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Constructive Developmental Theory: An Alternative Approach to Leadership

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As early as 1954, the critical value of leadership in dietetics was described by Rourke, who wrote, “When the day comes that your executive abilities equal your scientific knowledge, your profession (dietetics) will be secure. Until that day, you will be faced with a constant and unwelcome challenge” (1). Career and leadership skills development have been identified as an area for further attention by American Dietetic Association (ADA) practitioners and student members (2). Creation of the ADA Leadership Institute in 2003 represented an awareness of the need to invest in developing dietetic leaders (3). Proficient leaders are critical in keeping our profession on the cutting edge by identifying areas of need for change and providing leadership for change. Proficient leaders can also serve as role models for members.

Leadership has been identified as essential for success in the 21st century and according to Bennis, “our quality of life amidst the volatility, turbulence and ambiguity of our present day societal context, depends on the quality of our leaders” (4). Leadership research theory has been based on objective measures such as traits, attitudes and performance, intellect, personality, relationships, competencies, and values. Dietetic leadership studies are limited and describe these objective characteristics and leadership styles (5-9). In their review of traditional leadership theory, Gregoire and Arendt (10) suggested that more information is needed about *how* dietitians develop as leaders. The present article describes one theory of leadership development—constructive developmental theory. Registered dietitians at advanced leadership

stages can be identified and factors enabling their development can be studied. This theory provides a subjective approach for studying dietetic leadership and gives insight for leadership development programs.

Constructive Developmental Theory

Constructive developmental theory differs from traditional leadership theories in that it focuses on the mindset of an individual and not specific traits or characteristics. The mindset of the individual has an impact on his or her leadership ability. Constructive developmental theory has at its origins Jean Piaget’s theory of cognitive development, which centers on the process of how human beings “come to know,” and the stages of mental growth we travel through acquiring this ability of “abstract symbolic reasoning” (11). Piaget was also cognizant of the fundamental role of language in the construction of meaning and mastery of life. Prominent developmental frameworks include Loevinger’s ego development, Kegan’s subject-object, Beck and Cowan’s spiral dynamics, and Torbert and Cook-Greuter’s action logics (12-17).

Developmental theorists assert that human beings actively make sense of experience; that we are meaning makers of our experience, creating maps of reality that change with development. Constructive developmental theorists posit that “persons move through qualitatively different ways of knowing who they are, how the world works, and how they know what they know” and that “leaders as individuals develop over the life course and do so in predictable ways” (18). Most

growth in adults is objective or horizontal—that is, learning new skills, new methods, new facts, or pursuing advanced degrees. Subjective development or vertical growth is transformational growth manifested by changes in our *form* rather than *content* of understanding, and focuses on how people tend to reason and behave in response to their experience. This vertical development involves transformations of consciousness, seeing the world through new eyes, and changes in interpretations of experience and view of reality. It addresses questions such as: How do people interact? How does a person feel about things? How does a person think? (19).

Leadership Development Spiral

Vertical human development is illustrated as an ever-widening evolutionary spiral of the stages of lived human experience and how one makes sense of those experiences. There is a logical sequence of growth through the developmental stages, and one lives through the earliest stages before progressing to later stages. Once one has journeyed through an earlier stage, it becomes part of that person. Most human beings do not grow through the entire spiral, but rather settle in the stage that is most familiar or most supported by the environment (17) and (19). Vertical development moves from simple to complex with a demonstrated increase in autonomy, flexibility, tolerance for differences and ambiguity, and a simultaneous decrease in defenses (17). A person may grow horizontally in knowledge acquisition, whereas their vertical development remains the same.

	Stage	Action Logic	Characteristics
Pre-Conventional	2/3	Opportunist	Manipulative; focused on self; external blame; "I win, you lose mentality"; see feedback as an attack; fragile self-control; hostile humor; sees punishment as "an eye for an eye."
Conventional	3	Diplomat	Avoids overt conflict; wants to be a member of the group; seeks approval; conforms to social and group norms and standards; righteousness is prevalent; no self-reflection or recognition of own shortcomings; feedback heard as personal disapproval.
	3/4	Expert	Rules by logic and expertise; strong belief systems; usually cognitively grasps one or more disciplines; perfectionism; serial problem solving; can get stuck in detail; difficulty prioritizing competing demands; sees feedback as criticism.
	4	Achiever	Results and goal oriented; future oriented; seeks consensus; self as agent; initiator; may be unorthodox; self critical; mutuality and equality in relationships; begins to see complexity; accepts behavioral criticism.
Post Conventional	4/5	Individualist	Increased comprehension of complexity; turns inward, sees self in relationship; able to adjust behavior to context; systematic problem solving; can create decision paralysis; begin to seek out and value feedback.
	5	Strategist	Creates personal and organizational transformations; recognizes complexity and interrelationships; problem finding not just problem solving; aware of paradox and contradiction in system and self; nonhostile humor; deep appreciation of others; seeks feedback as vital for growth.
	5/6	Alchemist/Magician	Generates social transformations; highly aware of complexity of meaning making, dynamic processes; reframe meaning of situations; seeks spiritual and personal transformations; works with chaos and order; interplay of awareness, thought, action; aware of continuous self redefinition.

Figure 1. Stage, Action Logic, and characteristics of leaders using constructive developmental theory. Adapted from references (16), (20-22).

Action Logic States/Stages

Most developmental psychologists agree that what differentiates leaders is not so much their philosophy of leadership, their personality, or their style of management. Rather it is their internal "Action Logic" or stage of vertical development that impacts how they interpret their surroundings and react when their power or safety is challenged (20). Action Logics are those steps or stages of an individual's journey of mental growth and vertical development in adulthood; or how one makes meaning of themselves and the world (16, 17). A person's Action Logic is considered to be their center of gravity; the place where a person is most likely to reason and spontaneously respond and interpret their experiences (16).

Figure 1 describes the stages and characteristics of leadership using the Action Logic model (16), (20-22). Stages are assigned a number from 2 to 5/6 and a corresponding set of characteristics. These stages illustrate the movement from early to later (not lower to higher) stages of develop-

ment where Pre-Conventional is seen as the earliest tier of development and Post-Conventional as the later tier of development. Using the example of promoting nutrition care services in health care policy, a registered dietitian at Stage 3 (Diplomat) might avoid contact or discussion with regulatory agencies and perceive feedback as a personal attack. A dietetic leader at Stage 3/4 (Expert) may seek perfectionism in obtaining specific regulatory language for all areas of concern and overlook the need to prioritize advocacy. Any feedback on his/her effort is viewed as criticism. Dietetic leaders at Stage 4 (Achiever) may initiate other efforts to advocate for future needs and begin to understand the complexity or bigger picture of overall health care-related issues. At this stage the leader accepts criticism.

Authentic leadership most closely resembles the Post-Conventional Stages 4/5 (Individualist), 5 (Strategist), and 5/6 (Alchemist/Magician) of development. Dietetic leaders at these later stages of development are very

self aware and have an organizational impact. To promote nutrition care services, leaders at these stages may engage within regulatory agencies or institutions that propose health care policy/regulations. These leaders seek out and value feedback from a wide array of stakeholders and are proactive in finding problems that may prevent goal achievement. For example, they allow themselves to be visibly vulnerable in times of crises, thereby creating a trusting environment where others feel comfortable to express their own concerns. Assigning responsibilities to others based on their skill level, in turn, can challenge and mentor others to further personal development.

Previous studies of leaders across industries and organizational levels have identified that 5% of leaders are at the Pre-Conventional Opportunistic stage; 80% are within the Conventional tier at the Diplomat, Expert, and Achiever stages; and the remaining 15% are within the Post-Conventional tier at the Individualist, Strategist, and Alchemist/Magician stages (20, 21).

Incomplete sentence	Sample participant Response	Stage of leadership development
I am ...	I am healthy.	3
	I am a hard worker.	3/4
	I am very adaptable having an affinity for knowledge and new surroundings.	4
	I am challenged by my recent promotion at work, delighted that my sons are healthy and successful, and that I am married to a man whom I love and respect; thrilled to have weathered personal and professional change within the last year, and committed to personal growth and achievement in the next one.	4/5
A good boss ...	A good boss gets me the resources I need.	3/4
	A good boss encourages creativity and professional involvement.	4
	A good boss mentors, listens, provides prompt feedback, and usually stays out of the way.	4/5
	A good boss recognizes that people are THE essential part of results. A good boss pays attention to the person as well as the task and inspires and motivates—not command and control. A good boss leaves her or his personal issues and needs at home. A good boss is a rare and wonderful thing.	5

Figure 2. Examples of responses to the Sentence Completion Test International-Maturity Assessment Profile (SCTi-MAP) and corresponding constructive development theory stage of leadership development.

Measuring Stages of Development

To determine an individual's stage of leadership, the Sentence Completion Test International—Maturity Assessment Profile (SCTi-MAP) is used. This is Cook-Greuter's revision and expansion of Loevinger's validated and reliable Washington University Sentence Completion Test (23-27). The foundation of the SCTi-MAP is constructive developmental theory (17) and (19). Leadership capacity of professionals is measured by identifying their Action Logic (16) and (19). The SCTi-MAP shifts from viewing people as personality types (eg. Meyers-Briggs) to that of identifying their level of meaning making capacity. It focuses on how professionals tend to reason and behave in response to their experience and measures cognitive, affective, and behavioral aspects of being (19).

The SCTi-MAP profile consists of 36 open ended sentence stems such as: "Raising a family ...", "I am ...", "A good boss ...", "If I had more money ...". Both content (meaning) and sentence structure are significant. The sentence stems, with no right or wrong answers, take 30 to 45 minutes to complete (23). A certified MAP scorer, who has successfully completed an 18-month curriculum, uses a three-step process to score the profile. Initially, each sentence is scored individually with responses compared to a

manual of standard responses for each vertical developmental stage or Action Logic. A final score rates the developmental stage demonstrated by the subject (17), (24) and (28). Figure 2 shows examples of sentence completion responses and the corresponding stage.

Leadership Development of ADA Leaders Using Constructive Developmental Theory

A survey was conducted to explore the leadership development stages of ADA leaders. In 2006, a list of the names of 97 ADA leaders was obtained from the Association's Web site (29). Leaders were recruited electronically to participate in the study using survey methodology (30). These leaders were asked to complete the SCTi-MAP. Questionnaires were completed and electronically sent to the researcher. Completed profiles were individually scored by two certified scorers and reviewed by the originator of the SCTi-MAP. Almost half of the ADA leaders (n=46) participated and completed the testing. Eighty-seven percent of the scores of ADA leaders were in the Conventional tier (26% Expert, 61% Achiever) and 13% were in the Post-Conventional tier (13% Individualist).

The strong presence of Stage 4 (Achiever) among ADA leaders is consistent with a profession that is

scientifically based. Stage 4 is the latest stage in Conventional adult development before moving to the Post-Conventional tier. It is rational and deliberate—goal- and outcome-focused. It relies on the objective scientific approach to the world where cause and effect are honored. It is synonymous with Piaget's Era IV stage of physical-cognitive development from age 11 to adult (31). The majority of ADA leaders are at Stage 4, which may indicate comfort in the environment and embedded culture of the dietetics profession. These leaders may move further in development to Post-Conventional stages if they are aware of their own stage and are given or seek a supportive environment. Developing dietetic leaders from Conventional to Post-Conventional stages could be of great importance to the dietetic profession.

Individuals at the Post-Conventional tier appreciate differences, whereas those in earlier Action Logics look for similarity and stability. Among the ADA leaders who participated in the study, a similar percent (13%) scored in the Post-Conventional tier compared to 15% found in earlier studies among industry and organizational leaders (20, 21). These Post-Conventional ADA leaders can provide proficient leadership to the profession and serve as leadership mentors.

Actions for Developing Leadership Abilities

- Registered dietitians (RDs) who aspire to be leaders or who are interested in further development their ability to lead can use constructive developmental theory to learn about the stages of leadership development.
- Using the Action Logics and characteristics of leaders at different stages of development, RDs can self-reflect on their own stage of development.
- Leadership development occurs in sequential stages; therefore, RDs can continue to grow and develop as leaders.
- Identifying and working with leaders who are at later stages of development in work settings organizations, and other social networks may assist in advancing leadership ability.
- RDs can join the American Dietetic Association's new e-mentoring program at www.adaementoring.com to be a mentor or find mentors for leadership development opportunities.

Implications for Leadership Studies and Development

Actualization of quality leadership remains elusive, disappointing, and unsatisfactory, suggesting that some things affect one's ability to lead (4). A leader's self-awareness of his or her own Action Logic and knowledge of the vertical stages of leadership development may be beneficial for improving leadership ability and evolution over time. The distinction between horizontal and vertical growth is paramount for understanding that leadership knowledge is insufficient to enable a person to develop as a leader. It is through association with others who are at later stages of development and by self reflection of their own Action Logic that one is able to transform (20).

Authentic leaders are defined by Avolio and colleagues as "those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/morals, perspectives,

knowledge and strengths; aware of the context in which they operate and who are confident, hopeful, optimistic, resilient and of high moral character" (32). Truly authentic leaders have been described as knowing "the true north of their moral compass ... and have to understand themselves and the passions that animate their life stories" (33). This self-awareness of authentic leaders is an emerging process consistent with constructive developmental theory that extends beyond the meaning making domains of physicality, emotions, and morality and into how professionals *think* and not what they *know*. These factors determine their ability to tolerate complexity and ambiguity and define their professional competence (34-36).

Constructive developmental theory can be used to identify stages of vertical development of leaders within the profession and to better understand factors that contribute to movement from one stage to the next. Leaders should be aware that self transformation and movement to later Action Logic stages is possible. Using self reflection, dietetic leaders can identify their own stage of development and seek opportunities for advancing to later stages, including being open-minded toward persons and situations that they encounter as these can contribute to their development. ADA leaders at these later stages of development can be studied to understand factors contributing to their growth. These factors can inform leadership training for future ADA leaders. To attain exceptional leadership is to distinguish, control, and to direct one's own process of learning and change. Dietetic leaders who reach the Post-Convention stages of development, Stage 4/5 (Individualist), Stage 5 (Strategist), and Stage 5/6 (Alchemist/Magician) may challenge the status quo to new and/or different ways of being and seeing the world and enhancing dietetics practice.

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