defensive function; it is the core mechanism for self-regulation and intrinsic motivation. It is manifest as a personal vision, or an image of what kind of person one wishes to be, what the person hopes to accomplish in life and work.

Although the capacity for cognitive-affective ideal self formation "is more strongly rooted in some personalities than in others" (Schechter, 1974), the ideal self (IS) is an evolving, motivational core within the self, focusing a person's desires and hope, aspirations and dreams, purpose and calling. Discrepancies or congruence between the actual (i.e. real self) and the person's ideal self result in unique emotional and behavioral consequences (Boldero and Francis, 1999). The ideal self serves a mechanism linked to self-regulation; it helps to organize the will to change and direct it, with positive affect from within the person. Deep positive affect creates an affective tone of the specific cognitive processes that take place in the formulation and Nourishment of the ideal self. The result harnesses the will or drive for self direction, intentional change, and desired future accomplishments, or in selected cases providing the energy to maintain and sustain current ideal states in life and work.

In the model of the ideal self proposed, emotion, and more specifically positive emotion, is seen to have a core role. Positive affect is defined as "a state of high energy, full concentration, and pleasurable engagement" (Watson and Tellegen, 1985). Although both cognitive and emotional processes are required for the person to activate and articulate an ideal self, it is trait based positive emotion which becomes the driver and the substance of the ideal self overall. Positive affect improves the thoroughness, efficiency, and flexibility of complex decision making and influences one's sense of standards to evaluate your progress against a set of standards. Also, it facilitates the quality and quantity of pathways of thought and seems to boost an aspect of executive function, which is the ability to adjust efficiently to new information and undertake new problem solving efforts in congruence with the new information (Ashby *et al.*, 1999; Aspinwall and Leaf, 2002).

We propose that once the force of the ideal self is activated, it plays an executive or motivational function within the self. It monitors and guides all actions and decisions in a direction which ensures deeper self-satisfaction through the articulation and direction towards either: the emergence of a new state of being with self actualization as a core quality – evident in either an internal sense of the self in action, such as knowing you are acting with character and consistent with one's values, or as evident

to others through one's accomplishments; or the maintenance of a current character (i.e. way of being) or state or condition in life or work, with increased clarity and mindfulness. The latter requires effort, intentional effort, to sustain the balances achieved, so it must be a result of focused effort to alter the likely forces of dissonance and entropy.

Like the concept of "approach motivation" of the 1960s and 1970s in personality psychology (McClelland, 1985), it is believed the ideal self will show opposite effects than fear or "avoidance motives" (Boyatzis, 1973; McAdams, 1980; Kelner, 1990). It will show a longer lasting effect, but has a slower, more complex start up rate than fear or "avoidance motives".

The role of fear and avoidance motives are to arouse emotional and cognitive processes within the person that have the opposite effect of the ideal self, as mentioned in the Boyatzis article earlier in this special issue and explained in more detail in the Dyck and Howard articles later in the issue. Arousal of a fear stimulates neural circuitry starting in the amygdala and emanating with dominant activity in the right versus the left prefrontal cortex. At the same time, it promotes activation of the sympathetic nervous system, creating a set of neural and endocrine processes that stimulate negative or defensive emotions, resulting in a likely shift in perceptions of the environment as more threatening (or merely anticipating that future events will be more threatening). This results in defensive or hostile actions that typically result in a person's withdrawing or inhibiting new thoughts and alternative ways to approach a situation.

Instead of moving forward, toward a desired future or condition, the person moves away from and protects himself/herself from threatening aspects of the present or future. In this manner, arousal of the ideal self engages the positive emotional attractor (Boyatzis, article earlier in this issue) and its impact on intentional change. Arousal of fear or avoidance motives engage the negative emotional attractor with its impact on the person defending himself/herself or being forced to contemplate adaptation not previously considered (Boyatzis article earlier in this issue).

The ideal self activates the person's "will," and by association the possibility of increased self-monitoring, especially in terms of progress toward or behaviour consistent with the purpose reflected in the activation of the person's will. This is the teleos, or the expression of the person's will; in James' terms it is the person's "conscious volition" (James, 1897). As he suggested, once activated, the teleological effect of the will provides the possibility of increased self-monitoring in terms of the decisions and choices. This can be translated into decisions to sacrifice certain immediate rewards for the sake of accomplishment of more important and often longer-term goals.

Components of the ideal self

The overall model offered of the ideal self is shown in Figure 1. As can be seen, we propose that there are three major components converging into the articulation of the person's ideal self, and the resulting personal vision.

The ideal self contains imagery of a desired future (a novel one, or one existing over time, or one continually forming and revisited). This image is the articulation or realization of the person's dreams, aspirations, and fantasies. It is of cognitive nature yet, fuelled by the affect resulting from one's passion, dreams, and values. Specifically,

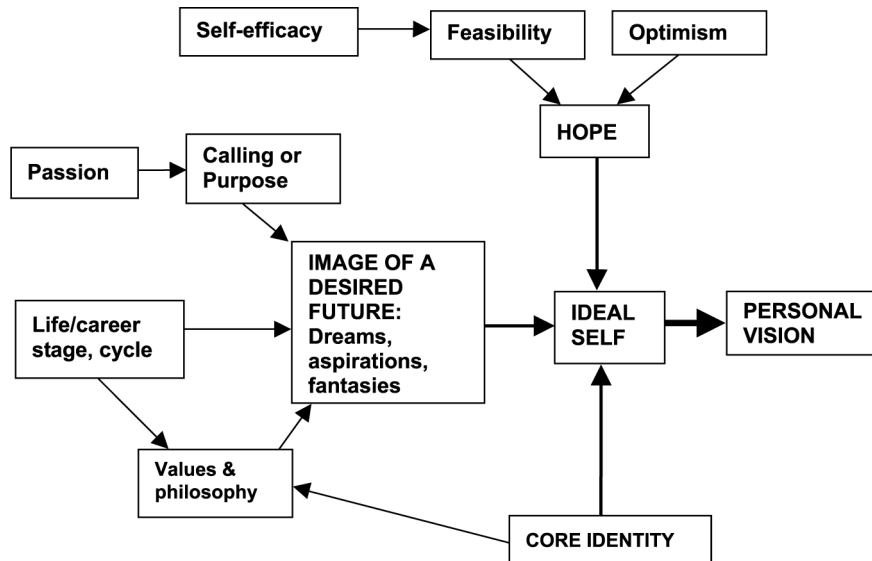


Figure 1.
Components of the
ideal self

we believe the person's dreams of the desired future/state are a function of his/her: sense of calling or purpose in life; driven by their passion, values and operating philosophy; and stage in life or one's career.

Second, the ideal self is emotionally fuelled by hope. Although the psychological processes related to hope are still under research, most researchers agree that hope is caused by the degree of the person's optimism. Also, it is the expression of their degree of self-efficacy. Self-efficacy determines their perceptions of possibilities – to differentiate this component from “pie in the sky” or false hope (Groopman, 2004). Some of the most prominent current literature on hope sees the concept as mainly cognitive in nature (Snyder, 2000c). Yet we believe that hope is an experienced state and, therefore, may be more accurately portrayed as an emotional state. This view is supported by Aspinwall and Leaf (2002) and by Skinner (1996). Additionally, the hope component of the ideal self model is defined by one's ability to generate cognitive processes that assess and judge the feasibility of that which is hoped. Even here, though, the cognitions are less judgemental and more affective.

The third component of the ideal self is the person's core identity. This is relatively stable, and likely unconscious set of enduring individual characteristics, like his/her unconscious motives and traits, as well as roles adopted consistently in social settings. In this manner, the core identity is the personal context within which underlies the historical and continuing aspects of a person's ideal self and one's deeply seated autobiographical themes that make a vision coherent and intense.

A major confusion about the ideal self comes from the “ought self.” The ought self as a concept is used in various labels in the literature (Baumeister, 1998; Higgins, 1989a; Markus and Nurius, 1986). It explains a version of the ideal self imposed by others, or by a person's internal desire to please others (Boyatzis, 1973). Reference groups or social identity groups affect the individual by anticipatory socialization or value induction. Groups that you wish to be a part of or identify with and feel that you

belong to become sources of either a person's ideal self or your ought self. Parents, teachers, respected or feared authority figures, or those with whom you wish to be admired, respected, or loved become sources of one's ideal self or ought self.

The dilemma is that it is often confusing, in the moment, when these forces or social pressures for role conformity are occurring. Are they things you really wish to be or accomplish, or are you compromising your deeper dreams and values to be considered a "good" member of a group? Quite simply, the ought self is someone else's version of what they think your ideal self should be. To the extent this becomes intentionally integrated into a person's ideal self, there appears to be no conflict among the various selves. But if they are somewhat different and a person works toward the ought self, at some point in the future, they will awake and feel betrayed, frustrated, and even angry at the time and energy they wasted in pursuit of dreams and expectations that they were never passionate about.

Ideal self leads to a personal vision

As described in the first article in this special issue, by Boyatzis, discovery, or more accurately conscious realization of one's ideal self may appear as a surprise or an epiphany. This emergence of a new insight or awareness is a discontinuous break with prior consciousness about one's aspirations or future. In complexity theory terms, it is a phase change. It is a small adjustment to a person's awareness of their desires that has a huge impact on their perceptions and choices. The ideal self provokes a phase change in the person's change or adaptation process. In this way, it provokes or invokes intentional change.

To have this impact on the person's behaviour, feelings, and perceptions, the articulation of the ideal self can be a strong personal vision. This engages the positive emotional attractor, which in turn enables an assessment of a person's capability as it may help or hinder movement toward the ideal self. We call this the personal balance sheet (see the Taylor article and the Dyck and Howard articles in this issue). This promotes the development of a person's learning agenda and then a more articulated learning plan, experimentation and practice with new behaviour, feelings, and perceptions, and the eventual desired changes in either the person's actual behaviour (their real self) or their aspirations and dreams of the future (their ideal self). As shown in the ICT, each of these discoveries is facilitated by the observations, interpretation, feedback, and encouragement of others with whom the person has a trusting relationship.

Hope: the affective driver

A major determinant of the ideal self is hope. Scholarly work on hope place its antecedents in the motivational and cognitive literature of 1960s to 1980s, stressing the desire to seek goals and the importance of cognition and the architecture of human thought processes (Anderson, 1983; Ashby *et al.*, 1999). Goals are seen to be the cognitive component that is at the core of recent hope research. Accordingly, hope has been conceptualised as a cognitive set which is built on the importance of goals (Snyder, 2000c, 1998, 1996, 1994, 1991; Snyder, Ilardi, Michael and Cheavens, 2000; Snyder *et al.*, 1997; Lee *et al.*, 1989; Pervin, 1989). Hope has often been seen as a unidimensional construct related to a general perception that goals can and will be met (Cantril, 1967; Erickson *et al.*, 1975; Farber, 1968; Frank, 1973, 1968; French, 1952;

Gottschalk, 1974; Lewin, 1938; Menninger, 1959; Melges and Bowlby, 1969; Mowrer, 1960; Stotland, 1969).

Ludema (1996) traced the roots of the concept of hope. He reported in his review on the concept of hope in Western tradition, that in Greco-Roman times, there was an ambivalence about hope. It was both a human projection of desire, with human failings and limitations. Judeo-Christian tradition saw hope as a divine gift with practical implications here on Earth. But it was the Christian theologians of the Middle Ages that brought hope into an ethereal level. Augustine called hope a basic human virtue and a path to God. Meanwhile, Aquinas claimed hope gave direction toward action. From in-depth interviews, Ludema (1996) concluded that hope has four enduring qualities:

- (1) hope brought people together and built relationships;
- (2) hope assumes an openness to the future and imagination;
- (3) hope is an “ultimate concern” of human nature; and
- (4) hope feeds creativity.

Snyder referred to the myth of Pandora box in ancient Greece, as an early conceptualisation of the concept of hope (Snyder, 2000a, b).

Among the recent research on hope as a psychological construct, Menninger wrote an academic lecture on hope in 1959, and Erickson defined hope as a psychiatric variable in his 1975 publication (Erickson *et al.*, 1975; Menninger, 1959). The most extensive research on hope as a psychological construct has been done by C.R. Snyder (Snyder, Rand and Sigmon, 2002; Snyder, Rand, King, Feldman and Woodward, 2002; Snyder, 1996, 1994, 1991). He has outlined a three-dimensional construct. In his terms, hope is “a positive motivational state that is based on an interactively derived sense of successful a. agency (goal directed) energy and b. pathways (planning to meet goals), as well as c. goals” (Snyder, 2000c). As noted earlier, goals provide targets of thought processes. They may be verbal descriptions or visual images. They vary in terms of temporal frame and degree of specificity (Snyder, 2000c). They may reflect positive, or approach goals or negative goal outcomes (Snyder *et al.*, 2002). “Pathways thinking” involves the perception that a path to the hoped future is feasible (Snyder *et al.*, 2002).

In Snyder’s model, his concept of “pathways thinking” is similar to our notion that self-efficacy affects the person’s experience of hope by creating a belief in the feasibility, or possibility that the desired future or state might occur. In this way, the hope is genuine and not foolish (Groopman, 2004; Snyder, 2000c), therefore that it is realistic and feasible. In contrast, that which is entirely out of one’s possibility is discarded as unrealistic and therefore not worthy of effort or even dreaming. People who are more optimistic and experience positive emotions set this marker high, meanwhile more pessimistic people set this marker low (Seligman, 1991; Fredrickson and Soiner, 2002). Therefore, we believe optimism must be incorporated into the components that affect a person’s experience of hope. This helps to explain why some people claim, or consciously claim that they do not dream. They do not want to be disappointed. They lack optimism, or a sense of possibility, and therefore, place no

affect on the desired image of the future, or even worse, they place a negative affective label on it – turning the positive force into a restraining force.

Snyder (2000c) said that people with high hope are also producing alternative routes to their goals, and when in situations when they face goal impediment (Irving *et al.*, 1998; Snyder *et al.*, 1991, 1996; Tierney, 1995). Agency thinking is an additional motivational component of Snyder's definition of hope (Snyder, 2000c). But this is where we believe Snyder's concept confuses different constructs, that of the emotional condition toward and the conceptual image of the desired future. We believe, by separating these two concepts, we achieve greater clarity on the internal mechanism of a person's ideal self.

In addition, in the above literature of hope there are overlaps and similarities with the concept of efficacy, as described in motivational and personality literatures as self efficacy and optimism. Literature on control beliefs shows confusion with agency and pathways thinking. Aspinwall and Leaf (2002), and Skinner's (1996) review of a large number of control-related constructs found three related sets of beliefs, namely beliefs about agent-ends relations (personal control beliefs), beliefs about agent – means relations (efficacy expectations) and means – ends relations (response efficacy, optimism). Agency thinking seems close to a combination of the first two sets of beliefs (agent-ends and agent-means), while the pathways concept is parallel to means-ends thinking (Aspinwall and Leaf, 2002).

In the model of the ideal self proposed in this article, optimism and efficacy are seen as the main determinants and generators of hope, and therefore, key determinants of the ideal self. Efficacy and optimism research provided insights on the nature and the difficulty of goals selected and the mechanisms through which the ideal self becomes a motivational force within the self, guiding the individual on goals selection, review, as well as goal adaptation, focus and change in behaviours or the goals themselves the face of adversity, integration of both negative and positive information. Self-efficacy related research also helps to understand how the person can sacrifice immediate rewards for the sake of accomplishment of the important ones.

Between the 1960s and 1970s, there had been a lot of research and theory developed on the role of self-referent thought in psychological functioning (DeCharms, 1968; Rotter *et al.*, 1972; Lefcourt, 1976; Perlmutter and Monty, 1979; Garber *et al.*, 1980). Bandura's research on self-efficacy (1986, 1982, 1977) emphasized the centrality of self-perception of efficacy in human agency, through its influence on psychological functioning during anticipatory and actual transactions with a person's environment. Self-efficacy is found to be the cognitive mediator in the relationship between knowledge and actions (Bandura, 1997). A person's perception of his/her capability also determines what kind of goals people will be chosen, how much effort will be invested and how much and how long one will maintain persistence in the face of obstacles or aversive experiences (Bandura, 1997). This is where the hope component of the ideal self interacts with the core identity component. That is, the person's awareness of his/her enduring capability and dispositions.

Strength of a person's efficacy predicted behavior change (Kolb and Boyatzis, 1970; Bandura, 1982). The stronger the perceived efficacy the more likely are people to persist in their efforts until they succeed (Bandura, 1982). In Bandura's social learning theory, a source of cognitive motivation is directly linked to goal setting (Bandura, 1977, 1982). It requires personal standards of excellence against which one is able to

evaluate his/her own performance. People create self-incentives for their actions (intrinsic motivation) by linking self satisfaction with a certain level of performance mastery – self motivation is sustained through the adoption of feasible sub goals that lead to large future goals (Bandura, 1977). According to Bandura (1977; 1982), self-efficacy beliefs may vary on three dimensions:

- (1) particular level of difficulty of the goal (magnitude or level dimension);
- (2) certainty of the person about performing particular level of goals (strength dimension); and
- (3) generality across contexts and situations.

Recent research has focused in the third dimension, termed general self-efficacy, which is a more stable dimension of self-efficacy, seen by many researchers as another motivational trait (Chen *et al.*, 2001), which they believe is resistant to ephemeral influences and is developed through the aggregation of previous life experiences and the role of successes and failures in an individual's life history.

Attitudinal optimism has received much attention and been a driving force in the positive psychology movement (Seligman, 1991). Scheier and Carver (1985) define optimism as a stable personality trait of cognitive nature that is operationalized as a measure of generalized positive expectancies in certain and uncertain times, thus stressing the role of outcome expectancies in the prediction of goal-directed behavior. Attitudinal optimism has been seen as enabling:

- vigorous and effective goal pursuit;
- cognitive evaluation and useful integration of negative information about the self;
- capability for adaptation to changes in life brought about by unexpected negative life events; and
- ability for the individual to select which are the critical goals to engage, as well as ability to disengage from goals that become irrelevant, not able to lead to success, unsolvable, or misleading (Aspinwall *et al.*, 2001, 2000, 1999, 1996; Carver *et al.*, 1993; Taylor *et al.*, 1992; Scheier *et al.*, 1986).

As mentioned previously, we believe this has confused the desired end states, the goals, with the belief that they are possible to be achieved and the affective tone of each of these thoughts or images. In our model, we are attempting to clarify each of these elements, separately, to document their primary interactions and facilitate their accurate assessment.

Current research on hope converges on the underlying base of hope as cognitions (Snyder, 2000c; Snyder, Feldman, Taylor, Schroeder and Adams, 2000; Snyder, Ilardi, Cheavens, Michael, Yamhure and Sympson, 2000; Snyder, Ilardi, Michael and Cheavens, 2000; Snyder and McCullough, 2000; Snyder, 1995, 1994, 1991). In their view, emotions are not seen to be at the core of hope, as they are seen as rather reactive and evaluative in nature, with “feelings playing an important albeit contributory role” which is not further defined (Aspinwall and Leaf, 2002). Affect is seen to be following cognitive appraisals of goal related activities (Snyder, 1991). As individuals proceed to goal attainment, emotional feedback reinforces agency thinking, resulting in the

continuation of activity toward the goal (Aspinwall and Leaf, 2002). This confusion as to the image, or goals, and the affect is a major problem.

Although we view emotion as a part of each of the components of the ideal self and the driving force of a person's intentional change, the positive emotion involved in the experience of Hope is central to the power of the ideal self. Positive emotion emerges from the sense of agency or self-efficacy, and the belief that there will be feasible routes to the accomplishment of the hoped for image or state. All of this adds to the person's degree of optimism, resulting in the aggregate positive affect encoding of the images or dreams of the future and the person's core identity (their sense of their own enduring dispositions, strengths, traits, and such). As we said earlier, positive emotion is defined as "a state of high energy, full concentration, and pleasurable engagement, while negative affect is defined as "a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear and nervousness" (Watson and Tellegen, 1985).

Does this mean that people who are relatively lower in self-efficacy and optimism experience less hope? Yes. We believe that the experience of hope drives the energy, through positive emotions, attached to the image or dream of a desired future. Without these positive emotions, we believe that the person becomes defensive, loses "hope," and withdraws energy or commitment to the effort of change.

The image

If the hope component is the affective driver of the ideal self, and the core identity is the personal context, the dream or image of a desired future is the content of the ideal self. It is the picture of what is hoped to be. Again, whenever we refer to the dream or the image of a desired future, it does not imply that a person has to change. For example, a person may be in a current state that he/she feels in perfect or the best balance that is possible. In such a situation, the dream of a future state is the continuation of the current state. In such a situation, we believe there is still the need to formulate and activate the ideal self for the investment of time and energy needed to maintain or sustain this present condition. All of the dynamics of ICT apply here as well.

The dream or image of a desired future comes from many sources. Dreams and fantasies are the expression of one's inner needs, wishes, fears (Murray, 1938; McClelland, 1985). They interact with each other in an on-going manner, over time. So there is a dynamics quality to the dream. Among the major sources are one's values and philosophy. These are created and nurtured by a person's family of origin, current family, reference groups, and social identity groups to which one belongs or aspires to belong (Boyatzis *et al.*, 2000). A person history and enduring dispositions, including those characteristics labelled as strengths, become a continuous input into one's values and philosophy. In other words, such perceptions of one's own qualities, and the extent to which they are positively valued (i.e. seen as strengths), will affect one's values and be interpreted by one's operating philosophy.

But the images of a desired future is also a function of a person's career and life stage. What you consider a noble and worthwhile aspiration when you are 21 is typically different from what you dream about doing or being when you are 58. In addition, a person's discovery of their purpose, or calling, also feeds into the dream. Being aware of your own passion, that which makes you feel life is worth living and you are fulfilling a promise of some higher being or life force, is your calling.

Throughout history of mankind, humans are driven by their imagination and their ability to see images of the desired future. Leaders, poets, writers, composers, artists, dreamers, athletes have been able to be inspired, stay inspired and inspire others through such images. These images, once shared, have the power to become a force, and in that sense an inspiration for social development and growth, for intentional change at many levels of social organization, not just for the individual.

The dream or image of a desired future is often a compilation of a variety of preferences, aspirations, wishes, and fantasies. But the specifics of each dream or fantasy are not necessarily insight into the person's ideal self. Just as with dream analysis, you must probe below the manifest level and extrude the insight from the latent themes which are inherent in these dreams and fantasies (McClelland, 1985; Boyatzis, 1998).

The dream or image of desired future is not what a person fears and wants to avoid. It is a mental and emotional state in which a person is elated and aroused, we believe, in their parasympathetic nervous system (i.e. PSNS). This is quite the opposite neuro-endocrine process to that which is engaged when a person contemplates something they fear or want to avoid. In such case, a person's limbic system is aroused, starting with the amygdale and their sympathetic nervous system (i.e. SNS) is aroused (Sapolsky, 2004). This involves a stress response. Once engaged, arousal of the SNS has the effect of limiting thought but focusing neural circuits on the object of fear or to be avoided (Boyatzis, Smith, and Blaize, in press). The resulting "fixation" blocks out other neural circuits or thoughts. At the same, the arousal of the SNS causes cortisol to be secreted into the bloodstream and has the resulting effect of inhibiting neurogenesis (i.e. the creation of new neural tissue from stem cells, which create the possibility of new learning) and shrinkage or death of older neurons from over stimulation (Boyatzis and McKee, 2005). All of this means that fear and stress arousal not only lead to feelings of nervousness, depression, or sadness and fear, but also limit the person's access to their current neural circuits (their brain) and learning. It is believed that dreaming about the future, experiencing hope, and arousing images of a desired future leads to arousal of the PSNS and all of the positive effects on new learning, access to more of one's neural circuits, and a perception of wanting to spend more time in thinking about these images (Boyatzis and McKee, 2005). The power of the ideal self is not just emotional. It is physical in that it involves neuro-endocrine processes that allow the body to renew itself, while ameliorating the ravages caused by chronic stress (Boyatzis, and McKee, 2005).

But the process of evaluating or judging the worthiness of one's dreams immediately invokes stress. This results in limiting your openness to new ideas and possibilities. This is the essential difference in the positive and negative emotional attractors. Similarly, increasing a person's commitment to their ought self, to the extent it is different from their ideal self, can have the effect of limiting flexibility about even considering the ideal self (Berlinger, 1994).

The core identity – one's context and resources

As we mentioned earlier, the core identity is the compilation of the person's enduring dispositions. Their unconscious motives, traits, roles taken consistently in social settings, and other habits become the basis for their core identity. In addition, this is evaluated by their reference groups, social identity groups, and anticipatory

socialization (groups within which they would like to included). So these dispositions take a relatively positive or negative value. In this sense, like Trafimow, Triandis and Goto claimed, our concept of core identity is comprised of “social identity” in group memberships, affiliations, and connections to different social collectives, and “personal identity” often referred to as one’s attitudes, traits, feelings and behavior (Abrams and Hogg, 2001, 2003).

A growing interest in techniques called “strength based” approaches to development or training seek to help the person identify strengths they have shown in the past. In a typical exercise, a person is asked to interview ten to 20 people with whom they work, live, and play, asking them to recall “a time when I was at my best.” Then, each respondent is asked to tell about the person’s actions and their impact on others. The person takes all of these stories and conducts a thematic analysis, looking for themes and patterns. The resulting list of ways they act when they were “at their best” constitutes an inventory of their strengths as observed, experienced, and remembered by others. It is a powerful exercise that makes people feel a surge of self-confidence and often accompanying self-esteem. We believe this burst of positive emotion and self-evaluation provides a boost to their sense of self-efficacy, and therefore, hope about the future. It also arouses, we believe, the PSNS and creates a neural condition in which they are open to new ideas. These may include new ideas about the future.

But it is precisely this effect that is important but not sufficient to yield a potent ideal self and driver of intentional change. Each person needs a clear image of a desired future. By building the articulation and awareness (consciousness) of the core identity, the person is prepared for the development of the image of a desired future, and the accompanying sense of hope. Without this additional jump into the fantasized future, a person may feel compelled to recreate conditions of the past in order to continue utilize their “strengths” and not experiment with new behavior.

The three processes leading to a healthy ideal self

There are three paths or processes by which a person can develop a healthy and robust (i.e. meaningful and useful) ideal self, as shown in Table I. One is to increase one’s

	Phase change criteria	When it is low
Is the ideal self articulated, explicit?	Mindfulness or consciousness	The person experiences catastrophic jumps, surprises, or emergence. The person is mindless or in denial of a desired future
Is the ideal self important?	Salience or intensity of desire for the components of the ideal self	Like New Year’s Eve resolutions, the person makes superficial commitments to change
Is it integrated with the rest?	Coherence or a holistic inclusion of all components of the person’s desired life and future	The person experiences surprises and unintended consequences in other parts of their life even when making progress or changes in other parts of their life or work

Table I.
Three paths leading to a healthy ideal self

mindfulness about the ideal self and its components. Another is to test the salience or importance of the components. A third is the determination of the coherence of the image – is it an holistic image of a desired future?

Each of these processes enables the person to establish increased congruence between his/her unconscious and conscious, between his/her seemingly fanciful dreams and aspirations, and thoughts and feelings. Without mindfulness or awareness of the ideal self and its components, it would be difficult for a person to sort out and evaluate the degree of importance each component has. Similarly, it would be impossible to test the holistic nature of one's image of the desired future. How can a person discover that he/she forgot to consider his/her partner or spouse without awareness of both the components and their spouse or partner's wishes and dreams? The power of the ideal self, in accessing more neural circuits, more learning possibilities, and the emotional state of elation provides a fertile ground for contemplating the future. The person is more likely to be engaging all aspects of his/her hopes, dreams, and strengths. It diminishes the possibility of repressed wishes or fears and less subject to undesired effect of their ego defence mechanism (Freud, 1936).

Implications for research and practice

This article proposed a model in which the ideal self becomes a motivational core and the locus of positive emotion within the self. Further, it is our contention that this ideal self drives the personal vision which, in turn, drives sustainable, intentional change. Similarly, we believe collective, shared desired images of the future, shared hope, and shared sense of a group's identity and distinctiveness, in the same way, become the shared vision that drives sustainable, intentional change at these other levels of human and social organization as discussed in more detail in other articles in this issue. Drawing from advances in positive psychology as well as classic psychological theory, we proposed a novel and more detailed determination of the construct of the ideal self and its determinants.

This is a prescriptive model that needs to be refined and tested through empirical research. Research validating this model should primarily focus in three directions: First, the links between the variables of hope and the degree of activation of a person's ideal self (increased consciousness, salience and coherence) need to be established and validated through research. Second, the offered model linking the constructs of self efficacy and optimism with the construct of hope needs to be further explored. In the relevant literature the measures offered for these constructs seem to be seen as unrelated and as measuring three distinct psychological processes. We believe that the inherent assumptions in existing work require new ways of measuring the constructs, as well as clarity as to their distinctions from each other. Third, the sources and roles of one's dreams, aspirations, and the components of a desired image of the future need to be studied. This would include how a person's values and operating philosophy is affected by one's life and career stages, the role of passion and calling, and so forth.

Conceptualizing and recognizing the ideal self as the driver of sustainable change reverses common practice and common assumptions at all levels of change. For individuals, people often believe a shock drives change. In organizations, the assumption is that urgency and threat can provoke change. Intentional change theory helps us to see that the ideal self at the individual level, shared vision and dreams at

collective levels are the real driver of change. But even with the recent increase in popularity and research in positive psychology, the actual mechanism is elusive and often misrepresented as seeming to require mere feeling good and change and good things will happen. The model of the ideal self and its counterpart at collective levels of social organization provides a more detailed model of how emotion, conceptualization of a desired state and one's past and dispositions might fit into a personal or shared vision.

While stories abound with this impact for sports figures, what is needed is careful research to support or refute or modify the elements of this model and how they affect each other. Current measures often confuse one of more of these concepts and make divergent validity difficult to establish. The use of qualitative methods of thematic analysis may be required to access and encode a person's dreams, or a team's or organization's. Cultures express shared dreams in their mythology and folklore (or the current version of that as highly viewed movies, listened to songs, and repeated archetypal stories). Research would then follow to help us understand how best to arouse and help people articulate these dreams for themselves and shared dream that will drive collective intentional change.

References

- Abrams, D. and Hogg, M.A. (2001), "Collective identity: group membership and self-conception", in Hogg, M.A. and Tindale, S. (Eds), *Group Processes*, Blackwell Publishers, Malden, MA, pp. 425-60.
- Anderson, J.R. (1983), *The Architecture of Cognition*, Harvard University Press, Cambridge, MA.
- Ashby, F.G., Isen, A.M. and Turken, A.U. (1999), "A neurological theory of positive affect and its influence on cognition", *Psychological Review*, Vol. 106, pp. 529-50.
- Aspinwall, L.G. and Brunhart, S.M. (1996), "Distinguishing optimism from denial: optimistic beliefs predict attention to health threats", *Personality and Social Psychology Bulletin*, Vol. 22, pp. 993-1003.
- Aspinwall, L.G. and Brunhart, S.M. (2000), "What I do know won't hurt me: optimism, attention to negative information, coping and health", in Gillham, J.E. (Ed.), *The Science of Optimism and Hope: Research Essays in Honour of Martin E.P. Seligman*, Templeton Foundation Press, Philadelphia, PA, pp. 163-200.
- Aspinwall, L.G. and Leaf, S.L. (2002), "In search of the unique aspects of hope: pinning our hopes on positive emotions, future-oriented thinking, hard times and other people", *Psychological Inquiry*, Vol. 13 No. 4, pp. 276-321.
- Aspinwall, L.G., Richter, L. and Hoffman, R.R. (2001), "Understanding how optimism 'works': an examination of optimists' adaptive moderation of belief and behaviour", in Chang, E.C. (Ed.), *Optimism and Pessimism: Theory, Research and Practice*, American Psychological Association, Washington, DC, pp. 217-38.
- Bandura, A. (1977), "Self-efficacy: toward a unifying theory of behaviour change", *Psychological Review*, Vol. 84, pp. 191-215.
- Bandura, A. (1982), "Self-efficacy mechanism in human agency", *American Psychologist*, Vol. 37, pp. 122-47.
- Bandura, A. (1986), *Social Foundations of Thought and Action*, Prentice-Hall, New York, NY.
- Bandura, A. (1997), *Self Efficacy: The Exercise of Control*, Freeman, New York, NY.

-
- Baumeister, R.F. (1998), "The self", in Gilbert, D.T., Fiske, S.T. and Lindzey, G. (Eds), *The Handbook of Social Psychology*, 4th ed., McGraw-Hill, New York, NY, pp. 680-740.
- Berlinger, L. (1994), "Commitment as a moderator of flexibility", unpublished doctoral dissertation, University of Texas, Austin, TX.
- Boldero, J. and Francis, J. (1999), "Ideals, oughts, and self-regulation: are there qualitatively distinct self-guides?", *Asian Journal of Social Psychology*, Vol. 2, pp. 343-55.
- Boyatzis, R.E. (1973), "Affiliation motivation: a review and a new perspective", in McClelland, D.C. and Steele, R.S. (Eds), *Human Motivation: A Book of Readings*, General Learning Press, Morristown, NJ, pp. 252-78.
- Boyatzis, R.E. (1998), *Transforming Qualitative Information: Thematic Analysis and Code Development*, Sage, Thousand Oaks, Sage, CA.
- Boyatzis, R.E. and McKee, A. (2005), *Resonant Leadership: Renewing Yourself and Connecting with Others Through Mindfulness, Hope, and Compassion*, Harvard Business School Press, Boston, MA.
- Boyatzis, R.E., Murphy, A. and Wheeler, J. (2000), "Philosophy as the missing link between values and behaviour", *Psychological Reports*, Vol. 86, pp. 47-64.
- Boyatzis, R.E., Smith, M. and Blaize, N. ((in press)), "Sustaining leadership effectiveness through coaching and compassion: it's not what you think", *Academy of Management Journal on Learning and Education*.
- Cantril, H. (1967), "Sentio, ergo sum: 'motivation' reconsidered", *Journal of Psychology: Interdisciplinary and Applied*, Vol. 65 No. 1, pp. 91-107.
- Carver, C.S., Pozo, C., Harris, S.D., Noriega, V., Scheier, M.F., Robinson, D.S., Ketcham, A.S., Moffat, F.I. and Clark, K.C. (1993), "How coping mediates the effect of optimism on distress: a study of women with early stage breast cancer", in Suinn, R.M. and VandenBos, G.R. (Eds), *Cancer Patients and Their Families: Readings on Disease Course, Coping and Psychological Interventions*, American Psychological Association, Washington, DC, pp. 92-127.
- Chen, G., Gully, S.M. and Eden, D. (2001), "Validation of a new general self-efficacy scale", *Organizational Research Methods*, Vol. 4, pp. 62-83.
- Curry, L., Snyder, C.R., Cook, D., Ruby, B. and Rehm, M. (1997), "The role of hope in academic and sport achievement", *Journal of Personality and Social Psychology*, Vol. 73, pp. 1257-67.
- DeCharms, R. (1968), *Personal Causation*, Academic Press, New York, NY.
- Erickson, R.C., Post, R.D. and Paige, A.B. (1975), "Hope as a psychiatric variable", *Journal of Clinical Psychology*, Vol. 31, pp. 324-9.
- Farber, M.L. (1968), *Theory of Suicide*, Funk & Wagnall's, New York, NY.
- Frank, J.D. (1968), "The role of hope in psychotherapy", *International Journal of Psychiatry*, Vol. 5, pp. 383-95.
- Frank, J.D. (1973), *Persuasion and Healing*, rev. ed., Johns Hopkins University Press, Baltimore, MD.
- Fredrickson, B.L. and Soimer, T. (2002), "Positive emotions trigger upward spirals toward emotional well being", *Psychological Science*, Vol. 13, pp. 162-75.
- French, T.M. (1952), *The Integration of Behavior: Vol. 1. Basic Postulates*, University of Chicago Press, Chicago, IL.
- Freud, A. (1966), *The Writings of Anna Freud, Volume II: The Ego and the Mechanisms of Defence*, (originally published 1936), International Universities Press, New York, NY.

- Garber, J., Fencil-Morse, E., Rosellini, R.A. and Seligman, M.E. (1980), "'Abnormal fixations' and 'learned helplessness': inescapable shock as a weaning impairs adult discrimination learning in rats", *Behaviour Research and Therapy*, Vol. 17, pp. 197-206.
- Gottschalk, L.A. (1974), "A hope scale applicable to verbal samples", *Archives of General Psychiatry*, Vol. 30, pp. 779-85.
- Groopman, J. (2004), *The Anatomy of Hope: How People Prevail in the Face of Illness*, Random House, New York, NY.
- Higgins, E.T. (1989), "Self-discrepancy theory: what patterns of self-beliefs cause people to suffer?", in Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Vol. 22, Academic Press, New York, NY, pp. 93-136.
- Irving, L.M., Snyder, C.R. and Crowson, J.J. (1998), "Hope and coping with cancer by college women", *Journal of Personality*, Vol. 66, pp. 195-214.
- James, W. (1897), *The Will to Believe*, Harvard University Press, Cambridge, MA.
- Kelner, S. (1990), "Interpersonal motivation: positive, negative, and anxious", unpublished doctoral dissertation, Department of Psychology and Social Relations, Harvard University, Boston, MA.
- Kolb, D.A. and Boyatzis, R.E. (1970b), "Goal-setting and self-directed behavior change", *Human Relations*, Vol. 23 No. 5, pp. 439-57.
- Lee, T.W., Locke, E.A. and Latham, G.P. (1989), "Goal setting theory and job performance", in Pervin, L.A. (Ed.), *Goal Concepts in Personality and Social Psychology*, Erlbaum, Hillsdale, NJ, pp. 291-326.
- Lefcourt, H.M. (1976), "Locus of control and the response to aversive events", *Ontario Psychologist*, Vol. 8, pp. 41-9.
- Lewin, K. (1938), "The conceptual representation and measurement of psychological forces", *Contributions to Psychological Theory*, Vol. 1, pp. 1-36.
- Lewin, K., Dembo, T., Festinger, L. and Sears, P.S. (1944), "Level of aspiration", in Hunt, J.M. (Ed.), *Personality and Behavior Disorders*, Ronald Press, New York, NY.
- Locke, E.A. and Latham, G.P. (1990), *A Theory of Goal Setting and Task Performance*, Prentice-Hall, Englewood Cliffs, NJ.
- Ludema, J. (1996), "Narrative inquiry: collective storytelling as a source of hope, knowledge, and action in organizational life", unpublished doctoral dissertation, Case Western Reserve University, Cleveland, OH.
- McAdams, D. (1980), "A thematic coding system for the intimacy motive", *Journal of Research in Personality*, Vol. 14, pp. 413-32.
- McClelland, D.C. (1985), *Human Motivation*, Scott Foreman & Co., Glenview, IL.
- Markus, H. and Nurius, P. (1986), "Possible selves", *American Psychologist*, Vol. 41, pp. 954-69.
- Matthews, K.A., Raikkonen, K., Sulton-Tyrell, K. and Kuller, L.H. (2004), "Optimistic attitudes protect against progression of carotid atherosclerosis in healthy middle-aged women", *Psychosomatic Medicine*, Vol. 66, pp. 640-4.
- Melges, R. and Bowlby, J. (1969), "Types of hopelessness in psychopathological processes", *Archives of General Psychiatry*, Vol. 20, pp. 690-9.
- Menninger, K. (1959), "The academic lecture on hope", *American Journal of Psychiatry*, Vol. 116, pp. 481-91.
- Mowrer, O.H. (1960), *The Psychology of Hope*, Jossey-Bass, San Francisco, CA.
- Moyers, B. (1993), *Healing and the Mind*, Doubleday, New York, NY.

-
- Murray, H.A. (1938), *Explorations in Personality*, Oxford University Press, New York, NY.
- Nasby, W. (1997), "Self-consciousness and cognitive prototypes of the ideal self", *Journal of Research in Personality*, Vol. 31, pp. 543-63.
- Oettingen, G. (1996), "Positive fantasies and motivation", in Gollwitzer, P.M. and Bargh, J.A. (Eds), *The Psychology of Action: Linking Cognition and Motivation to Behavior*, Guilford, New York, NY, pp. 236-59.
- Perlmutter, L.C. and Monty, R.A. (Eds) (1979), *Choice and Perceived Control*, Lawrence Erlbaum Associates, New York, NY.
- Pervin, L.A. (Ed.) (1989), *Goal Concepts in Personality and Social Psychology*, Erlbaum, Hillsdale, NJ.
- Rotter, J.B., Chance, J.E. and Phares, E.J. (1972), *Application of Social Learning Theory of Personality*, Holt, Rinehart & Winston, Oxford, UK.
- Sapolsky, R.M. (2004), *Why Zebras Don't get Ulcers*, 3rd ed., Harper Collins, New York, NY.
- Schecter, D.A. (1974), "The ideal self and other", *Contemporary Psychoanalysis*, Vol. 10 No. 1, pp. 103-15.
- Scheier, M.F. and Carver, C.S. (1985), "Optimism, coping and health: assessment and implications of generalized outcome expectancies", *Health Psychology*, Vol. 4, pp. 219-47.
- Scheier, M.F., Weintraub, J.K. and Carver, C.S. (1986), "Coping with stress: divergent strategies of optimists and pessimists", *Journal of Personality and Social Psychology*, Vol. 51, pp. 1257-64.
- Seligman, M.E.P. (1991), *Learned Optimism*, Knopf, New York, NY.
- Seligman, M.E.P. and Csikszentmihalyi, M. (2000), "Positive psychology: an introduction", *American Psychologist*, Vol. 55, pp. 5-14.
- Skinner, E.A. (1996), "A guide to constructs of control", *Journal of Personality and Social Psychology*, Vol. 71, pp. 549-70.
- Snyder, C.R. (1991), "The will and the ways: development and validation of an individual-differences measure of hope", *Journal of Personality and Social Psychology*, Vol. 60 No. 4, pp. 570-85.
- Snyder, C.R. (1994), *The Psychology of Hope: You Can Get There From Here*, Free Press, New York, NY.
- Snyder, C.R. (1995), "Conceptualizing, measuring and nurturing hope", *Journal of Counseling and Development*, Vol. 73, pp. 355-60.
- Snyder, C.R. (1996), "To hope, to lose and hope again", *Journal of Personal and Interpersonal Loss*, Vol. 1, pp. 3-16.
- Snyder, C.R. (1998), "A case for hope in pain, loss and suffering", in Harvey, J.H., Omarzu, J. and Miller, E. (Eds), *Perspectives on Loss: A Sourcebook*, Taylor and Francis, Washington, DC.
- Snyder, C.R. (2000a), "Hope theory: rainbows in the mind", *Psychological Inquiry*, Vol. 13 No. 4, pp. 149-275.
- Snyder, C.R. (2000b), "The past and possible futures of hope", *Journal of Social and Clinical Psychology*, Vol. 19 No. 1, pp. 11-28.
- Snyder, C.R. (Ed.) (2000c), *Handbook of Hope: Theory, Measures and Applications*, Academic Press, San Diego, CA.
- Snyder, C.R. and McCullough, M.E. (2000), "A positive psychology field of dreams: if you build it, they will come . . .", *Journal of Social and Clinical Psychology*, Vol. 19, pp. 151-60.
- Snyder, C.R., Cheavens, J. and Sympson, S.C. (1997), "Hope: an individual motive for social commerce", *Group dynamics: Theory, Research and Practice*, Vol. 1 No. 2, pp. 107-18.

- Snyder, C.R., Irvine, L.M. and Anderson, J.R. (1991), "Hope and health", in Snyder, C.R. and Forsyth, D.R. (Eds), *Handbook of Social and Clinical Psychology: The Health Perspective*, Pergamon Press, Elmsford, NY, pp. 285-305.
- Snyder, C.R., Rand, K.L. and Sigmon, D.R. (2002), "Hope theory: a member of the positive psychology family", in Snyder, C.R. and Lopez, S.J. (Eds), *The Handbook of Positive Psychology*, Wiley, New York, NY.
- Snyder, C.R., Rand, K.L., King, E.A., Feldman, D.B. and Woodward, J.T. (2002), "False hope", *Journal of Clinical Psychology*, Vol. 58, pp. 1003-22.
- Snyder, C.R., Ilardi, S., Michael, S.E. and Cheavens, J. (2000), "Hope theory: updating a common process for psychological change", in Snyder, C.R. and Ingram, R.E. (Eds), *Handbook of Psychological Change: Psychotherapy Processes and Practices for the 21st Century*, Wiley, New York, NY, pp. 128-53.
- Snyder, C.R., Feldman, D.B., Taylor, S.D., Schroeder, L.L. and Adams, V.H. (2000), "The roles of hopeful thinking in preventing problems and enhancing strengths", *Applied and Preventive Psychology*, Vol. 15, pp. 262-95.
- Snyder, C.R., Ilardi, S.S., Cheavens, J., Michael, S.T., Yamhure, L. and Sympson, S. (2000), "The role of hope in cognitive-behavior therapies", *Cognitive Therapy and Research*, Vol. 24, pp. 747-62.
- Snyder, C.R., Sympson, S.C., Ybasco, F.C., Borders, T.F., Babyak, M.A. and Higgins, R.L. (1996), "Development and validation of the State Hope Scale", *Journal of Personality and Social Psychology*, Vol. 70, pp. 321-35.
- Stotland, E. (1969), *The Psychology of Hope*, Jossey-Bass, San Francisco, CA.
- Taylor, S.E., Kemeny, M.E., Aspinwall, L.G. and Schneider, S.G. (1992), "Optimism, coping, psychological distress, and high risk sexual behavior among men at risk for Acquired Immuno-deficiency Syndrome (AIDS)", *Journal of Personality and Social Psychology*, Vol. 63, pp. 460-73.
- Taylor, S.E., Pham, L.B., Rivkin, I.D. and Armor, D.A. (1998), "Harnessing the imagination: mental simulation", *American Psychologist*, Vol. 53, pp. 429-39.
- Tierney, A.M. (1995), "Analysis of a new theory of hope and personality as measured by the California Psychological Inventory", *Dissertation Abstracts International*, 55 (10-B), 4616.
- VandeWalle, D., Cron, W.L. and Slocum, J.W. Jr (2001), "The role of goal orientation following performance feedback", *Journal of Applied Psychology*, Vol. 86 No. 4, pp. 629-40.
- Watson, D. and Tellegen, A. (1985), "Toward a consensual structure of mood", *Psychological Bulletin*, Vol. 98, pp. 219-35.

Further reading

- Abramson, L.Y., Seligman, M.E. and Teasdale, J.D. (1978), "Learned helplessness in humans: critique and reformulation", *Journal of Abnormal Psychology*, Vol. 87, pp. 49-74.
- Aspinwall, L.G. (1998), "Rethinking the role of positive affect in self-regulation", *Motivation and Emotion*, Vol. 22, pp. 1-32.
- Aspinwall, L.G. and Richter, L. (1999), "Optimism and self-mastery predict more rapid disengagement from unsolvable tasks in the presence of alternatives", *Motivation and Emotion*, Vol. 23, pp. 221-45.
- Bandura, A. (1989), "Human agency in social cognitive theory", *American Psychologist*, Vol. 44, pp. 1175-84.

-
- Baumeister, R.F., Bratslavsky, E., Muraven, M. and Tice, D.M. (1998), "Ego depletion: is the active self a limited resource?", *Journal of Personality and Social Psychology*, Vol. 74, pp. 1252-65.
- Beck, A.T. (1974), "The measurement of pessimism: the hopelessness scale", *Journal of Consulting and Clinical Psychology*, Vol. 42, pp. 861-5.
- Boyatzis, R.E. (1982), *The Competent Manager: A Model for Effective Performance*, John Wiley & Sons, New York, NY.
- Boyatzis, R.E. (1999), "Self-directed change and learning as a necessary meta-competency for success and effectiveness in the 21st century", in Sims, R. and Veres, J.G. (Eds), *Keys to Employee Success in the Coming Decades*, Greenwood Publishing, Westport, CT, pp. 15-32.
- Boyatzis, R.E. (2001), "How and why individuals are able to develop emotional intelligence", in Cherniss, C. and Goleman, D. (Eds), *The Emotionally Intelligent Workplace: How to Select For, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*, Jossey-Bass, San Francisco, CA, pp. 234-53.
- Boyatzis, R.E. ((in press)), "Using tipping points of emotional intelligence and cognitive competencies to predict financial performance of leaders", *Psicothemia*, p. 17.
- Carver, C.S. and Scheier, M.F. (2003), "Three human strengths", in Aspinwall, L.G. and Staudinger, U.M. (Eds), *A Psychology of Human Strengths: Fundamental Questions and Future Directions for a Positive Psychology*, American Psychological Association, Washington, DC, pp. 87-102.
- Carter, C., Macdonald, A., Ursu, S., Stenger, A., Ho Sohn, M. and Anderson, J. (2000), "How the brain gets ready to perform", paper presented at the 30th Annual Meeting of The Society of Neuroscience, New Orleans, LA.
- Chang, E.C. (Ed.) (2001), *Optimism and Pessimism: Theory, Research and Practice*, American Psychological Association, Washington, DC.
- Edelman, G. (1987), *Neural Darwinism: The Theory of Neuronal Group Selection*, Basic Books, New York, NY.
- James, W. (1890), *The Principles of Psychology*, Henry Holt, New York, NY.
- Keliman, G., Koch, C. and Fried, I. (2000), "Imagery neurons in the human brain", *Nature*, Vol. 408, pp. 357-61.
- Maddux, J. (1991), "Self-efficacy", in Snyder, C.R. and Forsyth, D.R. (Eds), *Handbook of Social and Clinical Psychology: The Health Perspective*, Pergamon Press, Elmsford, NY, pp. 57-8.
- Maddux, J.E. (1995), "Self-efficacy theory: an introduction", in Maddux, J.E. (Ed.), *Self-efficacy, Adaptation, and Adjustment: Theory, Research, and Application*, Plenum, New York, NY, pp. 3-33.
- Monty, R.A., Geller, E.S., Savage, R.E. and Perlmutter, L.C. (1979), "The freedom to choose is not always so choice", *Journal of Experimental Psychology: Human Learning and Memory*, Vol. 5, pp. 170-8.
- Rotter, J.B. (1966), "Generalized expectancies for internal versus external control of reinforcement", *Psychological Monographs: General and Applied*, Vol. 80 No. 1, p. 609.
- Scheier, M.F. and Carver, C.S. (1987), "Dispositional optimism and physical well-being: the influence of generalized outcome expectancies", *Journal of Personality*, Vol. 55, pp. 169-210.
- Seligman, M.E.P. (1998), *Learned Optimism: How to Change Your Mind and Your Life*, Pocket Books, New York, NY.
- Seligman, M.E.P. (2002), *Authentic Happiness: Using the New Positive Psychology Realize Your Potential for Lasting Fulfillment*, Free Press, New York, NY.

- Skinner, E.A. (1996), "A guide to constructs of control", *Journal of Personality and Social Psychology*, Vol. 71, pp. 549-70.
- Taylor, S.E. and Brown, J.D. (1988), "Illusion and well-being: a social psychological perspective on mental health", *Psychological Bulletin*, Vol. 103, pp. 193-210.
- Zaccaro, S.J., Blair, V., Peterson, C. and Zazanis, M. (1995), "Collective efficacy", in Maddux, J.E. (Ed.), *Self-Efficacy, Adaptation, and Adjustment: Theory, Research and Application*, Plenum, New York, NY, pp. 305-30.

About the authors

Richard E. Boyatzis is a Professor in the Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio, USA. He is the corresponding author and can be contacted at: richard.boyatzis@case.edu

Kleio Akrivou is a PhD candidate in the Department of Organizational Behavior, Case Western Reserve University, Cleveland, Ohio, USA.