## KONUK YAZAR (GUEST AUTHOR)

# DEVELOPMENTAL COUNSELING AND THERAPY: THE BASICS OF WHY IT MAY BE HELPFUL AND HOW TO USE IT

Allen E. IVEY and Sandra A. RIGAZIO-DIGILIO

The more we split and pulverize matter, the more insistently it proclaims its fundamental unity.

#### (Teilhard de Chardin)

Developmental Counseling and Therapy is a challenging integrative theory of counseling and therapy. It is the only system that is based on both ancient philosophy and Piagetian theory with its extensive research/practice background. As well, it is the only theory that has solid neuroscience backup for its premises, and it is one of the few that directly uses developmental theory to assess clients and to suggest specific actions to facilitate treatment (Ivey, 2000; Ivey 2009; Ivey, Ivey, Sweeney, & Myers, 2006).

#### Philosophy and Basic Theory

The *why* of Developmental Counseling and Therapy (DCT) rests first in Western philosophy, going back to Plato and earlier Greek work. Ivey pointed out in the original theoretical work *Developmental Therapy* (2000) that the theme of types/levels/styles of consciousness has had a consistent thread over time both in philosophy and psychology. Please see Table 1 for a comparison of Plato, Piaget, and DCT. All begin with the child or childlike individual who sees the world through the senses and then gradually develops increasingly complex modes of thinking and being.

More, recent study reveals that the early Persian philosopher Ibn Sīnā (Avicenna) named four states of gradual development of intellect, which have interesting parallels with the DCT model. His thoughts and definitions clarify some important philosophic and practical issues. The first three intellects are considered

"potentials." The "pure potential of knowing anything" can be considered close to sensorimotor thought. The second potential relies on axioms, self-evident concrete facts. The third, more reflective, acquires conclusions, but does not reflect/think back on these and challenge them. These first three dimensions are considered "acquired", while the fourth dimension, more fully human and holistic, is able to grasp all knowledge. The scholastic philosopher Albertus Magnus relied heavily on this thought in his *De homine* (Stanford, 2008). Ibn Sīnā's emphasis on development over time predates Piagetian theory and provides an integrative theme that suggests that the basic concepts of DCT transcend more than traditional Western culture.

Ibn Sīnā, the Moroccan scholar, Abū'l-Walīd Muhammad ibn Amad ibn Rushd O (Averroes) and the Nubian/Egyptian neo-Platonic philosopher Plotinus share some interesting commonalities in their search for holism and unity within human diversity (Davidson, 1992, pp. 7, 12, 253). All, in different ways, searched for the unity of the One. DCT, while considering cognitive/emotional development in specific dimensions/styles, also holds that "each style contains the other styles" in a holistic fashion; thus the unity of the One.

Putting this together inevitably leads one to believe that "there is something there that we need to attend to." Development is real-people move from lack of knowledge to knowing. Through this developmental transformation, new ways of thinking and feeling appear, each one encompassing the previous stage. At the same time, the Teihard de Chardin quote at the beginning of this article has increasing meaning. To paraphrase, "The more we seek to discover discrete units in humanity, the overarching whole of being is again represented." While we often work in parts within DCT, we are still impacting the whole human being and soul.

Richard Lane has given permission to use Figure 1 on the brain from the article cited here. Allen and Mary Bradford Ivey have given permission for the reproduction of the remainder of the Figures, Boxes, and Tables presented here.

<sup>© 2009</sup> Allen E. Ivey, allenivey@gmail.com. Permission for use in this journal has been given. Please contact me with comments or for further information.

Allen E. IVEY, Distinguished University Professor, Emeritus University of Massachusetts, Amherst; Courtesy Professor, University of South Florida, Tampa

Sandra A. RIGAZIO-DIGILIO, Professor, University of Connecticut, Storrs

Worldview	Plato	Avicenna	Piaget	DCT
The concrete world of appearances	Imagining (eikasia)	Pure potential of knowing anything	Sensorimotor Preoperational	Sensorimotor/elemental
Line between the visible concrete world and the	Belief (pistis)	Potential of axioms, self-evident concrete facts	Concrete operations	Concrete/situational
abstract world of ideas				
The abstract world of ideas and thinking	Thinking (dianoia) Knowledge (episteme) Intelligence (noesis)	Potential of reflection Grasp all knowledge holistically	Formal operations Post-formal operations	Formal/reflective Dialectic/systemic

Table 1: Platonic, Piagetian, Avicenna and DCT Views of Cognitive/Emotional Development

Table 1 begins with the basic world view as described by Plato. We have the concrete world of appearances and the abstract world of ideas. We then see that Plato's terminology for the four phases has direct correspondence with that of Piaget. In turn, we see the DCT model reflecting both Piaget and Plato. In addition, we should note that it would be possible to include the world of the Islamic philosophers as well.

Please note the consistency of the pattern in Western thought and its parallels in the Islamic tradition, although that later tradition gives more emphasis to holistic thought. The different language systems of each, drawing from different cultural traditions, nonetheless have interesting parallels and potential importance for counseling and clinical practice.

## DCT as Applied Philosophy

The theory/practice of Developmental Counseling and Therapy (DCT) draws on these worldviews, pointing out that we encounter some clients enmeshed in a sensorimotor, sometimes imaginary world and other clients primarily functioning within a concrete, linear, "if . . . then . . ." reasoning style. This is the world of appearances and concrete thought.

We then "cross the line" to abstract thought. The formal client style moves away from the concrete world to reflecting on experience (e.g. "reflecting on feelings") while a very few dialectic/systemic clients see themselves in social/environmental context and are able to take multiple perspectives on events. In the Platonic and Piagetian framework, usually we think of "higher" and "more complex" as better. We both agree and disagree with this approach, and substitute the idea that "more is better." On the other hand, note that the Islamic philosophers seek to integrate this paradox of complexity in Oneness. It is not just young children who experience the world - we all do, but often lose the power of the here and now. Adults who engage in meditation, prayer, and "being-in-the-moment" are enjoying the benefits of the sensorimotor style. There are distinct advantages in the here and now awareness of the sensorimotor style. The constraint, of course, is shown in elemental and often diffuse conversation and a confusing random narrative.

Similarly, the concrete world is where we find stories and novels. This basically linear portrayal of events helps us make sense of the world. If our spouse is difficult, we can outline the specifics of what is happening. We all need our clients to tell us specific and concrete stories of their issues. As therapists we get the client's perspective on what is happening. With a little help, the client can see the "if this happens(ed) . . ., then the result is/was . . . ". Obviously, this cognitive/emotional style is important, but it does again have constraints. Those clients who are primarily concrete in thought and emotion have real difficulty reflecting on their experience - and they also may be out of touch with the here and now sensorimotor world.

Abstract thought brings with it the ability to reflect on experience and the ability to see patterns in life, certainly a critical part of effective counseling and therapy. Counselors and therapists, themselves, tend to operate primarily in the formal reflective area. We are often impatient with clients who tell us long concrete stories and then have difficulty seeing how their behavior and thinking tie together in patterns. So, while formal abstract thought is essential to our being in the helping professions, sole reliance on this information processing style brings with it several potential problems: 1) Are the client and therapist able to be in touch with here and now sensorimotor experience? 2) Reflective clients may be so thoroughly imbued with "thinking about things" that they ignore concrete reality; and, 3) Once therapists and clients come up with new and useful reflections, multi-perspective thought and systems thinking may be more difficult. The counseling and therapy field is replete with individualistic theories and methods that fail to see social context and multicultural issues.

Multiple perspectival thought and awareness of the ways in which exchanges across individual, family, group, community, and wider systems is the ideal positive of the dialectic/systemic cognitive/emotional style. With awareness of multiple possibilities, thoughts, and feelings, individuals can be well prepared to make intelligent and positive decisions. But, on the other hand, it is not unusual for those who tend to mainly rely on this information processing style to be out of touch with their feelings and less able to carry out their decisions. They may be impatient and fail to listen to linear narratives, and may easily become frustrated with single perspective formal operational clients and colleagues.

So, the "highest" style of Plato and Piaget is not always the best, perhaps not even often the best. Perhaps a more useful objective is to seek the unity in difference. Ivey has said that "more is better" and that we operate holistically using the several modes of cognition and emotion. There is no end to development. This developmental holism is best described by the Islamic philosophers. The ideal client outcome is a person who can operate usefully and appropriately within all four information processing styles. The ideal counselor/therapist is the person who is highly skilled in multiple possibilities, but also able to commit to appropriate action to match their interviewing style in the here and now of the counseling and clinical interview.

## Neuroscience and Developmental Counseling and Therapy

There is now evidence through positron emission tomography (PET) that different areas of the brain fire when people are engaged in what DCT terms sensorimotor, concrete, and formal thought (Lane, 2008). Figure 1 illustrates Lane's breakthrough findings. It is also important to note that Lane and Schwartz (1987) presented their own interpretation of cognitive/emotional development, which they termed of Emotional Awareness." "Levels Writing independently, at approximately the same time that Ivey was completing the original *Developmental Therapy* book (2000/1986), these authors wrote about concepts parallel to DCT, often even using the same language.

Now that DCT and the work of Lane and Schwartz have discovered each other, the hope is to generate an increasingly powerful and useful framework that will justify these philosophic and theoretical approaches with a focus on making clinical interviewing more precise and impactful when working with individuals, families, and wider systems.

Richard Lane emphasizes psychosomatic medicine, but his ideas for treatment, again developed independently, are remarkably similar to Ivey. One would almost think that they have worked together for years. And, to us, it seems important that two individuals working so far apart would come to such parallel conclusions. Putting Lane's theoretical work and scientific investigations together with Ivey's on DCT and its accompanying research (see Ivey, Ivey, Myers, & Sweeney, 2006) represents a potentially powerful package.

Philosophy, psychology, and science appear to be powerful why's for examining and using Developmental Counseling and Therapy. First, we see that both philosophical and psychological theories are backed up by hard scientific research. The ideas expressed here move beyond theory into reality. Second, for practical purposes, neuroscience points out that therapy and counseling change the brain's neuronal structure and that a positive approach to therapy even changes emotional structures deep in the brain (Ivey, 2009). This strong statement is supported by key research that a positive therapeutic approach can actually strengthen and enlarge neuronal structures that work against expression of fear in the amygdala (Ekaterina, Popa, Apergis-Schoute, Fidacaro, & Par, 2008).



Figure 1: Suctures on the medial surface of the frontal lobe that participate in 1) background feelings, 2) attention to feelings and 3) reflective awareness of feelings

We strongly suggest that readers examine the work of Richard Lane and his colleagues as this research and theory support the DCT model. But, at the same time, he has taken several important directions that DCT does not follow and his work certainly enriches the possibilities for counseling and therapy. His 2008 presidential address of the Psychosomatic Society is an excellent place to begin reading. Here you will find that he emphasizes emotional awareness through five levels of structural transformation and awareness: 1) body sensations (sensorimotor reflexive); 2) the body in

#### Allen E. Ivey and Sandra A. Rigazio-Digilio

action (sensorimotor enactive, preoperational); 3) individual feelings (concrete); 4) blends of feelings (formal/reflective); and, 5) blends of blends of blends of feelings (postformal/dialectic/systemic). He cites evidence that each of these emotional styles relates to various areas of the brain.

A 1992 paper (Lane & Schwartz) shows an even clearer relation to DCT's framework. Here the authors suggest specific interventions for each emotional level, closely paralleling what you will read later in this summary paper. In 2005, Lane and Garfield examined the process of psychoanalysis through this lens. In this thorough and well-documented paper, he presents further evidence to the points made in this brief summary. Critical to successful psychoanalysis (and by extension, many other approaches to counseling and therapy) is helping the client bring unconscious, background, implicit feelings to consciousness. Two useful case studies illustrate this approach to treatment. Recent research makes this point even clearer, indicating that emotional awareness and subsequent behavioral expressions are dependent on activity within the dorsal anterior cingulate cortex (dACC).

Work by McRae, Reiman, Fort, Chen, and Lane (2008) validated that greater trait emotional awareness occurs when brain areas involved in attention are emotionally aroused. Their study is part of a continuing program of research providing neurological evidence that highly aware individuals are better able to recognize their own emotional reactions in high arousal contexts. They can anticipate and evaluate the consequences of their actions before responding, while less aware individuals are not as proficient at recognizing their feelings and are more apt to behave impulsively. Earlier findings support Lane's continuing work. Specifically, the dACC is centrally involved in translating intentions into actions during emotional around (Paus, 2000); Procyk, Tanaka, & Joseph, 2000).

There are immediate practical implications from the above paragraphs. DCT practice suggests that with a client with the formal or dialectic-systemic style that we can explore emotional aspects in more depth and complexity, but there is the danger that they may lose touch with sensorimotor feelings. With clients who present with sensorimotor or concrete emotional styles, they have reasonably good access to emotions, but are less able to evaluate the meaning and consequences of their actions. This suggests that different treatment alternatives are needed when we work with varying cognitive-emotional styles. It also suggests that it is important for clients to be able to access, understand, and work within all emotional styles/levels/orientations. No single emotional style is "best."

Basic to DCT theory is Piaget's comment, "No cognition without emotion and no emotion without cognition". The findings described above present clear brain imagining research revealing that there are

implicit emotions at deep levels which may not be conscious and that it appears that all cognitions have emotional underpinnings. It is clear that the future of Developmental Counseling and Therapy will rest and be enhanced by brain research. There is need for the DCT framework to bring its premises and discoveries closer to this supportive research.

Let us now turn to client assessment from the Developmental Counseling and Therapy perspective.

### DCT Client Assessment and Style Matching

Once a general understanding of the philosophical/theoretical/practical model of DCT has been gained, the next task is to practice assessing both yourself and your clients in the here and now of conversation, counseling, and therapy.

The first author personally tends to be a dialectic/systemic thinker, almost always taking multiple perspectives on things, often in ways that seem strange to his friends, colleagues, and even his wife! He becomes impatient when he listens to concrete stories and sometimes he is so impatient that he fails to listen and may miss important points. Sometimes he becomes angry with a person who has a different political ideology or agenda from his own and it is most frustrating when he can see their point of view and they cannot and will not see his perspective. It is challenging for people who see multiple perspectives to talk and work with those who tend to see things in a single "right" way.

So, we all have strengths and weaknesses. Luckily, Allen loves here and now experience. Flowers and plants, meditation, and just gazing at the pond out his window take him out of his head. So he has the benefits of the sensorimotor style as his secondary way of being. But, Ivey contends that even this good thing can become problematical in that he also tends to be impulsive, spurting out ideas that may seem "off the wall" to some people or offend others with the impulsive part of his basically dialectic/systemic style.

So, Allen would ask, "What should a counselor or therapist do with me should I come to them?" Well, they might be surprised to find a client who is both sensorimotor and dialectic/systemic, a combination that, in fact, also contributes to his creativity. At the same time, these two styles do have the commonality of "jumping around" and changing observations and experiences. The impulsiveness that can be associated with sensorimotor ideation can make expressing complex ideas to others challenging!

But, Allen would present in a very intellectual, analytic fashion and the sensorimotor aspects would only reveal themselves over time. The counselor would be wise to join him in his intellectualism, but soon should confront and challenge him on that style's limitations. The early goal would be to lead Allen toward more concrete and reflective styles, while building on his strengths in analysis. Ultimately, drawing on the solid sensorimotor awareness would be invaluable as it provides a physical base for experience. Treatment here would include recommendations for exercise, increased meditation, and perhaps body work through Gestalt exercises.

The above summary is oversimplified as the more important goal of treatment through DCT is to join the client where he or she "is." Thus, style matching and using the client's language and cognitive-emotion orientation are basic.

Why is all this shared? Because it is important to be aware that each client you work with has one or more basic styles of being that need to be respected and likely will require you to be fully in synchrony with their cognitive/emotional style. If you are a reflective therapist, how effective are you with clients who primarily function using a concrete processing style? Are you able to understand and work with children or adults who are *experiencing* in the here and now? So, what we are suggesting is that we need to first examine ourselves and our own cognitive/emotional style. Once we have that in our grasp, then it is time to start observing our clients and matching their style. It is no longer appropriate to develop a favorite "theory of choice" and apply that theory with each client. If you use the DCT model, you will find it beneficial to assess a client's cognitive/emotional style and then start by matching your conversation and interventions with "where the client **IS**". Specifically, if the client has a primarily concrete style, start with a concrete intervention, and so on. Match your style with that of the client. But, be ready to mismatch the client's style to encourage clients to explore new styles of thinking, behaving, and feeling.

Table 2 provides some basics for assessing a client's primary cognitive/emotional style. It will take some practice and some time, but eventually, knowing where the client is "coming from" will be helpful to both of you.

Sensorimotor/Elemental:	Definition and strengths. The client is able to experience emotions and cognitions
Focusing on the Elements of Immediate Experience	holistically in the here and now and be in the moment. There is no separation of self from experience. You will often find a random expression of thoughts and feel- ings. Look for the ability to be in touch with the body, but expect a short attention span. At late sensorimotor style, some magical or irrational thinking may appear. <i>Emotions. Feelings</i> are experienced in the here and now rather than described or reflected upon. There is an emphasis on bodily experience. Crying, laughing, and catharsis of deep emotion represent this style. <i>Potential developmental blocks.</i> Clients may have difficulty in telling a clear, linear story of what happened. They will have real difficulty in reflecting on them- selves and the situation. Behavior may tend to follow the same pattern—namely, short attention span and frequent body movement. There may be an inappropriate impulsive expression with tears, anger, or other emotions. <i>Example treatments.</i> Body-oriented work, imagery, relaxation training, medica-tion, Gestalt exercises, metaphor, hypnosis.
Concrete/Situational: Searching for Situational Descriptions and Stories	<ul> <li>Definition and strengths. The client gives concrete linear descriptions and stories about what happened, often with a fair amount of detail. Nonverbal clients, however, may give short yes and no responses. At the late concrete style, the client will display some causal reasoning, which is exemplified by <i>iffthen</i> thinking. Moving to behavioral action is easier for this style.</li> <li><i>Emotions.</i> Specific feelings will be named and described but not reflected upon. "I feel X because" Some clients will have difficulty in naming emotion, but naming is basic to concrete emotional experiencing. This is an important step, but nonetheless a move away from direct here and now emotional experiencing.</li> <li><sup>1</sup>Most clients will present their issues in multiple styles, although one cognitive/emotional style will often be most prominent. The example treatments are focused on how one style may be most appropriate, but let us recall that most counseling and therapy works in several styles. For example, a psychodynamic</li> </ul>
	dream analysis might draw out a concrete story of a dream, move to sensorimotor experiencing of a dream symbol, and then reflect on the dream in a formal-operational sense. Relatively few traditional theories, however, give primary attention to sensorimotor or dialectic/systemic experience.

Over time, you will find that you can identify a client's cognitive developmental style within 50 to 100 words. Again, this does not happen automatically. It takes careful observation, patience, and practice.

Table 2	. (continued)	
		Potential developmental blocks. Clients may tell you detailed stories of their problems again and again, but be unable to see patterns in their behavior. This may be so even though they share many examples of the same patterned behavior. They will have difficulty in generalizing learnings with one problem discussed in the session to another that is obviously parallel to the interviewer. They often have difficulty in seeing a perspective other than their own. <i>Example treatments.</i> Concrete narrative story telling, assertiveness training and many behavioral techniques, social skills training, rational-emotive behavior therapy, A-B-C analysis, reality therapy and Adlerians using "if then" problem analysis.
Reflecting	perational: g on Patterns of Emotion, and	<ul> <li>Definition and strengths. These people can talk about themselves and their feelings—sometimes even from the perspectives of others. Their conversations tend to be abstract. At the late formal style, these clients can recognize commonalities in repeating patterns of behaviors or thoughts. This is the type of client many counselors feel most comfortable with as they are often into analyzing themselves and their own identity.</li> <li><i>Emotions.</i> Feelings are reflected on and discussed rather than experienced.</li> <li>Patterns of emotional experience may be discussed.</li> <li><i>Potential developmental blocks.</i> Clients who present at the formal style may be good at pattern recognition, but have difficulty in giving concrete examples. They may reflect on themselves and situations, but they may fail to see the assumptions on which their thinking is based. They may be overly abstract and have difficulty in experiencing emotion at the sensorimotor style.</li> <li><i>Example treatments.</i> Reflecting on narratives and stories, most of Rogerian person-centered work, analysis of a Beck automatic thoughts chart or REBT thought patterns, psychodynamic dream analysis.</li> </ul>
	g Patterns of and Thought	<ul> <li>Definition and strengths. Most people do not ordinarily make sense of their world from this perspective. A woman who realizes that sexism is the cause of her depression is using systemic thought. A Native American Indian or a Canadian Dene who realizes that systemic oppression leads to individual feelings of hurt and even depression is using dialectic thought. Multiple perspective taking and many alternatives are to be expected. The client is aware of systems of knowledge and is aware of how he or she is affected by the environment. Also clients will be able to challenge and reflect deeply on their own or others' style of thought and feeling.</li> <li>Emotions. The client may be highly effective at analyzing and thinking about emotions. Emotions are often contextualized. A client may say "I'm sad about the loss of my parents in this accident, but proud of the life they led. In some ways I miss them terribly, but in my heart they are still there." The emotions change with the perspective taken.</li> <li>Developmental blocks. The clients can "analyze it to death." Their ability to think constantly in new ways may result in intellectualization and distancing from the real problems. Some clients would rather think about the problem than do anything about it. There may be real difficulty in experiencing emotion at the sensorimotor style or even being able to name what they are feeling accurately.</li> </ul>

## Specific Questions to Facilitate Client Expression within Various Cognitive/Emotional Styles

It was not planned, but very soon, we discovered that helping clients work through their issues at the multiple developmental levels/styles is therapeutic. While this first was surprising, it now is obvious that when clients are able to talk about, think through, and experience multiple ways of expressing emotion, this frees them for more intentional and effective resolutions of their issues. Table 3 provides a brief summary of the key questions that facilitate cognitive/emotional development. Try these questions with a client on virtually any issue and see what happens. But, be sure to share the question list with them. We and others have found that resistance to this process is greatly reduced if we work "with" the client as an egalitarian "coexplorer." In fact, we now extend the idea of sharing what we are doing with the client as much as possible. Sharing the list of DCT questions is particularly helpful in the early stages of learning practical use of these methods.

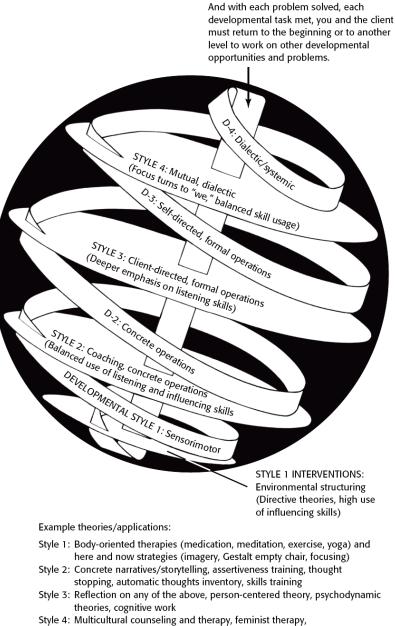
Table 3. Developm	ental Strategies Questioning Sequence (Abbreviated)	
Opening Presentation of Issue	<ul> <li>"Could you tell me what you'd like to talk about today?"</li> <li>"What happens for you when you focus on your family?"</li> <li>Obtain story of from 50 to 100 words. Assess overall functioning of client on varying cognitive-developmental levels.</li> <li>Assess client cognitive/emotional style. Use questions, encourages, paraphrasing, and reflection of feeling to bring out data, but try to impact the client's story minimally. Get the story as he or she constructs it. Summarize key facts and feelings about what the client has said before moving on.</li> </ul>	
Sensorimotor/Elemental	"Could you think of one visual image that occurs to you in that situation?" "What are you seeing? Hearing? Feeling?" It helps to locate the feeling in the body. Elicit one example and then ask what was seen/heard/felt. Aim for here and now ex- periencing. Accept randomness. Summarize at the end of the segment. You may want to ask "What one thing stands out for you from this?"	
Concrete/Situational	"Could you give me a specific example of the situation/issue/problem?" "Can you describe your feelings in the situation?"	
	<ul> <li>Obtain a linear description of the event. At late concrete operations, look for if/then causal reasoning.</li> <li>Ask "What did he or she do? Say? What happened before? What happened next? What happened after?" Possibly pose the question "If he or she did X, then what happened?" Summarize before moving on. For affective development, ask "What did you feel?" The statement "You felt X because" helps integrate cognition with affect at this level.</li> </ul>	
Formal/Reflective	"Does this happen in other situations?" (or) "Is this a pattern for you?" "Do you feel that way in other situations? Are those feelings a pattern for you?" Talk about repeating patterns and situations and/or talk about self. Ask "What were you saying to yourself when that happened? Have you felt like that in other situations?" Again, reflect feelings and paraphrase as appropriate. Summarize key facts and feelings carefully before moving on. "As you look back at the situation you just talked about, what are your thoughts/ reflections?"	
Dialectic/Systemic/ Integrative	Begin by summarizing all that has been said. Ask "How do you put together/ organize all that you told me? What one thing stands out for you? How many different ways could you describe your feelings and how they change?" In addition to providing an integrated summary of what has been said, these ques- tions serve the following functions: They enable the counselor and client to	
	<ul> <li>a. see how reality is co-constructed, not developed from just a single view</li> <li>b. obtain different perspectives on the same situation and be aware that each is just one perspective</li> <li>c. note flaws in the present construction, co-construction, or perspective</li> <li>d. move to action and test out new insights in daily life</li> </ul>	
	As we move toward more complex reasoning, several options are open. Before using any of them, summarize what the client has been saying over the entire series of questions.	
	Integration: How do you put together/organize all that you told me? What one thing stands out for you most?	
	<b>Co-construction:</b> What rule were you (they) operating under? Where did that rule come from? How might someone else (perhaps another family member) describe the situation? (Feelings can be examined using the same questions.)	
	<b>Multiple perspectives:</b> How could we describe this from the point of view of some other person or using another theoretical framework or language system? How else might we put it together using another framework?	
	<b>Deconstruction and action:</b> Can you see some flaws in the reasoning or in the pat- terns of feelings above? How might you change the rules? Given these possibilities, what action might you take?	

Of course, using exclusively questions one after another will be deadly. Time and a careful listening approach are needed throughout so that counselors are able to hear the client's thoughts and feelings. It is here that the basic microskills of interviewing are central. Listening is critical to DCT, just as in all theories and methods. In addition, the microcounseling model now gives considerable attention to the idea that different Allen E. Ivey and Sandra A. Rigazio-Digilio

areas of the brain and varying neurotransmitters are impacted by the several microskills of interviewing (Ivey, Ivey, & Zalaquett, 2008).

#### Different Strategies for Varying Cognitive/Emotional Styles

Figure 2 outlines some specific treatment strategies for working within each cognitive/emotional style. The Developmental Sphere illustrated in the figure may be useful as an integrative framework. Note that each client is holistic and capable of accessing multiple styles. While this sphere is somewhat balanced, imagine clients who may have much more space given to one of the four dimensions. For example, the primarily concrete client may be highly developed in that one primary style but in need of developing skills in all other three dimensions. One can imagine a "bulge "in the sphere with relatively little above or below "concrete operations" in cognitive/emotional development. The example of "bulge" refers to the idea that one style may be considerably more developed than another.



intergenerational family therapy, social action in community

Figure 2: Developmental Sphere. (Reprinted by permission of Lois Grady.)

So, what we are suggesting here is that all of us counselors and therapists need to be skilled and equipped with multiple approaches to meet the diverse needs of our clients. And this is a demanding task, one that means a lifetime of learning and growing.

As you can see, Developmental Counseling and Therapy is also a metatheory, an integrative theory about other theories. The developmental sphere reminds us that differing theories have strategies that tend to focus around certain developmental styles. It is critical to be skilled in listening and aware of the foundational importance of relationship and the working alliance, most often associated with Carl Rogers. It is also important to be skilled in cognitive behavioral therapy, particularly due to its strong base. But, these and other current practices tend to focus mainly on concrete and formal issues, failing to give sufficient attention to basic sensorimotor experience. In addition, current theories are particularly weak in their awareness and use of the dialectic/systemic area and the importance of social context, social justice, and complexity in client history and presenting concerns.

#### DCT, Neuroscience, and Future Directions

There is a growing body of research in neuroscience that lends credence to DCT's theoretical principles and clinical applications and that opens possible venues that will facilitate conceptual, applied, and empirical advancements in this and other models of counseling and therapy. For example, Lane and Garfield (2005) illustrate ways in which recent neuroimaging work has supported and enhanced their advancement of an alternative framework to traditional psychoanalytic theory and therapy. In this article, they specifically address how integrating these two bodies of knowledge has significantly informed their perspectives on the nature of clinical change, the psychological processes involved in change with and without insight, and their framework for conceptualizing how to promote emotional change in a variety of clinical settings.

We contend that the growing neuroscientific understanding of brain functioning provides: 1) Evidence that supports DCT's foundational premises; 2) Findings that can inform advancements toward more precise DCT assessment and treatment methods; and, 3) Empirical methods and technologies that open opportunities to investigate clinical change processes and treatment outcomes. Advancements in DCT will clearly benefit from integrating specific knowledge in neuroscience to identify DCT assessment and treatment methods that are consistent with current neuroscientific findings and to explore the implications of these associations for the actual practice of DCT. We have introduced some of these associations through out this article. Future work will continue to focus on how these associations can inform our work to make clinical interviewing skills and strategies more precise and impactful in counseling and therapy with individuals, families, and wider systems.

#### Beyond this Foundation

DCT is a complex theory explaining and integrating many diverse strands. The issues that clients and client systems bring to treatment can be understood as a natural and logical consequence of their developmental and contextual histories. Development in social context clarifies what is really happening with our clients, but it also makes our theory and practice more complex—and likely more effective.

While the primary focus of this article has been on the individual client, DCT has additionally been extended to work with families and wider systems. Systemic Cognitive-Developmental Therapy (SCDT) translates and applies core principles of DCT to the assessment and treatment of partners, families, and wider community networks (Rigazio-DiGilio, 2000, 2007a). SCDT links developmental constructs with the therapeutic process and provides specific assessment and intervention strategies that can be applied in the here and now of therapy. As with DCT, this model also provides an integrative metatheory for organizing and applying traditional and contemporary family systems models, approaches, and strategies to meet the diverse needs of those seeking treatment.

SCDT posits that we develop individual information processing styles as we interact in the environment and that, over time, we create and share collective styles by participating in resonating experiences within committed relationships that evolve within a wider sociopolitical context. Recent research confirms that these collective information styles can be reliably identified and elicited through specific questioning strategies (Speirs, 2006). Using the same therapeutic reasoning as DCT, counselors and therapists are able to design treatment plans that first match and then challenge families to use the strengths of their current styles and to shift to new styles in order to promote growth for all family members.

SCDT postulates that families naturally revisit the four DCT information processing styles as needed in response to external and internal demands for change and, in so doing, select the resources from those styles that will best assist them to respond to these demands. When families and wider systems, such as networks or organizations, face imbalances between their information processing styles and the demands of the environment, stress may develop that becomes debilitating. Treatment within SCDT focuses on three levels: 1) To help relational units strengthen and master resources that had not been effectively utilized within their primary processing styles; 2) To assist relational

units to explore new perspectives and new options associated with other styles; and, 3) To assist all members of the interactive system to work together on common goals within a series of processing styles that links all members. To achieve these treatment goals, SCDT affords clinicians the option of using a wide variety of therapeutic interventions that assist families to explore their issues using a wider range of information processing styles, thereby expanding their understanding of and approach to these issues.

We do not have space here to cover any of the other extensions in depth, but here is a brief list. All of these are discussed in detail in Ivey, Ivey, Myers, and Sweeney (2006).

1. The DCT model is useful to understand various stages of spiritual and religious faith, even to the point of suggesting specific ways to help clients discern their values and their life mission

2. Pathology is viewed within the DCT framework as "a logical response to an insane/pathological environment." Environment here considers both psychosocial and biopsychological issues. Given this analysis, it then becomes possible to develop consistent rational approaches to multiple issues of so-called "disorders." We prefer to call these "developmental challenges."

3. Multicultural theory and practice is fully compatible with the DCT model. For example, the wellknown cultural identity models have very direct parallels with those of Plato, Piaget, DCT, and the Islamic philosophers as well.

4. An approach to clinical supervision (Systemic Cognitive Developmental Supervision) builds on DCT principles to understand counselor and therapist development, extends DCT questioning strategies to assess and monitor supervisee styles of learning, perceiving, and intervening, and provides a metaframework that can be used to tailor supervision methods to meet the needs of supervisees (Rigazio-DiGilio, 2007b; Rigazio-DiGilio, Daniels, & Ivey, 1997).

5. *Counseling for Wellness* is the title of an important book by Myers and Sweeney (2005). While not focused on DCT, this work provides a well-researched foundation integrating DCT treatment procedures with positive goals to enable clients to live more fulfilling lives with better physical and mental health.

Here we have made an endeavor to provide the basics of Developmental Counseling and Therapy and to show some of the specifics as well as several of the possible extensions of the model. We have presented the neuroscientific basis of the framework, but have not gone into depth around other research. Please review some of the books cited for more information.

#### REFERENCES

- Davidson, H. (1992). Alfarai, Avicenna, & Averroes on intellect. Oxford, Oxford University Press. (Also available via Google Books.)
- Ekaterina L., Popa, D., Apergis-Schoute, J., Fidacaro, G. & Par, C. (2008). Amygdala intercalated neurons are required for expression of fear extinction. *Nature*, 454, 642-645.
- Ivey, A. (2000) Developmental therapy: theory into practice. Framingham, MA: Microtraining. (Originally published 1986)
- Ivey, A. (2009) Neuroscience, counseling, and psychotherapy: Implications for Clinical Practice. Keynote Presentation to the Associations of Japanese Clinical Psychologists, Toyko, September.
- Ivey, A., Ivey, M., Myers, J., & Sweeney, T. (2005). Developmental Counseling and Therapy: Promoting Wellness Over the Lifespan. Framingham, MA: Microtraining.
- Ivey, A., Ivey, M., & Zalaquett, C. (2008) Intentional interviewing and counseling: Facilitating client development in a multicultural world. Belmont, CA: Brooks-Cole/Cengage.
- Lane, R. (2008) Neural substrates of implicit and explicit emotional processes: A unifying framework for psychosomatic medicine. Psychosomatic Medicine, 70, 214-231.
- Lane, R., & Garfield, D. (2005). Becoming aware of feelings: Integration of cognitive-developmental, neuroscientific, and psychoanalytic perspectives. *Neuropsychoanalysis*, 7, 5-30.
- Lane, R., & Schwartz, (1987). Levels of emotional awareness: A cognitive-developmental theory and its application to psychopathology. *American Journal of Psychiatry*, 144, 133-143.
- McRae, K., Reiman, E., Fort, C., Chen, K., & Lane, R. (2008). Association between trait emotional awareness and dorsal anterior cingulate activity during emotion is arousal-dependent. *NeuroImage*, 41, 648–655
- Paus, T., 2000. Functional anatomy of arousal and attention systems in the

human brain. Prog. Brain Res. 126, 65-77.

- Procyk, E., Tanaka, Y.L., Joseph, J.P., 2000. Anterior cingulate activity during routine and non-routine sequential behaviors in macaques. *Nat.Neurosci.* 3, 502–508.
- Rigazio-DiGilio, S. A. (2000). Relational Diagnosis: A constructive-developmental perspective for assessment and treatment [Special Edition: New Developments in Relational Therapy. M. Goldfried (Ed.) and J. Magnavita (Guest Ed.)]. Journal of Clinical Psychology/ In Session: Psychotherapy in Practice, 56, 1017-1036.

- Rigazio-DiGilio. S. A. (2007a). Family counseling and therapy: Multicultural and theoretical foundations and issues of practice (pp. 429-468). Chapter in A. Ivey, M. D'Andrea, M. Ivey, & L. Simek-Morgan, Theories of Counseling and psychotherapy: A multicultural perspective, Sixth edition. Needham Heights, MA: Allyn and Bacon.
- Rigazio-DiGilio, S. A. (2007b). Systemic Cognitive-Developmental Supervision: Accessing and Extending Meaning and Options within the Supervisory Exchange. Workshop for the *Third International Interdisciplinary Conference on Clinical Supervision*. Amherst, New York.
- Rigazio-DiGilio, S. A., Daniels, T. G., and Ivey, A. E. (1997). Systemic Cognitive-Developmental Supervision: A developmental-integrative approach to psychotherapy supervision. In C. E. Watkins, Jr. (Ed.) Handbook of psychotherapy supervision, (pp. 223-249). New York: John Wiley & Sons, Inc.
- Speirs, K. (2006). *Reliability and predictive validity of the SCDT questioning strategies and classification system*. Unpublished Masters Thesis, University of Connecticut, Storrs.
- Stanford Encyclopedia of Philosophy (2008). Influence of Arabian and Islamic philosophy on the Latin West. (http://plato.stanford.edu/entries/arabic-islamicinfluence/#FouInt).