CAREER COUNSELING: 
THE LIFE CHANGES PERSPECTIVE

Comprehensive Reading on Career Counseling Course

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Integrating Work, Family, and Community Through Holistic Life Planning - Career Management Technique - Tutorial

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This article provides a rationale and interdisciplinary framework for integrating work and other dimensions of life by (a) reviewing relevant changes in society and the career development and counseling profession, (b) describing one holistic career-planning model called Integrative Life Planning (ILP), based on 6 interactive critical life tasks, and (c) discussing questions and issues surrounding narrow versus broad approaches to life planning. ILP includes a strong emphasis on career counselors as advocates and change agents. It focuses on several kinds of wholeness, integrative thinking, democratic values, and helping clients make career decisions not only for self-satisfaction but also for the common good.

A key question as one era ends and another begins is the extent to which career counseling as a profession has matured enough to meet the needs of diverse human beings who are making life choices and decisions in a dynamic technological society. Most career professionals probably would agree that in the twentieth century, with the help of traditional theories of vocational choice and computer-assisted career guidance and counseling, career counseling made great advances in the process of helping people find jobs. Some professional counselors have broadened their practice to help clients examine work in relation to other life roles. However, it seems evident that most career counseling practices in our individualistic, democratic, information society still focus mainly on finding a job for self-satisfaction and less on using our talents for the common good.

Before writing this article, I reread Parsons's Choosing a Vocation (1909/1989). Writing in the context of his time, he reflected the realities of that period in introducing the idea of choosing a vocation as a simple matching process, acting on his humanitarian concern for immigrants in the new industrial society, and cataloging the stereotypic options for girls and women in a list of limited "industries open to women" at home and away from home. He also established the importance of individuals making their own decisions. Recalling that era makes one realize how much progress has been made in a century in advancing the profession of career counseling, attending to the needs of diverse populations, and improving the status of women. Although Parsons created the matching model of vocational choice, his protocol interview for gathering client data is quite holistic, including how to be a good and successful person and dimensions of life beyond work.

As I think about the context and status of the career counseling profession today, I sense two tensions: (a) a highly visible national focus on the development and use of information technology that reinforces traditional matching of people and jobs (or colleges) or creating resumes and (b) a growing but less visible attention to holistic human development, balance, and career development over the life span. On the one
hand, driven by the soon to sunset School-to-Work Opportunities Act, youth are being urged to choose work early--by 11th grade, with less emphasis on developmental career guidance; on the other, many of their parents are being told that the occupation they chose early in life no longer needs them. Millions of dollars are being allocated to create the most advanced information systems, especially with the Internet, and to develop the educational and vocational infrastructure to deliver these systems. At the same time, their parents are beginning to ask why they gave 30 or 40 years of their lives to a job and neglected other parts of life, especially as they find themselves downsized and unable to find jobs of comparable status, pay, or security.

A difficult question is, what is happening to balance and holistic planning in this rush to technologize the career-planning process and again fit people into jobs? The purpose of this article is to provide a rationale and framework for integrating work and other dimensions of life (a) by reviewing relevant societal changes within and across cultures, (b) by describing one holistic conceptual model for broader life planning in this new century, and (c) by discussing questions and issues surrounding broader career and life planning. I make a case for a new worldview for career counselors and our clients based on global changes in work, family, and community, as well as changes in the counseling and career development professions. I believe it is also time for changes in public policy and legislation at state and federal levels to reflect that the development of human beings is as important as workforce development.

Societal Changes

Dramatic changes in work, the workplace, and work patterns point to a need for more integrative approaches to life and work. Changes in individuals, families, demographics, and organizations around the globe contribute to this need. Experts from fields such as sociology, organizational management, business, medicine, economics, women's studies, multiculturalism, futurism, adult development, and career development have described the changes and explored the potential impact on both individuals and organizations.

To understand the current context, it is important to review a few present and projected global changes. In describing "The End of Work," economist Rifkin (1995) presented convincing statistics from around the world--especially Europe, Japan, and North America--about how workers have been replaced by robots, automation, and restructuring. His conclusion was that societies must move to shorter workweeks so that the available work may be shared (presumably with more time for other parts of life). Although many societies today are moving toward capitalism, he predicted movement from a market economy to a postmarket society, with more time allocated to the nonprofit volunteer sector, where there is much work to be done, especially among marginalized people and communities.
Economist and futurist Henderson (1996) suggested that the world is losing in "global economic warfare" because society is not attending to human needs. She urged nations to find other cultural indicators of societal progress than the gross domestic product or gross national product, such as recognition of women's "caring work."

A "big picture" aspect of the changing nature of work has been offered by Stark (1995), a Swedish business and economics professor. Like Henderson, Stark is critical of the absence of "caring work" (often women's work) from assessments of national progress. She makes a strong case for giving greater attention and status to "caring work," such as childcare, "kincare," and similar nurturing activities.

From Bridges's (1994) perspective, "the end of the job" or the "dejobbed society" lay ahead, with each of us becoming a vendor (selling oneself) or "portfolio person," learning how to live with uncertainty. Instead of fitting into a job description, he saw an uncertain world of contracts, consultants, and contingent workers in which each must become an entrepreneur, work on teams, and find work to do.

From an organization management perspective, Hall (1996) suggested that managers and employees need to start putting more emphasis on relationships in the workplace. He posited that the old career pattern-- moving up a ladder or career path--was dead, but that the new career, which he called the "Protean Career," was alive and well. It is in this direction that we must move--helping employees to change and adapt quickly, like the Greek god Proteus, to meet the needs of changing organizations and society.

Reflecting new theories of women's development, Hall and his associates (1996) drew directly from the psychological of "Self-in-Relation" (Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; Miller, 1976). Hall projected that workers would need to learn skills of lifelong learning, teamwork, adaptability, valuing diversity, communication, and decision making. They would also need the "relational competencies" of self-reflection, active listening, empathy, self-disclosure, and collaboration to better understand themselves and others as they became self-directed, continuous learners in a dynamic and diverse workplace.

A number of demographic changes in the United States have also put pressure on the workplace to pay attention to human needs. These changes include an increasingly diverse population and workforce with multiple ethnicities and family types, an increasing number of working women still unevenly spread in career fields and earning less than their male counterparts, and the dominance of two-income wage earners wanting more balance in their lives. Many human resource initiatives are attempting to address some of these human needs through employee assistance, outplacement, coaching, work/life balance, and diversity management. Corporate attention to the needs of various employee groups for benefits such as childcare, kincare, care for aging parents, and care for self is growing. These changes are
indicators of human needs and desires for more emphasis on relationships, balance, and a concern for community, not only jobs.

Changes Affecting Counseling and Career Development

In addition to technological advances, a number of changes have occurred over the last half-century that have had an impact on the counseling and career development professions:

* Dramatic influx of women into the workforce, triggered by World War II and the women's movement
* Recognition of the connection of and need for balance in work and family
* Growth of multicultural counseling along with an increase of migrant, immigrant, and refugee populations
* Convergence of career development and adult development, especially with adult transitions
* Emergence of the broader concept of career and career development over the life span
* Emphasis on context and multiple identities and their impact on career development
* Increased recognition of the importance of spirituality in life and work
* Concern about violence in schools, workplaces, and communities
* Growing disparity between haves and have-nots
* Recognition of new ways of knowing in psychological and educational research

Of these, it is probably Super's (1951) theory that has affected our profession most dramatically. He challenged us to broaden our concept of career development almost 50 years ago with his definition of career development as a lifelong, continuous process of developing and implementing a self-concept and testing it against reality, with satisfaction to self and benefit to society. He later developed the life roles component of his theory, created the rainbow of life roles and stages (Super, 1980), and implemented it in the Work Importance Study (Super & Sverko, 1995).

Another area that has affected career psychology is the broadening of knowledge beyond the traditional empirical and quantitative ways of knowing and doing research. In the last decade, in particular, challenges to the reductionist way of knowing have appeared as more people seek spirituality, connectedness, and
wholeness. The epistemological questions of what we know and how we know it have been explored through logical positivism for a long time. It is only recently that qualitative methods of research in psychology and career development are becoming more accepted as alternative ways to truth. Some postmodern psychologists have been extremely critical of the way scientific method and technology have dominated Western psychology and been transported across cultures. The traditional Newtonian mechanistic view of the universe has been criticized by physicists, such as Capra (1980, 1996), as well as by feminists and multiculturalists who see the world through different cultural lenses and challenge the linear, scientific, rational view as the only view of the world.

Reinforcing changes that affect human development, British sociologist Giddens (1991) described local and global factors that affect self-identity as individuals make life choices and engage in life planning. He characterized the world as one of chaos, running out of control, in contrast to the beginning of the last century when Western societies believed that, as they learned more about themselves and the world, they would learn to control those forces. Three important trends in the current "risk society" are globalization, "detraditionalization" (i.e., the changing of traditions and customs around the world), and the concept of social reflexivity. The latter examines how societal transformations influence an individual's view of self in new contexts. From a more holistic constructivist view, they learn to use information to construct their own lives. Giddens believed this reflexivity would help people write their own biographies, tell their stories, and live with uncertainty.

These views are not unlike those of recent counseling theorists and psychologists who see career as story and career counseling as a means to help clients not only tell their stories but reconstruct their stories as they would like them to be (Cochran, 1997; Jepsen, 1995; Savickas, 1997). Peavy (1998) used transformations in contemporary social life and personal stories as a context for counseling. He introduced "sociodynamic counseling" as a twenty-first century approach to vocational counseling, challenging the overpsychologizing of this field in the past and urging counselors to draw more heavily from sociology and other disciplines in a contextualized and constructivist view.

These are only a few among many global, cross-disciplinary, and professional career development changes over the last half-century that lead to new ways of viewing human beings, society, and career development. I describe one such paradigm in this article.

Integrative Life Planning

Over the past 10 years, I have developed a concept called Integrative Life Planning (ILP; Hansen, 1997). It takes into account the many changes already cited and represents a holistic approach to life and career planning. For years, career professionals have functioned in a fragmented world, with knowledge broken down into little boxes and disciplines. Although trait-and-factor and person-to-
environment-fit approaches to career counseling will always exist and are appropriate, especially when clients are in job search or work adjustment. ILP moves beyond the linear process of choosing a vocation to a more holistic view of the world—seeing work in relation to other life roles, or work within a life.

Integrative is the opposite of separated or fragmented. It suggests connectedness and wholeness, a growing theme across cultures. To integrate has many meanings; for example, to make whole by bringing different parts together. It may also be applied to individuals, as knowledge, skills, and attitudes are integrated within one person. It may also mean to remove legal and social barriers, a mission of the larger society, and certainly one that should be a part of career counseling. ILP includes the multiple dimensions of lives (body, mind, spirit), life roles (love, learning, labor, leisure, and citizenship), cultures (individualistic and communal), gender (self-sufficiency and connectedness for both women and men), communities (global and local), ways of thinking (rational and intuitive), ways of knowing (qualitative and quantitative; Hansen, 1997), and linking personal and career issues (Subich, 1993).

Values and Assumptions of ILP

ILP suggests that, in the future, career counseling needs to focus more on counselors as change agents and advocates—helping clients to achieve more holistic lives and to be agents for positive change in society through the choices and decisions they make. It assumes that individuals should consider the consequences of those decisions for human beings and for the environment. ILP links individual and organizational change, noting that personal transitions often emerge from organizational changes.

I have used the metaphor of quilts and quilters to communicate the themes of connectedness and wholeness that ILP represents. ILP is like a quilt for many reasons. On one level, it represents the global world or context in which dramatic changes are affecting persons, families, communities, nations, and even the planet. On another level, it represents the career world and, on still another level, the pieces or patches of our own personal experiences and stories, or the stories of our clients.

The integrative approach to career and life planning that I describe only briefly here (but is articulated elsewhere) is an expression of values, as is any theory, program, curriculum, or innovation. The changes and metaphors just described create the context for ILP and lead to the following values and assumptions:

1. Dramatic changes around the world and at home require us to see the "big picture"; to broaden our thought and practice about how we work with employees, students, and clients; and to help them understand the changes as well.

2. We need to help our clients develop skills in integrative thinking as contrasted with linear thinking, to understand the importance of holistic thinking as different from reductionist thinking.
3. Being aware of and prioritizing the critical life tasks or major themes in one's own life and own culture are essential parts of human development.

4. New kinds of self-knowledge and societal knowledge are critical to understanding the contexts and themes of a changing society and of individuals in it.

5. Recognition of the need for change and the commitment to change are essential to the ILP process; change can occur at many levels, and out of personal change will come social change.

The Critical Tasks of ILP

ILP identifies six themes or critical life tasks facing individuals and cultures in the new millennium. They are tasks recurring in the counseling and career development literature (and reported in the media), triggered by social changes, researched by investigators in multiple disciplines, and emerging through reports of people's lived experience in several cultures. The themes are also a part of my professional and personal experience through 35 years of working in the counseling and career development field. They are especially a reflection of my concern for democratic values of individual freedom, dignity, and respect; equal opportunity; social and economic justice; and development of human potentials. Although ILP is based primarily on U.S. culture, several of the tasks described in the following seem to cut across some cultures.

1. Finding work that needs doing in changing global contexts. Task 1 relates strongly to the global changes described earlier in this article that point to "work that needs doing." This idea is quite different from traditional matching approaches to career planning. It suggests creativity and entrepreneurship in finding solutions to the many human challenges and work to be done both locally and globally. I have identified 10 kinds of work that seem most important to me: preserving the environment, constructive use of technology, understanding changes in the workplace and families, accepting changing gender roles, understanding and celebrating diversity, reducing violence, reducing poverty and hunger, advocating for human rights, discovering new ways of knowing, and exploring spirituality and purpose. Most of these are not part of mainstream career planning yet they are very much related to how we live our lives, individually and in the community.

2. Weaving our lives into a meaningful whole. Because the field of career planning has focused so heavily on the work or occupational role, we often have ignored other roles and other parts of human development, for example, the social, intellectual, physical, spiritual, and emotional. Life Task 2 focuses on these and on the gender role system, the differential socialization of women and men for various life roles, and the unique influences on and barriers to the life planning of each. It draws from the concepts of agency and communion and suggests that both men and women need to integrate self-sufficiency and connectedness into their lives.
3. Connecting family and work (negotiating roles and relationships). Critical Task 3 addresses the changing patterns in work and family (all kinds of families) that do not fit old norms. With increasing two-earner families, single parent families, gay and lesbian families, single adults without children, and delayed marriages and parenting, new questions of roles and relationships arise. Dilemmas emerge as people move beyond their ascribed provider and nurturer roles, often resulting in conflict and stress. ILP emphasizes the need for men and women to share nurturer and provider roles in equal partnerships, defined as occurring when each partner 1) treats the other with dignity and respect; 2) demonstrates flexibility in negotiating roles and goals; and 3) enables the other to choose and enact roles and responsibilities congruent with the individual's talents and potentials and the couple's mutual goals for work, the relationship, the family, and society. (Hansen, 1997, P. 20)

Readiness to deal with this task varies greatly across cultures.

4. Valuing pluralism and inclusivity. Effective interpersonal skills have always been important to people on and off the job. A task of career counselors is to help clients understand and adapt to the growing diversity in the United States (and other cultures) as they seek and create more humane workplaces, whether in business, government, school, university, or agency. Critical Task 4 calls for an informed awareness of all kinds of difference, variously called "multiple dimensions of identity" or "contextual factors" (e.g., race, ethnicity, gender, age, disability, belief, sexual orientation, language, regionality) and including sociopolitical and historical realities. Goals of this task are to help career counselors gain an understanding of what it means to value diversity, to be aware of economic and social barriers to educational--occupational opportunity, to examine their own biases and attitudes, to help clients also develop a more inclusive worldview, and to better understand what to do when one "enters the world of the 'Other'" (Moreno, 1996). It also addresses gender factors in multicultural career counseling.

5. Managing personal transitions and organizational change. Critical Task 5 links the transitions and decisions people make in their own lives with changes and decisions made by organizations. It describes models for making transitions, especially Schlossberg's (1994) popularized version of her model for human adaptation to transition. Indeed, transition counseling, along with gerontological counseling, may be the fastest growing counseling area in the United States in the twenty-first century.

Making decisions is another important part of this task. Gelatt (1989) suggested that the old rational, logical, linear models of decision making are insufficient for the new millennium and offered a new model called "Positive Uncertainty." He defined it as "a personal plan for making decisions about the future when you don't know what it will be" and "a flexible, ambidextrous approach to managing change using both your
rational and intuitive mind" (Gelatt, 1989, p. 254). His unique approach helps people become more conscious of risk taking and prepared for the uncertainty, instability, ambiguity, and complexity that may face them in the new century. Gelatt's rational-intuitive model seems to resonate with many of the traditional age and adult college students in my classes.

Another paradoxical approach to decision making, called "Planned Happenstance," involves creating and transforming unplanned or chance events into career opportunities. It encourages acting on curiosity and offers five skills to create chance: curiosity, persistence, optimism, flexibility, and risk taking (Mitchell, Levin, & Krumboltz, 1999).

This task also emphasizes social change and the importance of people being change agents in their personal, family, and organizational lives. Regarding change, sociologist Palmer (1992) observed that people have to have a compelling vision for change and understand how change really happens. He thinks people can bring about change by closing the gap between our inner spirit and outer conflict. His four stages for change include (a) deciding to stop living "divided lives" (be congruent), (b) forming groups for mutual support, (c) learning to translate private problems into public issues, and (d) creating alternative rewards to sustain your vision.

6. Exploring spirituality, purpose, and meaning. Critical Task 6 deals with ultimate meanings in life and links spirituality with meaning and purpose. Although a considerable body of literature has emerged on spirituality and counseling, only in the last decade has spirituality become more widely associated with career and life planning.

Spirituality often is defined as a higher power outside of oneself or "the core of the person--the center from which meaning, self, and life understanding are generated, a sense of the interrelatedness of all of life" (Hansen, 1997, p. 189). One of the goals of this task is to help clients define what they mean by spirituality and explore its connection with their search for purpose and meaning in life. Increasingly, the counseling profession is recognizing that counselors and career professionals need to help clients understand the "connections between spirit and work" (Bloch & Richmond, 1997).

Spirituality has not been central in career counseling, vocational psychology, or counselor preparation programs. It is incongruent with the kind of knowledge valued in quantitative psychology. Spirituality is not logical, objective, or linear. However, it is gaining ground as respected journals such as The Counseling Psychologist increasingly publish articles using scholarly qualitative research methods.

Fox (1994), a theologian, reflected the spiritual theme of ILP when he said:

Life and livelihood ought not to be separated but to flow from the same source, which is the spirit ... Spirit means life, and both life and livelihood are about living in
depth, living with meaning, purpose, joy, and a sense of contributing to the greater community. (p. 1)

His vision of the work role is "where mind, heart, and health come together in a harmony of life experiences that celebrate the whole person" (p. 2).

Critical Task 6 also encourages examination of material values and the place of money in work and life. Many of the 20-to-30 age generation are refusing to give their whole life to their job and are seeking more balance in life. Much literature also exists on the trend of moving away from materialism–toward voluntary simplicity, moving from the fast lane to the middle lane, "downshifting," and redefining success.

Applications

The tasks or themes of ILP have existed a long time, but I have tried to put them together in a way that makes sense out of complexity and change as we anticipate how our profession can be transformed in the twenty-first century. An appropriate question for career counselors who might wish to incorporate the ILP concept into their work with students and clients is this: How can I continuously use internal and external critical life tasks to develop a meaningful holistic career pattern, including both self-fulfillment and betterment of society?

ILP is comprehensive, interdisciplinary, inclusive, holistic, and integrative. It is concerned about the holistic development of the individual but also about community improvement and the goals of a democratic society. The six life tasks are interactive. Three focus more on individual development--weaving our lives into a meaningful whole; diversity and inclusivity; and spirituality, meaning, and purpose. The other three--finding work that needs doing in local and global contexts, connecting work and family, and managing transitions and organizational change--are more external or contextual. Nonetheless, all are connected to one another around the development of the human being in a changing society. For example, understanding the interrelationship of life roles, especially family and work, and valuing diversity and inclusivity are major tasks of living, learning, and working in a global society. Helping individuals, partners, and families explore how the various parts and priorities of their lives fit together is an important goal, as is creating awareness of the changing contexts that affect our life choices and decisions as we move into a new era.

ILP suggests multiple strategies for counselors and career specialists to use with clients to achieve individual, personal, and social change. It is a systems approach, yet so comprehensive that few could try to integrate it all at once. Career counselors (and their clients) are asked to identify the tasks most important to them or their organization at a given time and to work with them. Over time, all can be addressed (or new ones added), but it is likely that certain tasks will be more important to some individuals in different cultures. It moves beyond traditional matching of individuals
Integrating Work and Life: Issues and Questions

A number of issues surround the ideas presented in ILP. Students in my classes and participants in workshops have been helpful in raising thoughtful questions about the model in particular but also about the concept of integrating work and the rest of life. In a fragmented and work-oriented society, it is not surprising that some may have difficulty identifying with this inclusive and complex concept. To reiterate, it is assumed that the tools of trait-and-factor or person-to-environment vocational counseling will continue to be useful, especially for clients in a job search or work adjustment stage; integrative approaches are viewed as complementary, not replacing traditional approaches. However, if integrative thinking about life planning is going to be more central in people's lives in the new millennium, several questions need to be addressed.

1. Can you integrate too much, or where do you draw the line? As pointed out earlier, I believe society is moving slowly from strictly a reductionist or agentic framework to include a holistic view that is cooperative, subjective, nurturing, intuitive, and integrative. The movement toward integrative thinking has emanated from several disciplines, from physics to medicine, with alternative forms of healing appearing even in universities.

Many people seek wholeness, and the six critical life tasks of ILP, if understood and addressed by career counselors, can provide a worldview that will also be useful to clients as they think about their lives and life plans. Prioritizing the tasks and focusing on certain ones at a given time or life stage can make ILP more useful and manageable. Workshops and classes, or other forms of outreach, may be more viable means for delivering the program than individual counseling.

2. How do you communicate to younger people the importance of incorporating all parts of life into a whole? The concept of integrative and holistic thinking and planning has to be woven into school career development and career guidance and parent education programs from prekindergarten through Grade 16. Unfortunately, it is not there at present, and with the current focus on occupational information through school-to-work and computer technology, the emphasis is on finding a job rather than developing a life. The National Career Development Guidelines (National Occupational Information Coordinating Committee, 1997) make a modest attempt toward wholeness through such competencies as "Understands work and other life roles" and "Understands the changing roles of women and men," but they are still overwhelmingly directed toward finding or choosing a job. Service learning holds promise as one strategy for helping youth develop skills, broader life perspectives, and concern for the larger community. Perhaps some of the expanded career development programs of the 1970s and 1980s need to be updated and implemented by teachers, counselors, and parents in developmental guidance programs.
Counselors-in-training also need to be exposed to integrative counseling philosophy and strategies.

3. How do you bring incorporation of all parts of life into counseling with older persons? The task may be easier with older persons, because they are at a stage in life when many of them begin to ponder the big questions of spirituality, meaning, and purpose, questions that include connectedness and wholeness. They may also be at a place where they have made a transition out of formal work and are seeking new activities and finding time to examine parts of their lives that may have been neglected in a work-focused life course. With extended life expectancy, depending on their health and financial status, more older persons may want to develop other talents or new careers through "Later Life Planning."

4. How do you address spirituality with clients who are not in touch with this part of their lives? There is, of course, a danger of introducing spirituality in schools, with some confusing the term with religion. Defined in terms of finding meaning and purpose in life, spirituality is not threatening; it may be approached with adolescents, but counselors will have to determine which students (and families) are or are not ready to explore this area. Increasingly, college students, young adults, and older adults are seeking to answer questions of meaning as they make life choices and decisions. For many ethnically diverse students especially, spirituality is central to their lives. As society becomes more technological, automated, and isolated, the search for meaning and connectedness may become more central.

5. How do you help students become more conscious of their own socialization to gender roles, cultural norms, and the mechanized society? The short answer to this is education, education, education. Unfortunately, educational institutions at every level are modeled on the old fragmented structures of knowledge and organizations. Although there is some movement in both education and work toward more integrated structures and interdisciplinary programs, progress is slow. One of the answers to this question in the last 25 years has been systematic interventions in schools and colleges to educate students about stereotyping, socialization, and cultural sensitivity. Training programs in diversity in corporations and equity programs in schools and colleges have become very common.

6. Does ILP apply across cultures, and is it "culturally valid"? One thought this question raises for me in the twenty-first century is whether different cultures need to start vocational guidance with matching models and later evolve toward more holistic approaches or create their own indigenous models. Experiences conducting workshops and seminars with participants in several cultures convince me that there is no single answer to this question. Each culture needs to identify those tasks most important for its context and cultural values and determine where it is on a continuum of change.

At a seminar in Sweden in 1996 (Swedish Career Counselors Professional Development Seminar, Goteborg, Sweden, June), a difference of opinion was
expressed about where Sweden was in relation to the critical task of negotiating roles and relationships of women and men (i.e., how far ahead of other countries Sweden is in the equal status of men and women). There was strong agreement, however, on the life task of learning to deal with difference, a life task that has become more important with the influx into Sweden of many immigrants. A conference of the Career Development Association of the Philippines (Philippines National Career Development Association Conference, Manila, Philippines, November), which in 1996 selected ILP as its theme, reported a great deal of congruence between ILP and the Philippine values for family, wholeness, and spirituality.

How appropriate is it to transplant culturally based models to another culture? Can individualistic models be adapted to collectivist cultures? Leaders of change in each country need to look at the cultural gaps, biases, and blind spots, as Leong (1999) suggested, as well as the potentials, in deciding if ILP or other holistic models are appropriate to apply across cultures at a given time. The state of the economy, political structures, and cultural values certainly have an influence on such decisions. It is likely that holistic approaches to life planning will be more attractive in times of a thriving economy and low unemployment (such as at the end of the 1990s in the United States) and in developed more than developing nations. However, counselors from a range of cultures, including South Africa, Sweden, Japan, Romania, Venezuela, Jamaica, Kuwait, and Portugal, have applied aspects of ILP in their work.

7. What are the forces for and against using more holistic approaches to career and life development? Many of the forces for incorporating integrative thinking and life planning into career development have been alluded to earlier in this article, but a few more comments are in order. Among the forces against using an integrative approach are lack of money, time, and training. Parsonian counseling is much simpler and easier to teach and use, whereas holistic approaches, by their very nature, are complex and evolve over the life span. Matching models may be used as the most appropriate first steps with clients in poverty and on welfare, yet achieving wholeness should not be reserved for the economically privileged. Counselors generally have not been trained in the use of integrative models because the models have not yet found their way into many counselor preparation programs. A legitimate question is can a society afford to help its members develop holistically?

These are all good questions but not easy to answer, and the answers are not complete. At the beginning of the new century, it is appropriate for career counselors who see themselves as change agents to remember the words of Arthur O'Shaughnessy, who in his life wrote one poem sometimes called "Shakers and Movers." The last line is "Each age is a dream that is dying, or one that is coming to birth" (1955, pp. 976-977).

There will be dreams that die with the old century and new dreams that emerge with the new contexts, challenges, cultures, conflicts, and changes. Career counseling and guidance can move with the changes to make a greater difference in people's lives by
helping them connect the parts of their own lives and connect with others in community for the common good.

Epilogue

To conclude, ILP is strongly grounded in democratic values and a concern for social justice. Perhaps this is one characteristic that distinguishes it from other holistic career planning models. The work of Freire and his conscientizacao (consciousness raising) is relevant to ILP. Freire stressed the importance of "learning to perceive social, political, and economic contradictions and to take action against oppressive elements of reality" (quoted in Ivey, Ivey, & Simek-Morgan, 1993, p. 9). He also emphasized the process of developing critical consciousness, stating that "one of the purposes of education [and I would add, career counseling] is to liberate people to awareness of themselves in social context" (p. 94). Perhaps more important, he sees liberation as a process of people "reflecting upon their world in order to transform it" (p. 94).

To return to the quilt metaphor, in this article I have tried to put the pieces of the ILP quilt together in a way that is helpful and meaningful to career counselors who are entrusted with the humbling and significant task of helping people of all ages make choices and decisions in their lives--putting their own life quilts together. One thing seems certain: More and more people are wanting, as the ancient Greeks urged, to "see things steadily and see them whole," to have a sense of wholeness in their own lives and in the larger community.

As counselors and career professionals, we are also quilters in the lives of our children, clients, students, and employees, helping them to design the roles and goals of their lives and to see how the pieces fit together. We are quilters in our organizations and institutions, as we work to make them more humane places. Finally, we are quilters on the planet, seeking to connect with each other, to make the world a better place, and to shape our lives and communities for the common good. These seem to be important tasks for career development in the new millennium.

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References


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This article briefly chronicles selected major events and personalities that have stimulated and shaped career development practices in the 20th century. In its headings by decades, the article seeks to contextualize major political, social, economic, and scientific themes that have influenced the evolution of models of career behavior, career interventions, and the preparation of counselors to engage in the practice of career development.

As suggested in the first article of this special issue "Career Development and Its Practice: A Historical Perspective" (Herr, 2001), there are many events and persons that have shaped the practice of career development in the twentieth century. The following compilation of such influences is not exhaustive, but it does provide a decade-by-decade chronicle of the selected social, political, and economic events and the responses to them that have affected the contemporary legacy on which career development practices will build during the twenty-first century.

1900-1920

Significant questions about the focus of education; World War I; expansion of vocational education; rising concerns for mental hygiene

Frank Parsons founded the Breadwinner's College in 1905 to provide vocational training and guidance.

The Vocation Bureau, founded by Frank Parsons, opened in Boston and is recognized as the first organization to provide a systematic process for providing vocational guidance and counseling. Its services were subsequently incorporated in the public schools of Boston.

Frank Parsons's book Choosing a Vocation was published posthumously in 1909. He provided the original conceptual and process elements of vocational guidance and vocational counseling.

Jesse B. Davis organized a program of vocational and moral guidance in the schools of Grand Rapids, Michigan. The program included counseling with respect to courses and extracurricular activities.

Binet introduced his intelligence scales in the United States in 1907.
In 1910, delegates from a variety of organizations and institutions attended the first national conference on vocational guidance held in Boston under the leadership of David Snedden, Frank Thompson, and Meyer Bloomfield.

Meyer Bloomfield succeeded Parsons as head of the Vocational Bureau in Boston; he taught the first vocational-guidance course at Harvard University in 1911.

In 1913 the American edition of Hugo Munsterberg's work in Germany, Psychological and Industrial Efficiency, was published in which experimental psychology was applied to vocational choice.

The National Vocational Guidance Association (NVGA) was formed in 1913 in Grand Rapids, Michigan. Its first publication, the Vocational Guidance Bulletin, was started in 1915.

The U.S. Bureau of Education published Bulletin No. 14, Vocational Guidance, which summarized the papers presented at the organizational meeting of NYGA in 1913.

The Army Committee on Classification of Personnel, in developing and administering the Army Alpha and Beta tests for use in World War I, laid a base for occupational classification and selection in the civilian sector and stimulated concern about guidance and counseling's growing emphasis on classification and selection.

The Smith Hughes Act of 1917 provided reimbursement for vocational guidance services.

The U.S. government instituted programs in 1918 for World War I veterans with disabilities, marking the beginning of vocational rehabilitation counseling.

In 1918 the National Education Association caused deterioration in the early partnership between vocational education and vocational guidance because it accepted a craft rather than a technical training emphasis in vocational education and a guidance-for-education rather than for-jobs conception of vocational guidance.

The U.S. Bureau of Education (the forerunner of the U.S. Office of Education) published the Cardinal Principles of Secondary Education in 1918, in which were cited areas of student behavior to which many observers related guidance (e.g., vocation, citizenship, worthy use of leisure time, ethical character).

1920-1940

Concern about the dignity and rights of children; psychometrics flourished; economic depression caused concern about job placement and unemployment. Technological unemployment and worldwide depression were major social issues.
George-Reed (1920), George-Elizy (1934), and George-Dean (1936) Acts provided direct support to guidance by providing reimbursement for vocational-guidance activities.

The U.S. Employment Service was created by the Wagner-Peyser Act (1933).

The Occupational Information and Guidance Service was established under George-Dean Act funds in the Division of Vocational Education, U.S. Office of Education (1938).

In 1939, the Dictionary of Occupational Titles was published by the Bureau of Labor Statistics, U.S. Department of Labor; in 1940 the Occupational Outlook Service was established in the Bureau of Labor Statistics.

A major view of the period was that guidance had two major functions: distribution, helping students to find educational-vocational opportunities effectively, and adjustment, helping students adjust to environmental requirements. A contrasting view emphasized that guidance was a clinical process that rested on the work of applied psychologists concerned with the measurement of individual differences.

The depression emphasized a placement approach in vocational guidance.

1940-1950

World War II; women entered the workforce in unprecedented numbers; higher education expanded to absorb veterans; postwar economic and industrial expansion; Cold War began with the Soviet Union.

Carl Rogers published Counseling and Psychotherapy (1942), which conceived of counseling as concerned with other than traditional medical models and disease entities and of the counselor as a directive authority.

During World War II, women successfully worked in manual and technical jobs previously reserved for men.

Experimental use of the General Aptitude Test Battery by the U.S. Employment Service was initiated in 1945.

Return of veterans to society spurred the use of classification tests and the importance of career guidance and counseling at secondary and postsecondary levels.

George Barden Act authorized salaries and travel expenses of vocational counselors and supported counselor-training courses. As such, it spurred certification of counselors, the definition of and provision of suitable content for appropriate courses at the graduate level, and the professionalization of counselors.
The Occupational Outlook Handbook was first published in 1948.

1950-1960

Korean War; Sputnik launched, thus causing widespread debates about American education; education and guidance seen as instruments of national defense

In 1951, the historic NVGA definition of vocational guidance is changed from an emphasis on what is to be chosen to the nature of the chooser.

Carl Rogers published Client-Centered Therapy (1951), which conceived the helping relationship in terms of the provision of specific ingredients of a therapeutic situation.

In 1951, the NYGA, the American College Personnel Association, the National Association of Guidance Supervisors and College Trainers, and the Student Personnel Association for Teacher Education merged to form the American Personnel and Guidance Association (APGA), the predecessor of the American Counseling Association (ACA).

In 1951, Donald Super launched the Career Pattern Study, introducing the concept of vocational development.

In 1952, The Vocational Guidance Quarterly, the predecessor to the Career Guidance Quarterly, began.

In 1956, for the first time a computer successfully completed a simulation of human problem solving.

Sputnik was launched (1957), thus initiating a reappraisal of the offerings and rigor of the American high school and of the need to identify and encourage students with potential to be scientists.

In 1957, Super published the Psychology of Careers, which laid out the rationale and the processes to view vocational guidance not only in terms of immediate choice but also in broader perspectives involving intermediate and future goals. The book applied the emerging perspectives of career development theory to choice behavior, presented a developmental-task concept of career development in different life stages, and emphasized the importance of the self-concept as the organizing mechanism of career behavior.

Titles V-A and V-B of the National Defense Education Act of 1958 required states to submit plans to test secondary school students so that academically talented students could be identified and encouraged to enter the hard sciences and other forms of higher education; funds were provided for extensive training of secondary school counselors. Title V-A provided funds for support and development of local school
guidance and counseling programs. Title V-B appropriated funds for counseling and guidance institutes for the purpose of upgrading the qualifications of secondary school counselors. The act, which initiated an enormous increase in the number of school counselors across the nation in addition to the identification of academically talented students, also included provisions supporting the career development of students by counselors.

Career-development and vocational-development theories emerged in the works of Eli Ginzberg, Donald Super, Anne Roe, John Holland, and David Tiedeman

1960-1970

Civil rights movement escalated; war in Vietnam caused major values upheavals and economic difficulties; major federal legislative outpouring to counteract unemployment, poverty, and other social ills; "Do your own thing" became a credo; rise in professionalism; computer-assisted career guidance systems begin to emerge as important complements to career guidance and career counseling

Third edition of the Dictionary of Occupational Titles was published.

Major expansion of vocational education occurred under the Vocational Education Act of 1963 and the Amendments of 1968; the emerging notions of career development theory were apparent in the legislation.

The Vocational Education Act of 1963 specifically stated that vocational guidance and counseling were to be provided to students planning to enroll or enrolled in vocational-education courses.

Civil Rights Act passed in 1964. The civil rights movement accelerated the democratization of educational and occupational opportunities for those in minority groups.

In 1964, Henry Borow edited Man in a World at Work, the 50th anniversary volume of NVGA and the first NVGA decennial volume.

In 1966, John Holland authored The Psychology of Vocational Choice, the first book-length discussion of his theory.

The women's rights movement heightened concerns about the need for guidance efforts to reduce effects of sex stereotyping and sex bias in student choice making and in access to occupations.

Vocational and career development theories began to be used as organizing content for guidance programs.
Vocational Education Act Amendment of 1968 advocated a need for career programs, responses to the disadvantaged and physically handicapped, and the expansion of a broadened concept of guidance and counseling, including its extension into the elementary schools. These pieces of legislation stimulated a large number of national and state conferences on vocational guidance, innovative projects in career guidance, counseling, and placement.

Counselor education programs mushroomed.

1970-1980

International tensions rose; energy problems emerged; unemployment, particularly of youth, became a major issue; concerns about over education and a lack of technical education; concerns about survival skills

In 1971 career education was introduced as a priority of the U.S. Office of Education. The Educational Amendments of 1974 made career education a law of the land and initiated the Office of Career Education in the U.S. Office of Education. Kenneth Hoyt became commissioner of career education.

In 1974, Herr edited Vocational Guidance and Human Development, the second NVGA decennial volume.

The Career Guidance and Counseling Act of 1975 was introduced into Congress under the leadership of APGA. Although it was not passed by the Congress, its language and concepts appeared in later pieces of legislation.

The Educational Amendments of 1976 included major support for guidance and counseling in Titles I, II, and III; Title II provided major support for vocational guidance.

Pressures for accountability in guidance and counseling mounted.

Fears of economic crisis and concerns about widespread unemployment among youth continued to spur career and vocational guidance emphases.

1980-2000

Many political changes swept the world: the Cold War ended; apartheid ended in South Africa; many nations formerly under Communism moved to market economies; the global economy became a reality; the practice of career development became a worldwide phenomenon; computer-assisted career guidance systems grew in number and capability; women and minorities became major sources of new entrants to the workforce.
In 1982, the Joint Training Partnership Act (JTPA) replaced the Community Employment Training Act (GETA), providing career guidance for disadvantaged youth and for workers needing retraining.

In 1982, Carol Gilligan published In a Different Voice, stimulating renewed attention to the differential career behavior of women and men. Other women theorists advanced these perspectives in important conceptual and empirical work.

Comparative studies of the effects of computer-assisted career guidance systems with and without counselor assistance to users began to appear in the professional literature.

In 1984, Norman Gysbers edited Designing Careers: Counseling to Enhance Education, Work, and Leisure, the third NVGA decennial volume.

In 1984, the Carl D. Perkins Vocational Education Act advocated programs designed to improve, extend, and expand career guidance and counseling programs to meet the needs of vocational education students and potential students. Subsequent Perkins Acts in the 1990s (e.g., Carl D. Perkins Vocational Education and Applied Technology Acts) continued to provide major fiscal support for career guidance.

In 1984, the Report of the National Commission on Secondary Vocational Education, The Unfinished Agenda, advocated that comprehensive career guidance programs be available to all students and, in philosophy at least, reaffirmed the importance of strong career guidance programs to vocational education.

In 1984, the credentialing of nationally certified career counselors (NCCC) was initiated.

In 1985, the NVGA changed its name to the National Career Development Association.

In 1986, The Vocational Guidance Quarterly was renamed The Career Development Quarterly.

In 1992, the Americans with Disabilities Act (ADA) was passed, requiring employers to provide reasonable work accommodations to persons with disabilities.

The Internet grew rapidly throughout the 1990s, incorporating job search and career counseling Web sites. New ethical questions emerged concerning the preparation for and use of the Internet by career counselors.

In 1994, the School-to-Work Opportunities Act provided funds for and advocated career exploration and counseling.
In 1998, the Workforce Investment Act provided career guidance and counseling for disadvantaged youth, adults, and dislocated workers.

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Recommended Reading List


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The purpose of this article is to set out the key elements of the Chaos Theory of Careers and to illustrate how these fundamental concepts are particularly relevant to contemporary career development. In the process, we show how we have applied some of these concepts to counseling practice and have used a time-honored, but infrequently acknowledged, method of reasoning in an effort to illustrate how the demanding aspects of chaos theory can be communicated in user-friendly ways.

Traditional approaches to career development typically aim to understand the key attributes of the person and then match these to compatible or congruent environments (jobs). A recurring theme in the criticisms of traditional person-environment fit models by authors such as Savickas and Baker (in press); Krumboltz (1979); Mitchell, Levin, and Krumboltz (1999); Vondracek, Lerner, and Schulenberg (1986); and Lent, Brown, and Hackett (1996) is that the person-environment interaction has been characterized in trait-oriented terms (e.g., Dawis & Lofquist, 1984; Super, 1990). The relatively static nature of the terms of the interaction, person and environment, is no longer appropriate, given the complexities and change that are observed in modern careers. Arnold (2004) noted that congruence between the person and environment has been shown in several metastudies to correlate poorly (between 0.1 and 0.2) with outcome measures such as satisfaction (e.g., Assouline & Meir, 1987; Tranberg, Slane, & Ekeberg, 1993; Young, Tokar, & Subich, 1998). Arnold high-lighted the problem by observing that the concept of congruence in J. L. Holland's (1997) theory accounts for only 1% to 4% of the outcome measure variance. He proposed 14 problems with the theory, including inadequate conceptualization of the person and the environment, inadequate measurement of the environment, and the fact that job environments are increasingly demanding variety and diversity and that jobs are continually changing.

Several of vocational psychology's leading authorities (e.g., Mitchell et al., 1999; Pryor & Bright, 2003a, 2003b; Savickas & Baker, in press) have openly questioned the continuing value of traditional person-environment fit models of career choice, wondering whether they fail to capture adequately the complexities, uncertainties,
and dynamic aspects of modern work. As Savickas and Baker have pointed out, "With less stable personalities and occupations, vocational psychology's basic model of person-environment fit with its goal of congruence seems less useful and less possible in today's labor market."

Career theorists are increasingly interested in approaches that characterize the individual and the environment in more complex and dynamic terms than the traditional person-environment approaches. Vondracek et al. (1986) directed attention to the multiplicity of contextual factors in career development. Mitchell et al. (1999) explored the role of unplanned events in career choice. Patton and McMahon (1999) used systems thinking to illustrate the complex interconnectedness of multivariate influences on individuals' career decision making. Savickas (1997) focused attention on individuals' capacities for change and creativity in the crafting of a career. As an extension of such thinking, we pose the question, "What conceptual framework of careers might be able to incorporate coherently such new ideas as complexity, change, and chance?"

Recently, several authors (e.g., Bloch, 1999; Drodge, 2002; Pryor & Bright, 2003a, 2003b) have begun to investigate the potential of chaos and complexity theory to explain career behavior. Chaos theory challenges traditional approaches to scientific explanation and goes to the heart of issues relating to what can be known and how it can be known. In chaos theory, two key concepts are nonlinearity and recursiveness. In linear systems, all the elements add up to make the whole, such as a credit card balance being equal to the amount of money spent plus interest and plus a monthly card fee. A nonlinear system is characterized by the elements adding up to more (or less) than the sum of the parts. For instance, the air time a song receives on the radio increases as the sales of the song propel it up the charts, which, in turn, increases the air time the song receives. In this scenario, the sales and airplay increase rapidly and nonlinearly. Of course, the final outcome sees a sharp decline in sales and airplay as the market becomes saturated and also tired of the song. This example also includes recursiveness—one variable influences another, which in turn influences the first one, and so on. Chaos theory (Gleick, 1988; Stewart, 1989) presents an account of the recursive application of several nonlinear equations to system behavior, resulting in elements of both stability and susceptibility to sudden and dramatic change at the same time. Furthermore, chaotic systems display other characteristics such as a lack of predictability at the micro level, while at the same time appearing to have a degree of stability at the macro level. In addition, their nonlinear nature means that minor events can have a disproportionate outcome on the system. Such ideas are permeating many areas of contemporary science. To cite just one example from Peacocke (2000), "[W]e know, through key developments in theoretical biology and physical biochemistry, that it is the interplay of chance and law that allows the matter of the universe to be self-creative of new forms of organization" (p. 44).

Chaos theory describes a series of features of complex system behavior that many social science researchers have identified in their own areas of study. For instance, in social psychology, Arrow, McGrath, and Berdahl (2000) have described in great
detail how the tenets of chaos theory provide a compelling account of small group behavior. They highlighted how chaos theory can provide useful insights into the development of teams, how conflict arises in teams, and how teams adapt to change. In the management literature, Stacey, Griffin, and Shaw (2000) presented chaos theory as a way to consider change, creativity, and crisis in organizations. They highlighted how traditional systems approaches in management theory are conceptually and practically flawed in approach and scope and why chaos theory provides a more complete account of human behavior in organizations and of the behavior of the organizations themselves. Chaos theory approaches to counseling have been applied in psychoanalysis (Van Eenwyk, 1991) and in family therapy (Chubb, 1990). Duffy (2000) outlined how the tenets of chaos theory might be useful in assisting a worker whose career has plateaued.

In fact, careers counselors are already confronting the realities of 21st century career development, including the implications of complexity, chance, and change, with their clients. Chaos theory may provide a theoretical basis for career counseling practice and a conceptual framework through which further counseling advances might be made.

Career Counseling and Prediction

A prerequisite to adopting a chaos theory approach is to accept that career development is subject to a wide range of different influences, many if not all of which are continually changing at different paces and in different degrees. In other words, career development and the influences upon it are highly complex. Furthermore, it is increasingly accepted that career behavior is influenced by unplanned and chance events to a much more significant degree than has been typically acknowledged (e.g., Bright, 2003; Bright, Pryor, & Harpham, in press; Bright, Pryor, Wilkenfeld, & Earl, in press; Mitchell et al., 1999; Osipow, 1973; Williams et al., 1998). Incorporating this wide array of influences and acknowledging the central role of chance events in careers, however, present a significant challenge to the possibility of accurate prediction. This challenge is important, because often when providing career advice, career development professionals are explicitly or implicitly making predictions about the suitability of different courses of action or jobs for a client on the basis of past behavior, knowledge, skills, or interests. As Savickas (1997) said, "the career counselor's job is to see life prospectively, to extend a life theme into the future" (p. 14).

Abduction and Communication

The difficulty for both counselors and clients of grasping some of the fundamental notions of chaos theory is not to be underestimated. Moreover, chaos theory acknowledges the finitude, and therefore the limits, of the capacity of human understanding. This appears to contradict the aspirations of much previous science, which emphasized the apparently boundless ability of humans to research, understand, and control the world and the things in it. Various attempts by writers in
the counseling field (e.g., Amundson, 2003b; Gabriel, 2000; White & Epston, 1990) are being made to use metaphors, myths, archetypes, poetry, heroes, and stories to deal with the challenges of complexity, change, and chance that their clients face. In doing so, they point to a form of reasoning that is different than the forms that are typical of "scientific psychology." The traditional forms of reasoning in scientific psychology have been deductive reasoning (syllogistic logic) and inductive reasoning (generalizing from observation). However, drawing on the work of Bateson (1979), Patton and McMahon (1999) indicated that an additional form of problem solving, called "abductive reasoning," should be used. Unlike the traditional forms of reasoning, abductive reasoning is not linear but lateral; it deals with patterns and relationships and accepts that all knowledge is open to doubt and revision and open to interpretations from different perspectives. It is often analogical in form, such as techniques based on metaphor and myths. Duke (1994) was one of the earliest researchers to argue that chaos theory can be usefully applied in psychology, pointing out that its application was likely to be analogical and metaphorical in nature. Following this lead, we proffer the following vignette to illustrate some of the major concepts of the Chaos Theory of Careers.

Ping-Pong Balls and Puppies: An Abductive Illustration of the Chaos Theory of Careers

Imagine you are in a room alone with a Ping-Pong ball. If you repeatedly drop the ball from waist height, you can be fairly confident of correctly predicting that it will fall to the ground somewhere near your feet. We call this Scenario 1.

However, suppose now that an eager ball-chasing puppy is in the room with you and also that a strong electric fan is brought into the room, placed near you, and switched on. Now, when you drop the Ping-Pong ball, how certain can you be that the ball will land near your feet? Presumably much less certain, because the puppy might catch it or the fan might blow it off course. We call this Scenario 2.

Now suppose there is a pack of eager puppies in the room and a series of electric fans; someone has opened the window and a howling gale is blowing; and, furthermore, you are now obliged to stand on an electric treadmill programmed to randomly vary its speed! Now when you drop the ball, how confident are you that it will land near your feet? Indeed, how confident are you in making any prediction about where the ball might end up? We call this Scenario 3.

In Scenario 1, the system is very predictable for two reasons. First, the person and the environment are fairly static and unchanging. Second, there are no unplanned events intruding. This is essentially the world as characterized in traditional person-environment models of career development, such as J. L. Holland's (1997).

In Scenario 2, there is a broader range of variables with the addition of the puppy and the electric fan, but we are probably still confident of working through most of the possible outcomes. In career development terms, this is not dissimilar to frameworks
such as Gottfredson's (1981), in which gender, prestige, and interests are characterized as the key influences on career choice. With the "zone of acceptable alternatives," there is a constrained influence of happenstance (Chen, 2002).

In Scenario 3, there are many different variables to consider: Each puppy has a mind of its own, the treadmill is randomly programmed, the airflow is confused by the various fans blowing, and the gale force winds outside will all combine to confound our attempts at predicting where the ball will go. Such a scenario is closer in spirit to the wide range of influences identified by Krumboltz (1998) and Lent et al. (1996). This scenario also resembles the type of complex dynamic system that can be well accounted for in chaos theory (Pryor & Bright, 2003a). Here is an example where broad predictions can be made about the future behavior of the room. For instance, the ball will end up somewhere. It is highly likely the ball will remain in the room, because the gale force winds blowing in are more powerful than the fans in the room. So in the short term, we can make broad predictions, but we are unlikely to be able to make specific and accurate predictions. In the longer term, due to the characteristics of the system, things could alter dramatically, thereby making prediction impossible. For instance, if the gale abated, it is possible the ball would be blown out of the room, or a dog with the ball in its mouth could escape through the open window. If either of these happened, the dynamics of the system would be radically altered. Either one would have to find something other than the ball to drop or go after the ball (and the puppy).

Stacey et al. (2000) argued that chaotic systems are predictable at the global or macro level, but only in qualitative terms. In the short term, they argued, short-range, micro-level predictions might be possible, but these will have little or no bearing on long-range predictions. In Scenario 3, in order to make accurate long-range predictions, it would be necessary to measure the effect of every minor alteration of the initial state of the person, the treadmill, the fans, the outside weather, and those pesky puppies! The number of possible ways that all these states could vary--and the manner in which they could interact--makes it impractical and probably impossible to record. Arrow et al. (2000) argued that chaos approaches to prediction differ in three crucial respects from "positivist-reductionist analytic" approaches:

1. The operation of the system is observed in its entirety and not in terms of the directional causal effects of specific individual features.

2. The rules and principles that govern the interaction of individual features are investigated rather than trying to predict the exact values of specific variables.

3. The focus of interest is on how the system changes over time--its trajectory--and not the "average" levels of certain variables over time.

In the career development literature, there is evidence that the unpredictability of life experience does influence career paths. For instance, Morrison (1994) found that a group of people with similar Holland codes diverged in their career paths over time.
in ways that were not predictable from the original descriptions of their Holland types. Bright, Pryor, Wilkenfield, et al. (in press) found that 70% of a large sample of university students reported that their careers were significantly influenced by unplanned events. These events ranged from unplanned meetings to illness to messages from God.

In summary, what we have described in the Ping-Pong ball analogy is a complex or chaotic system because it contains the key elements of chaotic systems: complexity, emergence, nonlinearity, unpredictability, phase shifts, and attractors. In the remainder of this article, we highlight how these chaotic elements apply to career behavior and suggest how they might be used in counseling.

Complexity and Career Counseling

Careers are influenced by parents, social and environmental context, gender, age, political and economic climate, interests, abilities, geography, and many other events (Patton & McMahon, 1999). All of these factors, and many more, are inherently unpredictable and subject to change. For instance, economies can change rapidly and unexpectedly, political scandals can emerge from left field to change the political landscape, and acts of terrorism can have profound influences on career behavior (e.g., negative impacts on tourism, impacts on the victims and their families and communities). In counseling terms, career counselors must take this complexity into account and encourage clients to reflect on the variety of influences in their lives.

The emphasis here is on understanding processes and influences and how these have shaped and continue to shape individuals' experience of the world. Narrative counseling techniques emphasize the role of story and construction in understanding careers (Amundson, 2003a; Savickas, 1997). Narrative provides a vehicle for understanding the motive processes in a person's career. It focuses on interests--as understood in the word's derivation from "between-being,"--such as those described by Savickas (2005) in which he described career construction in the following terms: "[I]ndividuals construct their careers by imposing meaning on their vocational behavior and occupational experiences" (p. 43). Savickas argued that constructivist counseling focuses not on the person or the environment of the person-environment fit, but rather on the "----" (i.e., the series of dashes) that make up one's career. Such an approach is entirely consistent with the chaos theory's emphasis on understanding the process and the patterns in careers rather than on defining or predicting stable variables as outcomes.

The complexity of the influences on career alerts career counselors to the need to avoid traditional approaches of seeking causes or trying to explain behavior in terms of one factor influencing another factor. Rather, counselors should look at each client in that client's entirety and then help the client understand the patterns and processes in his or her life. Counselors should not try to "narrow down" conversations to only "career-related" topics. Clients should be encouraged to reflect on many different aspects of their lives, such as their familial circumstances, their childhood, their
hobbies, their reading, and key events and tragedies, and on more general environmental factors, such as global political issues and concerns. Clients should be encouraged to reinstate contextual factors when recalling previous career decisions. Techniques for working with clients using these techniques can be found in Bright and Pryor (2003) and Pryor and Bright (2005).

Emergence and Career Counseling

Essentially, emergence is a process that runs in a counter direction to reductionism (Morowitz, 2002). The latter, traditional, scientific approach is to seek ever narrower, more precise explanations of behavior in terms of the nature of the constituent system agents. The problem with always looking at finer and finer distinctions is that interaction of the components is neglected. In sport, for example, a team of champions is not the same as a champion team. Teams have properties over and above the total of the skills and performance of individual players. Teamwork, morale, combinations of moves, strategies of play, and so on cannot be accounted for by specific reference to each particular team member. As Polkinghorne (2000) noted about science in general, "there are two levels of description. One involves energy and bits and pieces. The other involves the whole system and pattern" (p. 135).

Emergence involves going up a level or more in description to look for patterns of behavior that appear to emerge from the complexity. Inevitably, such approaches appear to lack the scientific precision of measurement that is often claimed in reductionist approaches, and the forms of description are typically qualitative, such as narrative, analogy, and metaphor. In such an endeavor, the emphasis becomes to describe the system behavior in ways that are meaningful to clients at their current stage and understanding of themselves, as opposed to trying to "nail" the essence of a person or making long-term predictions. In pursuing this goal, career counselors recognize the limitations of their knowledge, in that they can never fully know what influences a person or how that person will respond in the future. However, career counselors can attempt to identify some of the emergent patterns of behavior and link these to past career events. In this way, clients can come to a greater understanding of how their life story is playing out; this, in turn, can provide them with some ideas for future career exploration.

Emergence as a counseling process essentially makes sense of the client's past behavior in terms of themes, narratives, preoccupations, and the unpredictable nature of a range of influences in the past. The role of counselors in this process is to assist their clients to understand their career behavior and to highlight the range of influences, including happenstance, on their careers. Then, techniques for capitalizing on some of these influences, events, and themes can be developed with the client (e.g., Krumboltz & Levin, 2004).
Nonlinearity and Career Counseling

As J. H. Holland (1995) demonstrated, nonlinear equations prevent the description of behavior in terms of aggregates or averages, because very small changes in an input variable can lead to dramatic changes in the output. This is the essence of nonlinearity: There is potential disproportion between a change in one part of a complex system and its subsequent effect in another part of the system. Strogatz (2003) argued that most things in nature are nonlinear, whereas linear equations tend to describe idealized situations (such as somebody dropping a Ping-Pong ball in the absence of any complicating factors like puppies and fans). Strogatz argued that "every major unsolved problem in science from consciousness to cancer to the collective craziness of the economy is non linear" (p. 182). In nonlinear systems such as career behavior, small or seemingly trivial events can have significant career implications. For example, a young engineer working for a construction company has one sick day off in the first 2 years that he is with the company. However, that is the day an urgent overseas project meeting is held. A team is assembled from those attending the meeting and within a few days is sent to work on the project. Subsequently, the project is a great success, and all those on the team are promoted ahead of our only slightly sick, but certainly hapless, young engineer who only missed one meeting.

Memon (1999) recommended that clients be asked to recall everything, no matter how trivial, when the aim is to obtain a full understanding of a past event, because it is the seemingly trivial that can shed light on the significant subsequent event. Savickas (1997) recommended that counselors listen carefully to the language used by clients, because language can reveal important information about their preoccupations and, hence, how they may behave in the future. In chaos theory, the future is conceptualized not principally as some place or time out on the horizon; rather, the future is essentially an individual's next thought, word, or action. Furthermore, nonlinearity reminds the counselor that interventions do not need to be large, long, or painful to effect change in a client's career. Nonlinearity means that a single word may be sufficient to effect change. For example, one of the authors of this article was 14 years old when, after irritating his high school Spanish teacher through classroom misbehavior, he was chastised, with the teacher saying "when you go to university you will not be able to behave like that." Had the teacher said, "if you go to university," it would have had little impact. The use of the word when and the backhanded high expectation were sufficient to change the 14-year-old's self-efficacy and expectations after having never considered himself able to gain entry to college.

Unpredictability and Career Counseling

In career development terms, chance events can and often do have significant influences on an individual's career (e.g., Bright, Pryor, & Harpham, in press; Bright, Pryor, Wilkenfield, et al., in press; Krumboltz, 1998). Career counselors must encourage clients to explore the impact of chance in their careers and find ways to
help clients capitalize on chance events. As Gelatt (1991) termed it, they must encourage clients to embrace positive uncertainty. Krumboltz and Levin (2004) have set out a series of principles to assist individuals to capitalize on chance events.

Helping clients to understand the uncertain nature of careers can definitely be a challenge. First, clients' expectations of career counseling typically involve some notion of the counselor narrowing down a wide array of possible steps or jobs to a manageable few options and, hence in so doing, reducing the uncertainty of the future. Consequently, attempts by the counselor to increase or underline the high level of uncertainty in life may be met with active resistance or pessimistic fatalism. Second, when clients think of chance events, they tend to bring to mind situations in which they have little or no control over the aftermath of the event, such as being injured in a motor vehicle accident requiring a month in hospital. Typically, a client does not consider the events in which he or she has a great deal of discretion over the outcome, such as unexpectedly meeting someone at a party who suggests that the client contact him or her at work the following week to discuss a job opportunity. In this circumstance, the client has much more discretion over whether to capitalize on this event by making an appointment or failing to do so by ignoring the invitation.

Conversely, discussing happenstance in a client's life can often serve to relax him or her and remove the self-imposed burden that some clients carry to present all of their career decisions and history in strictly rational terms. When clients present their history in rational terms, they are very often overlooking or ignoring the chance events, and the opportunity can be lost to discuss strategies to stimulate future positive chance events.

Counselors might wish to ask questions about unplanned and unpredictable events when asking their clients about their past. They can normalize chance events by citing statistics that show that most people report that chance events have played a major role in their life. Furthermore, they could work with clients to develop strategies to capitalize on chance events in the future (Pryor & Bright, 2005).

Phase Shifts and Career Counseling

In the scenarios presented earlier, a small change in the behavior of one of the fans could have blown the ball out of the room. This could change the dynamics of the system radically. The function of the system, the person's behavior, might change from an investigation of gravity to a search for a Ping-Pong ball. Similarly in careers, people can undergo radical changes in career direction. Sometimes, this is caused by significant external events such as a major workplace injury. Alternatively, it can be more subtle: When an employee has attended countless pointless meetings previously and then is called on to attend one more, it may be the "breaking point" that provokes the employee to resign.
Using Attractors in Career Counseling

Just as a single job in a particular organization can be seen as a single set of interrelated influences or constraints (on a system), so, too, the person's work history, or career, can be seen as a more complex system. According to chaos theory, a common theme is patterns within patterns (Kauffman, 1995). Understanding how such patterns at differing levels of generality and complexity function has given rise to the adoption of the mathematical notion of "the attractor" within chaos theory.

Attractors are descriptions of the constraints on the functioning of a system. They are called attractors because they influence behavior by drawing it in particular directions or constraining the behavior in some way. Four major types of attractors are generally recognized in chaos theory.

Point Attractor and Career Counseling

The simplest is the point attractor. The point attractor describes behavior when the object in question (a thing or person) is attracted to one specific thing or point. In Scenario 1, the floor directly below is a point attractor for the Ping-Pong ball: The ball falls directly to the ground when dropped (in the absence of any complicating influences). In career terms, the point attractor could be a particular vocational goal--such as being promoted to the next level in the corporation. Point attractors generally occur when the individual or some other agency places artificial constraints on the individual's behavior. Person-environment fit models of career decision making (e.g., Dawis & Lofquist, 1984; J. L. Holland, 1997) are examples of point attractor models. They assume there is an optimal vocational direction or space in which personal interests or other personal attributes match suitable jobs. Constraining a client's behavior by imposing a point attractor can be motivational (i.e., by setting a goal), but chaos theory reminds individuals of the need to continually revise goals as they are seeking to attain them and also to make alternative plans in the event of unforeseen circumstances becoming insuperable barriers to the fulfillment of goals.

Counselors should recognize the strengths and weaknesses of goal-setting behavior. Goals have been demonstrated to be effective in motivating behavior; however, Landy (1989) pointed out that evidence for goal setting was far stronger in laboratory settings than when applied in real-life settings because of the complex and unpredictable nature of the world. Counselors should be alert for self-limiting behaviors characterized by setting overly narrow or unrealistic goals and encourage clients to develop resilience strategies or insurance policies to deal with unforeseen future events that prevent their reaching their goal. In addition, reality checking about the true value of the goal is a recommended action (Gelatt, 1991).

Pendulum Attractor and Career Counseling

The second form of attractor is called the pendulum attractor. A pendulum attractor constrains behavior to a regular, predictable pattern. Behavior can move from one
extreme through to a midpoint and out to an opposite extreme. The behavior then moves back toward the midpoint and out toward the original position. Behavior is regular, unchanging, and defined. Pendulum attractors might be observed in the career behaviors of clients who are torn between two career options. They gradually build up their determination to follow one course of action, and then this determination gradually recedes to indecision and then to intentions to follow the alternative course of action. In turn, the strength of this intention wanes back into indecision and ultimately back through to the conviction to follow the first course of action. Pendulum attractors are a reflection of significant constraints being imposed on career behavior, either self-limited or overly narrow thinking, or some external pressures, such as family pressure to study medicine combined with an individual interest to pursue psychology. Identifying the action of the pendulum (also known as periodic) attractor is an important first step in understanding the nature of the career indecision (Bright, 2003).

The pendulum attractor can be seen in clients who hold rigid and extreme beliefs. Such thinking is generally a barrier to effective thinking and hence prevents insights and the generation of solutions. Counselors should encourage clients to consider issues from multiple perspectives, and, in so doing, the clients appreciate that the problem is likely not to be reduced to a simple either/or scenario (Amundson, 2003a). Clients in the grip of pendulum thinking will rarely be able to generate win-win scenarios, and furthermore, solutions that present "balance" as the desirable outcome may be aggravating the situation by attempting to stop the pendulum at the lowest point!

Torus Attractor and Career Counseling

The third form of attractor is called the torus attractor. The torus attractor describes behavior that is more complex but that is still ultimately constrained and repeating. A client may perceive that his or her job is well described by this attractor. For instance, an indoor nurseryperson produces plants indoors all year round. He or she follows routines in terms of planting, nurturing, harvesting, and selling the plants. This person may see his or her world as predictable and repetitive; however, he or she is placing artificial constraints on business as a way to beat an inherent unpredictability: weather. Although the nurseryperson has gone to great lengths to minimize unpredictability, it cannot be removed entirely and it takes only a hailstorm to break a greenhouse or a disease to devastate the crop. In the same fashion, many people express feelings of boredom or frustration with what they see as endless routine. In thinking about their work in these constrained terms, however, they may be overlooking possibilities and opportunities for change.

This attractor can be the hardest to identify in clients and the hardest to demonstrate to clients, because the apparent complexity of its action serves to mask its ultimately bounded nature. Consequently, clients may perceive their careers as changing and varied while at the same time feeling empty or stuck in a rut (Covey, 2004). Appeals to creativity, uncertainty, and further change, as implied by chaos theory, may be
interpreted as more of the same and, therefore, may be rejected. The challenge here is to identify the routine nature of the career as constructed by the client and highlight how all possibilities within this structure can be ultimately anticipated. As a consequence, the lack of challenge may be exposed and understood. Clients may then need to be challenged about the barriers and constraints that they are placing on initiating phase-shift change in their lives (Amundson, 2003b). At this point, issues of purpose, meaning, contribution, and passion may need to be raised and confronted as the driving forces to motivate personal change by the client.

Strange Attractor and Career Counseling

The strange attractor is the attractor that typically characterizes chaos models. It is also the most complex and counterintuitive. Strange attractors, at one level, seem to have no constraints or rules governing their dynamics. Indeed, it may appear as though there are no patterns or relationships between their elements. In this sense, they are chaotic; however, over time and when considered from the appropriate perspective, a pattern, albeit exceedingly complex, can be discerned. It is characterized as never repeating, but self-similar. The identifiable and psychometrically assessed skills and traits of individuals are examples of such patterns. However, psychologists' limitations in predicting specific behavior at a particular future time from such assessed results may owe as much if not more to the inherent changeability of individuals as to the technical limitations of the measuring instruments.

Change and unpredictability are constants within the strange attractor. Minute changes in initial states can result in profound nonlinear changes in the behavior of the attractor. Furthermore, the strange attractor can reconfigure radically into a different attractor unpredictably and unexpectedly. In counseling terms, understanding a client's strange attractor in all its complexity, stability, and vulnerability will help both counselor and client understand current and past behavior and help prepare the client for his or her future journey. Counselors are increasingly using myths, mind maps, movies, metaphors, pattern identification, and client journaling, along with narrative therapy strategies, to encourage clients to explore the order and disorder of their experiences.

For clients, the goal of counseling is to gain an appreciation of their careers in all of their complexity. By recognizing the inherently unpredictable nature of their careers at the micro level and how this unpredictability can lead to possibilities at the macro level, clients can begin to develop strategies to deal with change and uncertainty at work. Such strategies might be risk-minimization strategies or more positive strategies to embrace and thrive on chance and uncertainty (Pryor & Bright, 2005). Furthermore, clients can be encouraged to consider patterns and themes—and the rich variety of influences upon them—and how small changes to any of these things may lead to profound changes in their careers. Counselors using this approach move away from notions of the ideal or perfect career and consider clients in their entirety and in
their context in order to assist them to discover purpose and meaning within their own frame of reference (Covey, 2004).

McKay, Bright, and Pryor (in press) recently compared traditional trait-matching approaches to career counseling with a chaos theory approach. Clients were randomly allocated to traditional, chaotic, and wait-list control groups. Outcome measures were used to assess such variables as satisfaction, self-efficacy, career exploration, and irrational career-related beliefs before, after, and 1 month after the counseling. The chaotic approach was found to be equal to or superior to traditional counseling and the control group on all the measures. We concluded that approaches using chaos theory that emphasize uncertainty, continual change, and adaptation have a legitimate role in career counseling and may be more appropriate and better received than the more traditional, static, matching approaches.

Conclusion

In this article, we have attempted to indicate the potential worth of the Chaos Theory of Careers (Pryor & Bright, 2003a, 2003b), which may represent a significant development in the understanding of career behavior. The theory deals with reality as individuals experience it as richly complex, nonlinear, and serendipitous. We believe this is why when we present chaos theory in presentations or individually in counseling, so many people--professional counselor and client alike--can identify with it. Chaos theory points to some of the neglected realities of career decision making, such as chance, unpredictability, the limits of knowledge at the point of decision making, the limitations of goals, and the nonlinearity of change. The Chaos Theory of Career Development also links career development with some of the most profound thinking in other parts of science (Pryor & Bright, 2004). We suspect that this approach is the only theoretically coherent account of chance, the unplanned, and serendipity in contemporary career development theory. The approach is inherently dynamic in nature and points to the importance of continual change and adaptation in careers, because both the careers of those around us and the world around us change.

References


Drodge, E. N. (2002). Career counseling at the confluence of complexity science and new career. M@n@gement, 5, 49-62.


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Complexity, Chaos, And Nonlinear Dynamics: A New Perspective On Career Development Theory

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The author presents a theory of career development drawing on nonlinear dynamics and chaos and complexity theories. Career is presented as a complex adaptive entity, a fractal of the human entity. Characteristics of complex adaptive entities, including (a) autopiesis, or self-regeneration; (b) open exchange; (c) participation in networks; (d) fractals; (e) phase transitions between order and chaos; (f) search for fitness peaks; (g) nonlinear dynamics; (h) sensitive dependence; (i) attractors that limit growth; (j) the role of strange attractors in emergence; and (k) spirituality, are described and then applied to careers. The article concludes with a brief case analysis and implications for practice and research.

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The human experience of work varies from joy to desperation, from the excitement of the new to the boredom of "been there, done that." For example, one would not expect a successful American actor at the height of his powers to say, "I felt desolate, disinterested in my work. How did this happen to me?" Yet, at age 55, this is just what Richard Dreyfus said of himself (Weinraub, 2001). In contrast, at age 70, Roget--doctor, explorer, inventor, and writer--on his retirement began work on his plan for something unseen before. That something was to become the familiar Roget's Thesaurus. Jung (1933) aptly described Dreyfus's dilemma in Modern Man in Search of a Soul. In it, he described what he called "the general neurosis of our time." "About a third of my cases," he wrote, "are suffering from no clinically definable neurosis, but from the senselessness and emptiness of their lives" (p. 61). He continued,

It is difficult to treat patients of this particular kind by rational methods, because they are in the main socially, well-adapted individuals of considerable ability, to whom normalization means nothing.... The ordinary expression for this situation is: "I am stuck." (Jung, 1933, p. 61)

Again in contrast, the poet Donald Hall (1993) described his feelings about work in "the best part of the best day," as one in which "absorbedness occupies me from footsole to skulltop" (p. 41).

Career counselors have taken as their mission to move people from being "stuck" to finding the work that leads them to "absorbedness" and, even more broadly, to work with people at every stage of life--youth to adulthood, middle age to elder status--so that all may achieve a sense of purpose and meaning in the work they do. To
accomplish this mission, career professionals have developed theories and theory-based methodologies and tools.

The predominant career theories, what might be called "classic career development," have been based primarily on the reductionist paradigms of science prevalent in all fields throughout the 19th and most of the 20th centuries. Reductionist approaches rely on an underlying understanding that finding and isolating all the parts will lead to the total or sum of knowledge about a phenomenon or organism, yielding reliable predictions and replicable interventions. This is the basis of what has been called the scientific method. The focus is on identifying structures and processes. Reductionist science has yielded many of the great discoveries that enrich contemporary life, from antibiotics that increase life expectancy to communications that appear to decrease distances around the globe. The same is true in career development. The two theoreticians whose work exemplifies the best of structure and process approaches are, respectively, Holland and Super. The Career Development Quarterly annual review for 2001 "indicates that Super and Holland continue to have a substantial influence on both research and practice in the field of career development and counseling" (Whiston & Brecheisen, 2002, p. 126). In addition, the authors of the review noted continued interest in the work of Parsons and in social cognitive career theory, two additional process theories.

However, in the late 20th century, many supposedly immutable truths were thrown into question not by those who simply questioned the truths but by those who had gone beyond doubting the individual beliefs to doubting the very system of thought in which the beliefs were constructed. The theory of relativity and subsequent discoveries in physics overturned the assumed limits of Newtonian or classic physics as certainly as Copernicus and Galileo overthrew the belief system of the ancients. Investigations into complex phenomena in both the physical and biological sciences have shown that an understanding of relationships, subsuming structure and function, is a more fruitful path to understanding all complex entities. These complex entities include not only all of life from single cells to human beings but also organizations from ant colonies to corporations. Because it is the nature of each entity to adapt to its environment and internal state to maintain its life, these entities may be dubbed complex adaptive entities. The theories that explain these entities fall under the rubrics of chaos theory, complexity theory, and nonlinear dynamics, the last being the more general term. Career development theorists and researchers have yet to explore these approaches in any detail. (A search of ERIC, all years; InfoTrac's One File, all years; PsycINFO; and ProQuest's ABI and Interdisciplinary Research Library, 1986-present for empirical research related to career and chaos, complexity, nonlinear, nonlinear dynamics yielded a total of two reports.) The career development theory presented in this article focuses on relationship and nonlinear dynamics. It is the theory of career as a complex adaptive entity, a theory that enables career practitioners to understand and explain what otherwise appears to be the messiness of life, a theory that reveals the underlying order in what otherwise appears to be random.
It should be noted that Savickas (Savickas & Lent, 1994) has been seeking convergence in career development theories since at least 1994. Subsequent to the initial development of this article, I read Savickas's (2001) outstanding piece that summarized the major career development theories and suggested a new approach to a unified theory of career development. His approach provided support for the idea that I have advanced: career as a complex adaptive entity. Savickas (2001) used the word adapt in its variant forms 27 times in this chapter, and he used some form of the phrase self-organizing 11 times. Furthermore, he emphasized the constructivist utility of a subjective narrative of one's career and supported a model of career that examines "transactional adaptation to the environment" (p. 313). These transactional adaptations are the "fitness peaks" of complex adaptive entities as I have described them.

It is interesting that the ever-widening and ever-narrowing webs of relationships that are revealed in the examination of complex adaptive entities can lead to an understanding that, as Bronowski (1978) wrote in his introduction to a series of lectures to the scientific community, "the world is totally connected: that is to say that there are no events anywhere in the universe which are not tied to every other event in the universe" (p. 58). This sense of connection is the essence of spirituality. In A Spiritual Audit of Corporate America, Mitroff and Denton (1999) found virtually unanimous agreement on the definition of spirituality among executives, managers, and workers at all levels in a variety of industries. In essence, the definition had two components. The first was that spirituality included a sense of connection to something beyond the individual; the second was that spirituality is a search for meaning, purpose, and integration in life. In this article, I explore how the currently prevailing scientific paradigm, careers, and spirituality are all entwined, thus stressing relationships and meaning.

The New Theory

This article presents a new theory of complexity, connections and careers by (a) describing the characteristics of complex adaptive entities and nonlinear dynamics; (b) applying the principles of complex adaptive entities to careers; (c) developing conceptual links among the ideas of nonlinear dynamics, career development, and spirituality; (d) presenting a brief case analysis using complexity theory; and (e) discussing possible implications of the theory for practice and research. (When I searched the databases listed above using the term spiritual*, I found no reports of research or theoretical articles.)

Characteristics of Complex Adaptive Entities

Complex adaptive entities share common characteristics whether they are being described in physics, in biology, or in the social sciences. Eleven of these characteristics are described briefly in this section. It should be noted that I have identified these characteristics from a broad base of readings and observations (see the Appendix for a list of the background readings). The characteristics do not exist
independently in some obscure, or familiar, text on complexity science. Certainly, others writing in this field might isolate a somewhat different list or combine the elements of this list into a different order. In the next section, each characteristic is applied to career development.

1. Complex adaptive entities, referred to from this point on simply as entities, have the ability to maintain themselves, although their components and even their shapes may change. In this sense, they have life. Life is the ability of the entity to maintain itself, or autopoiesis. Life is self-organizing, not controlled externally. Life is the ability to adapt internally to changing environments (Maturana & Varela, 1972/1980, 1987).

2. Entities are open, that is, they maintain themselves through the ongoing flow and interchange of components or energy.

3. In these exchanges, entities are part of networks. Any entity is part of many networks, which can be depicted not only as concentric circles but as ever-widening links to nodes beyond the entity itself. At the same time, a particular entity may have networks operating within it (Barabasi, 2002).

4. Entities are parts or fractals of other entities. Each fractal has the entirety of the organism within its shape. Ultimately, every organism may be seen as a fractal of the universe. Fractals reveal themselves as irregular structures that are self-similar at different scales of manifestation (Mandelbrot, 1982).

5. Entities are dynamic. In the constant exchange of forms, components, and energy, they move between order and chaos. These phase transitions are comparable to the movement of water among its three phases: liquid, solid or ice, and gas or steam. Phase transitions are the opportunity for creativity and the emergence of new forms.

6. During phase transitions, entities seek fitness peaks, that is, the point that will yield the greatest chance of survival. Kauffman (1995) wrote,

I suspect that the fate of all complex adapting entities in the biosphere--from single cells to economies--is to evolve to a natural state between order and chaos, a grand compromise between structure and surprise.... The edge-of-chaos then also arises as a potential general law. In scaling the top of the fitness peaks, adapting populations that are too methodical and timid in their explorations are likely to get stuck in the foothills, thinking they have reached as high as they can go; but a search that is too wide ranging is also likely to fail. (p. 15)

7. Phase transitions are best explained by nonlinear dynamics. In linear dynamics, there is an expectation that changes of equal sizes will produce equal effects. There is also the assumption that causation is, if not unidimensional, then easily studied through multiple regression methods. Complex entities, however, behave in
nonlinear ways. Because the transitions between order and chaos are drawing on multiple causes from multiple network relationships, from a continuing interplay of the internal and external, it is often what would have been considered "noise" in reductionist science that is of most importance in understanding the dynamics of nonlinear entities.

8. Small change brings about large effects. Within the nonrecurring, nonlinear patterns, small changes may be seen to bring about large effects. This phenomenon, known as sensitive dependence, is a quality of all complex entities. No matter how similar the starting states of dynamic entities, one can be sure that they will "drift apart" after a while (Banks, 2000).

9. As the entity moves through its transition, it may retain its life and shape in response to several types of attractors that limit its movement and growth. These limiting attractors can be described as point attractors, pendulum attractors, or torus attractors. As the name suggests, an entity shaped by a point attractor returns repeatedly to the same state as if drawn by a magnet. An entity shaped by a pendulum attractor moves back and forth between two identifiable states, just as a pendulum swings from side to side. Finally, an entity held in place by a torus attractor moves around, and again around, in a circular pattern. Patterns formed by torus attractors are often described as doughnuts, or bagels, as round and round the same circle the events go, never exactly repeating themselves, but never leaving the circumscribed area. Imagine the events sketching the doughnut. The more similar the events, the closer the pencil lines will be to the center hole; the more varied the events, the further out along the edge of the doughnut the pencil lines will be.

10. However, as the entity moves through its transitions, it may retain life through the creation of new forms, a quality known as emergence. Strange attractors yield entity shapes that are neither linear nor contained. When they are plotted mathematically, the patterns form unique figures or fractals.

11. Complex adaptive entities exist only as part of nested inseparability or connectedness. In other words, there are no living systems without interdependence. Spirituality is the experience of this unity (Ainslie, 1995; Goerner, 1994, 1995; Kauffman, 1995).

To sum up this section, complex adaptive entities, from evolution to single cells, can be described as self-organizing structures that adapt for continuing being, with connections along networks that allow for open exchange of matter and energy and with the ability to use the border between order and chaos for the creation of new forms and for emergence to occur. In this border between stability and change, life is unpredictable. Small differences in initial conditions, as well as small changes in the environment, may result in wildly different results. The moments on the border between chaos and complexity afford the greatest opportunities for growth (and conversely for failure). In the next section, each of the 11 points is applied to careers.
Applying the Principles of Complex Adaptive Entities to Careers

Living in the nondeterministic world of complexity is confusing to humans. Humans look for patterns, often yearn for certainty. Given the actuality of life and the predisposition to seek order, individuals often experience their own careers as illogical, having no clear relationships between actions and reactions. They believe there is some sequence of work roles that they are expected to follow. They believe that others make career decisions based on logical links of past experience and that others expect this logic of them as well, but that is not what most people experience. That is why many people seem to keep the real stories of their careers secret. They keep to themselves the strange links between events, links they describe as "just luck" or coincidence. In truth, it is the secret career stories that reveal the reality. Career paths are characterized by unexplained trajectories and apparent, but not actual, disconnections.

Because human beings are complex, adaptive entities, the characteristics of such entities that were identified in the previous section are evident in their lives, and, on a smaller scale, in the complex adaptive entity of their careers. The characteristics include the following elements: (a) autopiesis, or self-regeneration; (b) open exchange; (c) participation in networks; (d) fractals; (e) phase transitions between order and chaos; (f) the search for fitness peaks; (g) nonlinear dynamics; (h) sensitive dependence, or the potential for small changes to bring about large effects; (i) attractors that limit growth; (j) the role of strange attractors in emergence; and (k) spirituality.

Autopiesis or self-regeneration. People continually reinvent their careers, moving freely among, within, and outside the macrocycles and roles previously identified as the anticipated career paths of "healthy" individuals. Whether or not people receive career counseling or participate in any career education programs, they have careers. This is not to suggest that the efforts of the career counseling profession are in vain or even unnecessary, but to point out that the original idea that career development is a natural, internal process is borne out by the acceptance of career as a complex adaptive entity.

Open exchange. Career requires a living human body in which it functions in continuing exchange with all the entities of that body. In addition, career cannot take place for the individual alone. By its very nature, career requires participation in the give-and-take of the outside world. These relationships are complex and dynamic but nevertheless hark back to the foundational work of Frank Parsons.

Participation in networks. The relationships among the physical, psychological, neural, and spiritual aspects of the individual are, however, neither unitary nor linear but exist in interweaving networks. So, too, career is an entity within the entity of the individual, but it is also part of the surrounding networks of education, occupations, industries, particular employers, needs of the community, local and global
economies, and cultures—to mention just a few. These are ongoing relationships that operate, affect, and are affected by the entity of each career.

Fractals. The career of any person is a fractal of that person's entire life experience. In addition, it is a fractal of the entire work and economic system. Because career is a fractal of an individual's life, in examining a career, an individual sees the patterns and dynamics of the whole life. In addition, the careers of many people are fractals of the workforce experience. They are fractals in that these parts are similar to the whole. Like a hologram, they show the same features at different levels of examination—from the closest look at the smallest element to the most distant view of the whole shebang.

Phase transitions between order and chaos. From a state of being fixed in school or work, an individual is thrown into change, from order to chaos. Because careers are part of relational networks and, further, because the networks are in continual open exchange, career changes occur. These career changes may be sought or thrust upon the individual, but they are always part of the relational network whether experienced as such or not. In this model, graduation, being fired, ambition, illness, and virtually any event are all potential sources of phase transitions.

Search for fitness peaks. During phase transitions, career is characterized by the search for the best that each individual can imagine for her- or himself. However, like all entities, the career search for fitness peaks may be limited by excessive timidity or by risk taking, as well as by the networked relationships and exchanges taking place all the time. With each phase transition, the individual again becomes an explorer of her or his own career.

Explorers live or die by first impressions. Is the approaching inlet a shelter or a shoal-strewn trap? The figures beckoning from the beach—are they friends or foes? Act too cautiously, and you will discover nothing. Too recklessly, and you may end dashed against rocks, or, like Magellan, lying on the sand with a spear through your gut. (Horwitz, 2002, p. 248)

Nonlinear dynamics. Each person's career development pattern makes sense in terms of that person's work life, the specific dynamics of the environment in which it occurred, and the internal dynamics of that person. So, too, people experience parts of their careers that seem to form patterns for them, but these patterns are either not explicable, or are only partially explained, in terms of the patterns of other careers. The career development of each individual is a series of choices that have internal harmonics or resonances for that individual and can only be understood in terms of that individual.

Sensitive dependence, or the potential for small changes to bring about large effects. Apparently random, often small, events may lead to major career shifts. These small changes can range from distant perturbations of the economic scene to responses to a
previously ignored interaction at work. Consider the person who simply walks away from a job because of the proverbial final straw.

Attractors that limit growth. Some careers appear to be formed by point attractors. Individuals with point attractor careers see only one occupation as possible and, often, only one route into that occupation. For example, unforeseen changes in personal circumstances or occupational opportunities, such as industrial shifts or international outsourcing of particular types of jobs, leave such individuals with no sense of options or even possible areas of career exploration. Other careers appear to be formed by pendulum attractors. Individuals in the grip of pendulum attractors may be unable to move forward, caught in the inertia of indecision. Still other careers appear to be formed by torus attractors, that is, patterns are clearly repeated with slight differences in each repetition. Careers formed by torus attractors may feel comfortable, but the awfulness of the repeated trajectory is the illusion of change followed by the reality of being stuck. With each circuit, there is awareness of the hole in the doughnut, the abyss of the "stuck" existence.

Role of strange attractors and emergence. Strange attractors allow careers to take new shapes and emerge in forms quite varied from those seen before. Life has surprises; unexpected trajectories arise. Even in careers in which an individual has stayed within one occupation and industry, emergence is present to the extent that the individual continues to learn--therefore emerge--creating a sense of satisfaction, flow, and even joy. Fairy tales and legends of all cultures often reveal common strange attractors. In the tale of Sleeping Beauty, the prince's kiss is the strange attractor that moves the princess from the state of sleep to the state of wakefulness. However, it is the waiting for the kiss, the waiting itself, that is another attractor that keeps her asleep. In the story, the poisoned apple is the external circumstance, the strange attractor that puts her to sleep. Princes do not get off any easier in legend. The prince, too, awaits the kiss of the beautiful maiden to turn him from the outward ugliness of a frog into his true self, or the prince wanders forever in the woods, searching for the princess he must rescue and kiss.

The phenomenon described as "planned happenstance" (Mitchell, Levin, & Krumboltz, 1999) is another way of describing these aspects of nonlinear dynamics. By examining the career decisions that arise through what appears to be serendipity, one sees the operations of strange attractors and the resulting emergence.

Spirituality. Complex adaptive entities exist only as part of nested inseparability or connectedness. In other words, there are no living systems without interdependence. Spirituality in work is the experience of this unity. Career counseling is, in this sense, spiritual counseling.

Links Among Complex Adaptive Entities, Spirituality, and Career Development

The similarities between the principles and effects of nonlinear dynamics and spiritual beliefs have been noted by writers in more than one discipline. Kauffman
(1995) described his work in evolution as "rediscovering the sacred." The noted economist W. Brian Arthur has described the complex approach as Taoist: "The universe in Taoism is perceived as vast, amorphous, and ever-changing. The elements always stay the same, yet they're always rearranging themselves" (Waldrop, 1992, p. 330). Ainslie (1995) and Goerner (1994, 1995) have shown how the principles of nonlinear dynamics link spirituality and psychology. In contemporary descriptions of spirituality, there seems to be the commonality of a sense of connection (Mitroff & Denton, 1999). One may envision this as a connection to something larger than oneself or to something deeper, but it is beyond the material world. At the same time, it is the material, and the something larger and deeper and, indeed, oneself are all "it," because "it" is the connection, the sense of oneness.

The search for oneness is the essence of all spiritual beliefs and is expressed in many religions. In Christianity, the worship of the Trinity—the Father, the Son, and the Holy Spirit—is also the worship of One. This is known as the Mystery: three persons, one God. In Judaism, a central prayer begins "Hear O Israel, the Lord our God, the Lord is One." Some people believe that this prayer was written to help the early Jews distinguish themselves from people who believed in many gods. However, another interpretation, one that is consistent with the emphasis generally placed on the word one in meditation on this prayer, is that God equals One. This image of oneness is in the ever-repeated image of each of us as a mustard seed in a sphere that is a mustard seed in a sphere that is, in turn, a mustard seed in the sphere of the moon as expressed in writings related to Kabbalah (Matt, 1996). It is Hanh's (1996) lotus flower within each petal of a lotus flower. Both of these images were described long before the discovery of chaos, complexity, and nonlinear dynamics with its relatively new vocabulary, yet both are perfect descriptions of the nested similarity of fractals.

A survey by Gallup and Jones published in 2000 showed that more than three fourths of Americans feel the need to experience spiritual growth in their lives. Gallup and Jones noted that this percentage is up from 20% in 1994. Wuthnow (1998) has described contemporary spirituality as a "seeking spirituality," one in which people "increasingly negotiate among competing glimpses of the sacred, seeking practical knowledge and practical wisdom" (p. 3). In addition, studies in the United States and Australia show that employees who work for companies that they consider to be spiritual are more productive and that they are less likely to leave those companies (Mitroff & Denton, 1999).

In search of ways to connect spirituality and work, Bloch and Richmond (1997) brought together a group of commissioned writings to explore the connections between spirit and work from a number of theoretical and practical perspectives. From this initial exploration, they moved to the development of practical approaches to help individuals experience the sense of connectedness. In this second work, Bloch and Richmond (1998) identified seven connectors between spirit and work. These connectors may assist individuals in maintaining the sense of interconnectedness, a sense that is otherwise often fleeting and difficult to act on. The seven connectors are as follows:
* Change: Being open to change in yourself and the world around you

* Balance: Achieving balance among the activities of your life such as work, leisure, learning, and family relationships as well as balance between the old and new

* Energy: Feeling that you always have enough energy to do what you want to do

* Community: Working as a member of a team or community of workers

* Calling: Believing that one is called to the work one does by a particular mix of talents, interests, and values

* Harmony: Working in a setting that harmonizes with one's talents, interests, and values

* Unity: Believing that the work one does has a purpose beyond earning money and in some way serves others

These seven connectors also form the basis of an instrument, Salient Beliefs Review: Connecting Spirit and Work (SBR; Bloch, 2003) designed to assess congruence between individual and organizational values. The SBR has been described in an earlier article (Bloch, 2000).

Seeing work as spiritual enables each person to consider his or her contribution to the world, to the ongoing creation of the universe. This view gives value to each career. At the same time that this view may save one from self-centeredness, it also enables a perspective that "Our individual microscale activity in all its uniqueness can count in a way classical science never imagined" (Goerner, 1995, p. 36). Finally, seeing one's career as spiritual avoids the moral schizophrenia between life and work. It adds both an ethical dimension and a dimension of love to work.

Case Analysis: Marion's Calling

This section of the article presents the case of Marion and then applies complexity theory to analyze it. The purpose of this section is to show how complexity theory can offer a new perspective and approach to familiar situations.

The case. Marion is a 58-year-old counselor who has worked in social service agencies since obtaining her master's degree and state licensure 28 years ago. Getting a degree in counseling had not been easy, but Marion felt called to counseling and had managed to get her degree by combining part-time work and part-time study. When she began work in her first job, she knew that the sacrifice had been worth it. Marion has now been with the same agency for 15 years. In the past 10 years, she has moved into more administrative roles within the agency. At first, Marion enjoyed the new challenges posed by her leadership responsibilities. Marion also appreciated the recognition of her combination of abilities that led the upper management of the
agency to move her higher and higher in the organization. In the first few years in leadership positions, Marion was able to reserve specific hours each week for work with clients; however, as her leadership responsibilities increased, her opportunities for client contact decreased.

Now, Marion felt depleted. She felt she no longer had anything to give to the agency or to clients. She questioned her earlier sense of calling and wondered what to do next. She felt that she had dealt too often with the same agency issues, had solved those she could, and was just wasting her time trying to patch those problems that could not be solved. On the rare occasions in which she interacted with clients, it was only to help them navigate the shoals created by the unsolved agency problems. Instead of feeling a sense of satisfaction in working with clients, Marion felt annoyed by them and guilty about her annoyance. Yet, Marion was not ready to retire. She looked forward with dread to the next years in which she would just be marking time. She was too young to retire, yet too tired and unhappy to stay where she was. Marion began to think about how she could move into management positions in other fields, but none seemed particularly attractive.

In the course of her work, Marion attended a small conference of counselors working in similar agencies. Not at a workshop but at an informal gathering, one of these counselors spoke of her own sense of calling and how it affected her work with clients. The proverbial light bulb went on in Marion's mind. She had not lost her calling, but her current work situation did not allow her to enact it. Marion recognized that, indeed, she needed to stay in the field but not in her current job.

The analysis. Marion's distress was a sign of phase transition. Internal dissatisfaction with her environment was taking its toll on her emotional well-being and on her health, as evidenced by her fatigue. Marion was caught in the grip of a torus attractor as around and around she went in the endless cycle of problems caused by the low funding and high client demand faced by the agency. Each year she thought the promotion or shifting of her responsibilities from one unit to another would make a change. Yet, with each change, the situation remained the same. As her sense of "fit" with the environment waned, she moved closer to the border between order and disorder. She was in a state of high sensitive dependence. Indeed, this was the kind of situation in which less controlled people may experience "the straw that broke the camel's back" and simply quit in a moment of anger. Fortunately for Marion, she found herself in a situation in which another attractor was presented, an attractor that fostered emergence. Hearing the younger counselor speak of her sense of calling brought Marion back to her own younger sense of self. She left the meeting prepared to take the risk of leaving her current job, but knowing that she wanted to remain in the field, indeed return to counseling. Her calling, her personal strange attractor, was strengthened.

Of course, this is not the end of the story. Marion may need help to follow the moment of inspiration she experienced, and she now needs help in identifying the
kind of job or self-employment that will enable her to work directly with clients and provide the level of income and other job satisfaction factors that she needs.

Implications for Practice

I am grateful to participants in two workshops--in Melbourne and Sydney, Australia, in February and March 2003--for their contributions to the implications of the theory for practice.

1. In working with individuals, understand that the opportunity for creativity occurs at the transition points. Everything depends on (a) recognizing phase transitions, (b) recognizing attractors of the past, and (c) seeking fitness peaks.

2. Classic career development theories and related instruments and methodologies of structure and processes explain parts of the whole but are not additive. The place to begin in practice is with the whole.

3. Mosca (1995) suggested that narrative and play are the most effective methods for helping clients and students seek happiness. He defined happiness as

   [T]he potential to be totally consonant with what is as it unfolds. It implies the nonjudgmental transcendence of the linear blandishments of point, limit cycle [pendulum], or carefully tessellated tori attractors. It is allowing oneself to choose to go with the ontogenetic or intuitive drift. (p. 181)

Narrative approaches are certainly not new to career development. As Savickas (1997) wrote, "The empirical tradition of rational career counseling does not encompass complex human qualities such as spirit, consciousness, and purpose. Science examines parts; personal stories explain the whole" (p. 9).

4. Listen to the stories to help individuals find the links and nodes of their networks. Use storytelling to help clients identify who they are--not just their occupational titles--and where they fit in the larger picture.

5. Provide paper and crayons or markers or other means of expression through playful activities.

6. Knowing that change is inevitable but uncomfortable, use the concepts of complexity theory to help reduce client discomfort. Help clients recognize their transferable skills as a way of reducing the discomfort of chaos.

7. Help clients understand the power of small changes and help them identify those they might attempt.

8. Explore how individual careers are kept alive: by point attractors, pendulum attractors, torus attractors, or strange attractors. Career interests, career anchors,
social and socioeconomic constraints, habits of mind, and other internal and external factors are examples of possible attractors. Identify one's own patterns and dynamics and how they influence one's work.

9. Help clients and students appropriately assess the degree of risk that is appropriate during phase transitions.

10. Help clients who want to rush off the edge of chaos to see where, in the past, the rushing itself has been a torus attractor and led to nonsatisfying outcomes. Recognize one's own discomfort at the edge of chaos and do not rush clients away from the edge of chaos.

11. Recognize the need to feel connections--the spiritual aspect of work--and make a space for clients to discuss this in their stories or play.

12. In career education or career development programs, stress the opportunities presented by phase transitions because change is the only certainty.

Implications for Research

1. Avoid quantitative studies that ignore small differences in measurement. Kellert (1993) asked, "Why was this limitation so unexpected and so unwelcome?" and answered, because there is an assumption in Western science that one does not have to take into account a small difference or vagueness in measurement. "[T]his assumption, that a small amount of vagueness in measurements will lead to only a small amount of vagueness in predictions, meets a direct challenge from entities with sensitive dependence on initial conditions" (Kellert, 1993, p. 43).

2. Avoid studies that examine phenomena in isolation. This is related to the "view that the universe should be approached as a collection of individual entities with nonrelationship properties," properties that researchers mistakenly believe "have a pre-existing and infinite degree of accuracy, which justifies their representation by real numbers" (Kellert, 1993, p. 46). In career development, this means avoiding studies that center on isolated assessment of interests, values, family background, or any of a host of variables to which numeric or alphabetic codes are assigned.

3. Foster studies that use case study and other qualitative methodologies to develop pictures of how the networked interrelationships and nonlinear dynamics of phase transitions and attractors work in the complex adaptive entity of career so that through the examination of an increasing number of cases, counselors can arrive at approaches that are more and more useful and that still recognize the uniqueness of each individual.
Conclusion

William Butler Yeats (1928/1962) began the poem "Among Schoolchildren" by describing a man questioning a nun about the children in a classroom. The nun says,

The children learn to cipher and to sing,  
To study reading-books and history  
To cut and sew, be neat in everything  
In the best modern way--(pp. 114-115)

Modernism, classic physics, and classic career development were all based on the same model, a model that has continued to influence much of Western thinking even into the 21st century. It is a model of orderliness. Within the orderliness, all could be separated and then recombined because there was a right way to be found. Indeed, one could cut and then sew. But listen to the final verse in which Yeats (1928/1962) rejected that model.

O chestnut tree, great rooted blossomer,  
Are you the leaf, the blossom or the bole?  
O body swayed to music, O brightening glance,  
How can we know the dancer from the dance? (p. 116)

This is the picture of the world that has been shown through the work of physical, biological, and social scientists who embrace nonlinear dynamics. It is a picture of wholeness and relationship, of ever-swirling dynamics, of dancing molecules, and of work that is intrinsically and inextricably linked to the essence of each individual and the whole of the world in which we individuals live.

APPENDIX

In addition to the references cited, the following background readings contributed significantly to the ideas presented in this article.


References


Deborah P. Bloch, Organization and Leadership Department, School of Education, University of San Francisco. The author, as featured speaker, presented an
abbreviated version of the ideas in this article at the 2004 National Career Development Association awards luncheon. Correspondence concerning this article should be addressed to Deborah P. Bloch, 2130 Fulton Street, University of San Francisco, San Francisco, CA 94117 (e-mail: bloch@usfca.edu).

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A Constructivist Look At Life Roles

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The author reviews the literature related to life roles and describes a variety of techniques that can be used from a constructivist career counseling perspective. Seven counseling techniques are included: life space map, life line, life-space genogram, life roles circles, life roles assessment, life role analysis, and goal map. Framed from the storied approach (P. E. Brott, 2001), constructivist applications to co-construct, de-construct, and construct the client's life story are presented. Applications for use with diverse populations are suggested.

Most career counselors will credit Donald Super with their understanding of life roles. However, other theorists include aspects of life roles in their approach to counseling, such as Adler's lifestyle (Shulman, 1973; Shulman & Mosak, 1988) and life tasks (Mosak & Dreikurs, 1967); Glasser's (2000) genetically encoded needs; and the existential philosophy dealing with identity, relationships, and the search for meaning (May & Yalom, 1995). Theories of development also reflect the concept of life roles when addressing identity (e.g., Erikson, 1963) and developmental tasks (Havighurst, 1972). In the field of career counseling, a number of approaches have taken career counseling beyond job placement. Examples of these approaches include that of Gysbers and Moore (1973), who conceptualize life career development as the interaction and integration of the roles, settings, and events in a person's life. Brown (1996) presents a values-based, holistic model of decision making. Hansen's (1997) Integrative Life Planning model (ILP) integrates life roles into the career decision-making process. Furthermore, life roles are a focus of postmodern approaches to career counseling, such as those of Blustein (1997), Brott (2001, 2004), Peavy (1997), and Savickas (1993).

The postmodern, or constructivist, counseling process is based on the client's subjective narrative or life story, with the counselor as a collaborative partner both in the client's personal awareness of past and present chapters and in the client's action steps in building a preferred way of being in future chapters (Brott, 2001; Bujold, 2004). The constructivist approach reaches beyond the client's worker role and occupational decision making. Clients are active participants in becoming aware of and exploring the variety of life roles (e.g., worker, family, relationships, learner) and their own sources of beliefs (e.g., experiences, media, family). Acknowledging the synergy among the life roles and the belief system of the client marks a refreshing direction for career counseling. It is more than "test them and tell them" and more than "true reasoning" for finding the fit between person and occupation.

Given the variety of counseling perspectives that include aspects of life roles and the emphasis in career development on life roles, this is certainly an important issue for
counseling in general and career counseling in particular. In fact, a recent issue of the Journal of Vocational Behavior (Young & Collin, 2004) was devoted to constructivism. The purpose of this article as a constructivist look at life roles is twofold. The first purpose is to provide a review of the theoretical models that contribute to the counseling profession's focus on life roles. The second purpose is to present seven counseling techniques that can be incorporated into the career counseling process with a focus on life roles from a constructivist career counseling perspective. The career counseling techniques are life space map, life line, life-space genogram, life roles circles, life roles assessment, life role analysis, and goal map.

Theoretical Basis for Life Roles

The Adlerian lifestyle assessment (Shulman & Mosak, 1988) explores the client's subjective frame of reference from three perspectives: (a) the client's basic orientation to life, (b) the client's social interest that begins in childhood and involves finding a place in society and acquiring a sense of belonging and of contributing, and (c) the client as understood from a social context. Mosak (as cited in Corey, 2001) presented five life tasks that include relating to others, making a contribution, achieving intimacy, getting along with oneself, and developing one's spiritual dimension. These can be related to the respective life roles of relationships, work, family, self, and spirituality. Reality therapy, based on choice theory, poses that human beings are born with the genetically encoded needs of survival, love and belonging, power, freedom, and fun (Glasser, 2000). The client's quality world is explored to determine how he or she meets these needs. These needs are reflected in various life roles, such as work, relationships, and leisure. The existential philosophy of significance in life includes striving for identity and relationship to others as well as one's search for meaning (May & Yalom, 1995). Meaningfulness is found in engaging in life through creating, loving, working, and building. These may be seen as the life roles of family, relationships, work, and actualization.

Most introductions to career development include Super's (1980, 1990) conceptual model of the life rainbow and the longitudinal two-dimensional graphic depicting the nine life roles that are played in four theaters as one progresses through the five developmental stages. The life roles are child, student, leisureite, citizen, worker, spouse, homemaker, parent, and pensioner. The four theaters are home, school, community, and workplace. The life stages are growth, exploration, establishment, maintenance, and decline. This conceptual model allows us to see that we are involved in several roles simultaneously and that roles affect each other (Zunker, 2002). Later, Super (1990) created the Archway model to clarify the influence of biographical-geographical, psychological, and socioeconomic components on career development. Collectively, these models visually represent the life-span, life-space approach to career development that is synonymous with the name of Donald Super.

It seems that the initial ideas for Super's theory of life-span, life-space began forming in the late 1930s with his interest in work and occupations, developmental studies, and occupational mobility (Gysbers, Heppner, & Johnson, 2003; Super, Savickas, &
The reference to life roles can be traced at least as far back as Davidson and Anderson's (1937) research on occupational mobility with the relationship between the worker and the roles held by a person outside of his or her work life. Another reference (Davidson & Anderson, 1940) appeared in a report on occupational trends in the United States that established the influence of an individual's occupation on his or her place in society, circle of friends and acquaintances, use of leisure time, political affiliations, interests and aspirations, and boundaries of culture.

In one of his earliest writings, Super (1942) wrote about vocations and leisure, positing that the industrial revolution had shortened Americans' workday and work life, thus increasing interest in leisure activities. Leisure activities were outlets for interests and abilities that were not fully used or were not being satisfied on the job. By 1980, Super was integrating social role theory into career development as he called attention to the relationships of job roles with other life roles (e.g., family, leisure, learner, citizen) and the concept of role salience, which is the importance of each role to the person. Super's (1990) life-span, life-space approach was presented as a life-career rainbow of life roles in a schematic life space.

In the field of career counseling, life roles have been the basis of numerous applications dealing with adolescent career development (Amatea & Cross, 1986), university students (Anderson, 1995), adults (Chiappone, 1989), women's issues (Crozier, 1999), dual-career couples (Hall & Huenefeld, 2002), and families (MacDermid, Leslie, & Bissonnette, 2001), as well as international applications (e.g., Stead & Watson, 1998). Research studies that have dealt with life roles include clients with diagnosed cumulative trauma disorders (Dale et al., 2003); clients with spinal cord injury (Quigley, 1995); college student development (Niles, Sowa, & Laden, 1994); gender differences (Cinamon & Rich, 2002); dual-career couples (Rajadhyaksha & Bhatnagar, 2000); and international perspectives, such as the Work Importance Study (Super & Sverko, 1995). For the Work Importance Study, the five major life roles or activities identified for the international research project were study, work, home and family, leisure, and community activities or service. The most widely used standardized assessments in these research studies include the Values Scale (Nevill & Super, 1989), the Salience Inventory (Nevill & Super, 1986), and the Life Roles Inventory (Fitzsimmons, Macnab, & Casserly, 1985).

Other authors writing in the field of career development and counseling have contributed additional considerations on the concept of life roles. Brown's (1996) values-based, holistic model marked a shift in the focus of career development theories. This approach emphasized that values play a part in decision making for career choice and that career decisions related to the worker role should be considered in relation to other life roles. Hansen (1997) has written about the obstacles to women's career development that include gender-role socialization, role conflicts between marriage and work, focus on marriage, lack of work orientation, and sexism and gender discrimination. Her ILP model incorporates career development, life transitions, gender-role socialization, and social change. The ILP
model is seen as a lifelong process of identifying and integrating our primary needs, roles, and goals within ourselves, our work, and our family (Zunker, 2002). Other writers (e.g., Forrest & Mikolaitis, 1986; Gilligan, 1977, 1982) have suggested that the client's identity is reflected in relational roles, such as women connecting with others and men differentiating themselves from others. These authors have contributed additional considerations when looking at life roles, such as values, gender, and socialization.

More recently, the constructivist perspective on career counseling has emerged. Constructivist approaches to career counseling are well suited to incorporating life roles in the client's formulation of a subjective narrative frame of reference. The constructivist approach holds that clients construct their own personal meanings and that these personal meanings are reflected in past and present experiences in a variety of life roles. The counselor co-constructs (uncovers and explores) with the client the life story that has been and is currently being lived. The themes across the client's life experiences reflect the personal meanings held by the client. By de-constructing (opening up) these themes, the client is able to see different perspectives, find exceptions, imagine different experiences, and reveal the client's preferred way of being. Clients have the opportunity to construct (author) their future story based on the personal meanings that they wish to implement in their lives. A number of authors have written about the constructivist career counseling approach (e.g., Brott, 2001; Peavy, 1997) and the use of qualitative assessments to explore the client's life story (e.g., Brott, 2004; Okocha, 1998).

In my storied approach (Brott, 2001), I have used a number of techniques related to life roles in order to co-construct, de-construct, and construct the client's story. The lifeline technique is used to uncover themes, people, and significant life events as perceived by the client. The career genogram is used to uncover and explore the client's gender-role and life roles beliefs. By engaging the client in self-awareness and self-assessment, one uncovers the underlying values on which future choices and decisions will be made. The exploration of life roles is a strategy that will reveal the personal meanings of the client. The life roles circles (Brown & Brooks, 1991) is an excellent example of a counseling technique that engages the client in a qualitative review of interrole relationships.

Given the history of life roles in counseling and the postmodern movement toward client narratives, there is certainly an opportunity for career counselors to meld these two foci through the use of a variety of counseling techniques. Techniques that address these foci include, but are not limited to, the life space map (Peavy, 1997), life line (Brott, 2001; Goldman, 1992; Okocha, 1998), life-space genogram (Brown & Brooks, 1991; Gysbers & Moore, 1987; Okocha, 1998), life roles circles (Brown & Brooks, 1991), life roles assessment, life role analysis, and goal map (Brott, 2004). Following are descriptions of each of these seven techniques that may be incorporated into the counseling process that focus both on life roles and on the client narrative. The techniques may be used separately or with two or more selected
to provide a collaborative process that builds awareness and leads to client action in a preferred way of being.

Life Roles Counseling Techniques

The storied approach (Brott, 2001) context is used to demonstrate a variety of techniques that focus on life roles. The emphasis is on the counseling process rather than on the techniques, with the process represented by co-construction (uncovering), de-construction (opening up), and construction (authoring) of the client's story. When using the storied approach, counseling techniques are selected to illuminate the life story and personal meanings of the client.

Co-Construction of the Client's Story

During this phase of counseling, the counselor and client are able to establish rapport, place the client as expert in his or her life story, and develop an atmosphere of collaboration in the counseling process. A number of techniques can be used during this phase, such as the life space map, life line, life-space genogram, and life roles circles.

The life space map (Peavy, 1997) is drawn by the client on a blank sheet of paper, with the counselor providing a variety of exploratory prompts. The activity begins with the counselor describing that the blank page will be developed with representations of what the client is currently thinking, feeling, and doing in relation to the presenting concern, which is the reason the client has come to counseling. The counselor asks the client to draw a circle on the page that represents him- or herself; the circle may be drawn anywhere on the page to represent where the client is currently feeling within in his or her space. The next request is for the client to draw a circle for each important person in the client's world, give the name of the individual, and draw a double ring around those persons who are related to the client's presenting concern. These circles are drawn on the paper in a spatial relationship to the client (e.g., close, overlapping, distant). The life space map that is co-constructed can be discussed as it relates to the client's relationships, emotional references to the presenting concern, and the voices of meanings and interpretations provided by the client as the life space map is drawn.

The life line (Brott, 2001; Goldman, 1992; Okocha, 1998) is a technique that will reveal the client's past and present life story. It is a graphic illustration of events, people, and perceptions that will uncover themes and meanings in the client's story. On a blank sheet of paper, the client is instructed to draw a horizontal line through the middle of the paper; at the left edge of the paper the client writes his or her date of birth and at the right edge of the paper, today's date. The counselor introduces the storied approach as a framework for uncovering the chapters in the client's past and present story. Chapters are represented by life stages, such as before starting formal schooling, elementary school, middle school, high school, college, first job, and starting a family. The client is asked to mark off on the line significant starting points.
for each chapter and note on the page the year that each chapter began. Prompts by the counselor engage the client in exploring significant events (e.g., What are the high points you remember in this chapter? What are the low points?), important people (e.g., Name the people you remember in this chapter, What is the significance of each person?), and adjectives to describe the chapter (e.g., Give two adjectives that best describe how you remember this chapter in your life). As chapters are explored, the counselor asks the client to title the chapter (e.g., Thinking back on this chapter in your life, what is the title of this chapter?). The life line is continued during the construction phase when future chapters of the client's life story are identified.

The life-space genogram is a variation on the technique used by family therapists (Bowen, 1978; McGoldrick, Gerson, & Shellenberger, 1999). Career counselors use the occupational genogram to explore careers and occupations of a client's family members (Brown & Brooks, 1991; Gysbers & Moore, 1987; Okocha, 1998). The life-space genogram is used to illuminate life roles as perceived by the client with at least three generations of the client's family included. An important aspect of this activity is to engage the client in defining what he or she means by family, and the counselor needs to be open to the need for including "family bushes" so that significant others who are not related by direct family lines in the family tree can be included in the genogram. The basic guidelines for the activity are as follows: (a) Males are represented by squares and females are represented by circles; (b) a horizontal line connects a husband (square) and wife (circle) who are on the same plane to the left and right of each other; (c) children are denoted by a respective figure (e.g., square for male, circle for female) below the parents with a line drawn down from the horizontal line connecting to each child's figure and listed in birth order with the oldest to the left and the youngest to the right; (c) relationship of the client to other family members is a color-coded line (e.g., red line indicates warm relationship, blue line indicates cold relationship); (d) an x is placed in the shape if the person is deceased; and (e) for each family member, the name and current age are indicated. Names of other significant people in the client's life can be listed at the bottom of the page as "bushes" in the client's genogram. Once the three-generation genogram is constructed, the counselor asks the client to fill in next to each person's name the occupations held, geographic locations of where each person has lived, leisure activities enjoyed, and a quality admired in each individual. Reflective questions posed by the counselor are used to uncover and explore a variety of life roles: What were the family rules growing up? What are your current family rules? What has been your role as child? As parent? As sibling? How have the life roles of [select someone from the genogram] changed over the years? Who in your genogram do you admire or look up to? What do you admire in that person?

Life roles circles is a variation on the assessment of interrole relationships described by Brown and Brooks (1991). The activity begins with a discussion of what life roles are and involves the client in identifying the life roles he or she has experienced and is currently experiencing. On a blank sheet of paper, the client is asked to draw circles representing his or her current involvement in the identified life roles, with
the size of the circle representing either the importance of the role or the amount of
time spent in the role. On another sheet of paper, the client is asked to draw the same
life circles representing a point in the future, with the size of the circle again
representing either the importance of the role or the amount of time to be spent in the
role. The discussion will explore the relationships between and among the life roles:
conflicting roles, complementary roles, and compensatory roles. Barriers and
problems that the client may encounter can be discussed with a focus on how to
overcome and solve the problems. Role salience can be explored to assist the client
in identifying and accommodating the importance of a variety of life roles. An action
plan can be devised to begin the first steps in moving from current life roles to future
life roles based on the client's values and life plan.

De-Construction of the Client's Story

The de-construction phase of counseling "opens space" and provides other points of
view to the client's story and challenges the context of society's role expectations for
the client. Counseling strategies are focused on exploring the origin of values and
beliefs, assessing their importance, and determining how values and beliefs will be
lived in future chapters of the client's story. The client's choice of life themes that
hold importance can provide the motivation and direction for future chapters in his or
her life story. The life role perspective plays a part in the de-construction phase of
counseling by allowing the client to expand the definition of career from being
narrowly defined only as the worker role to being more broadly defined as living a
life through multiple life roles.

Building on the activities from the co-construction phase (e.g., life line, life-space
genogram), the counselor engages the client in a life roles assessment. The counselor
asks questions to probe and define the client's values and beliefs: What themes do
you see so far in your life story? What continually motivates you in your worker
role? In your family role? In your leisure role? If you could do one thing differently
in your life, what would it be? How would your life be different now? Why would
you want to do that differently in your life? What would [name of significant person
from client's past] say is your motivation in life? The counselor may prefer to use a
sentence completion technique (Lock, 2000) to probe and define the client's values
and beliefs: If I had a million dollars, I would...; One thing I would change in my life
would be...; I daydream most about...; People who know me well think I am...; In
school, I did (do) best in/when.... Reviewing the life role choices that have been
made and allowing the client to think of "what would have been" had the other
choice been made highlight how current choices influence future life experiences.

Another aspect of the de-construction phase of counseling deals with the dominant
social discourses related to life roles. Feminist therapists and others who have
adapted the feminist therapy model provide a variety of techniques to help both
women and men differentiate between what they have been taught is socially
acceptable or desirable and what is actually healthy for them (Enns, 1993; Sharf,
2000; Worell & Remer, 1992). By addressing this aspect during the de-construction
phase, the client is encouraged to overcome stereotypes and negative self-talk. One technique that addresses culture and gender issues is the life role analysis.

Life role analysis helps the client to examine the costs and benefits of role expectations as defined by culture and gender. The client is asked to recall parental messages related to family and work. The counselor asks the client to identify positive and negative consequences (e.g., cost, benefit) of these messages. The counselor can place the messages in the context of society's role expectations by exploring with the client the influences from media and popular culture (e.g., TV, movies, advertising) that socially construct these experiences. Together, the client and counselor de-construct these messages in order to (a) open the space for the messages the client wants to change and develop and (b) make a plan to create a place for these messages in the future chapters. A review of the life roles assessment to integrate the life role analysis is a bridge to the construction phase as the client develops a future orientation.

Construction of the Client's Future Story

The construction phase focuses on the future chapters in the client's life story. The chapters are developed across the life roles and integrate the values and beliefs that have been identified by the client. Action plans are developed that identify the steps to take, anticipated barriers, and resources to overcome the barriers.

Future chapters in the client's life story can be seen as the "possible selves" of what clients might become, what they would like to become, and what they are afraid of becoming (Markus & Nurius, 1986). Other writers view this future self-concept as the "potential social Me" (James, 1910), the "ego ideal" (Freud, 1925), "how I should be" (Rogers, 1951), and "the Dream" (Levinson, 1978). This future self-concept is linked to motivation with specific, organized, concrete action steps toward future goals; this motivated action is seen as a vital part of the self-concept (Markus & Nurius, 1986; Robinson, Davis, & Meara, 2003). These client steps are actions or behaviors that can be enacted to realize positive states of being or avoid negative ones and facilitate an optimistic belief that change is possible (Markus & Nurius, 1986). Self-directed goals serve to guide and regulate behavior by providing a road map connecting the past and present to the future (Oyserman, Bybee, Terry, & Hart-Johnson, 2004). When goals are directly tied to strategies or action steps, the more likely they are to be carried out (Gollwitzer, 1996).

A review of the client's life roles assessment is an excellent place to start the construction phase to develop future chapters in his or her life story: What is the first step you can take to move this life role from where it is to where you want it to be? What is your time frame for making that happen? What other steps do you need to take? What are the barriers to your ability to accomplish this step? What resources do you have to overcome those barriers? A goal map can assist the client in visualizing the steps to take, obstacles that may impede, resources to overcome the obstacles, and a clear focus on the goal. Brott (2004) used a one-page visual of a road to move
the client from the bottom of the page (i.e., where the client is today), with footsteps to start the journey (representing action steps), down a road with forks and bends (anticipated obstacles), across bridges (representing resources for overcoming the obstacles), and to the top of the page where the client's goal has been written. Dates can easily be added to identify a time frame for the goal map.

The life line that was begun during the co-construction phase of career counseling can now be expanded into the future. A blank sheet of paper is given to the client with the instruction to draw a horizontal line through the middle of the paper and put today's date on the left edge and an arrowhead at the right edge. The client picks a point in time from the future that identifies a next chapter. The next chapter is constructed to embrace the client's preferred way of being through a variety of life roles. The counselor and client identify the values and beliefs that will be a part of the various life roles. Once the future chapter is constructed and titled, the counselor can assist the client in identifying the steps that need to be taken now to begin the journey into the next chapter. During termination, the client will tape together the two pieces of the life line that represent past, present, and future chapters and then title the life story.

Constructivist Applications of Life Roles in Career Counseling

Life roles are important to career development in that they expand the focus of counseling from occupational concerns and job placement to life stories that empower clients. The concept of life roles is applicable to a variety of clients and different presenting concerns. Dual-career partners; women; men; adolescents; diverse populations that include race and ethnicity, gay men, lesbians, and bisexual and transgender persons; and persons with disabilities will benefit from the life roles perspective. Presenting concerns that relate to satisfaction, actualization, socialization, and expectations can be viewed from a life roles perspective. These life roles may include learner, family, relationships, worker, leisure, and community.

Dual-career partners may have concerns about the relationship between home/family and worker roles, role overload and role conflict, satisfaction, relocations, competition, dealing with stress, occupational stereotypes, and gender-role expectations (Hall & Huenefeld, 2002; Reardon, Lenz, Sampson, & Peterson, 2000). These concerns may be co-constructed and de-constructed through the life roles of worker, partner and family, relationships, and leisure to allow clients an opportunity to understand and explore their personal narrative as it exists and to develop their future narrative in preferred ways.

Women's career development issues may arise from their consideration of gender-role socialization, role conflicts (e.g., family and work), and relational needs. These issues may be explored through a variety of roles, including family, relationships, worker, leisure, and community. The relational context that generally arises for women can be viewed from the perspective of a number of roles and explored to find ways to meet the need to relate with others. Single mothers may need to find a
balance between the family role and other life roles (e.g., leisure, community, relationships).

Men's career development issues may include gender-role socialization; the gendered workplace context; and the importance of performance, achievement, and success. The life roles perspective is an avenue for men to explore the context of gender, one's needs and motivation, and life satisfaction. Identifying his current life roles participation and setting a direction for where he prefers his life roles participation to be may open up opportunities for the male client to enrich family, relationships, and leisure roles to complement the worker role.

It is important to address life roles before adulthood, and the benefits of providing opportunities for adolescents to participate in a school counseling program should be acknowledged. School counselors can expand their school counseling programs to reach beyond career education (e.g., career day, career speakers) and postsecondary plans (e.g., work, college) that have a narrow focus on occupations. Career development should include understanding lifestyle and identifying goals for personal success and satisfaction, which can be seen through the life roles of learner, worker, family and relationships, leisure, and community. School counselors have many avenues for presenting life roles, such as classroom guidance units, group counseling, individual counseling, and parent education programs.

Counselors are often challenged when working with diverse populations to understand the client's perspective. The constructivist approach, with the counselor and client collaborating to co-construct, de-construct, and construct the client's narrative, provides an opportunity to address this challenge. With a focus on life roles, it is not necessary for the counselor to be an expert on issues relating to race and ethnicity, sexual orientation (e.g., gay men, lesbians, and bisexual and transgender persons), older workers, and individuals with disabilities. Rather, the counselor approaches the counseling process with curiosity and a wanting-to-know attitude that will enrich the counselor's experience in knowing and understanding the client's frame of reference. Using the life roles perspective is an excellent way in which the counselor and client can identify the themes and issues in the client's present life story and develop a future life story to support and enhance his or her preferred way of being. Illuminating the life roles of family, community, leisure, worker, and learner through the client's life story acknowledges the influence of the social context and mores of society with the opportunity for the client to embrace, weave, or reconstruct these influences in future chapters.

Summary

With a long and successful history within counseling, the life roles perspective has provided an insight into the client's lifestyle, needs, significance, decision-making style, and personal narratives. Thanks to the seminal work of Donald Super, social role theory has long been associated with career counseling. Standardized assessments (e.g., the Values Scale, the Salience Inventory, the Life Roles
Inventory), research studies, and international perspectives have expanded the profession's understanding of and interest in life roles. With the dawning of a postmodern perspective, career counselors moved from the role of expert to the role of collaborator in the client's story. For some constructivist writers, the concept of life roles has been integral in the development of the counseling process. For this article, a storied approach was selected as the preferred counseling process to co-construct, de-construct, and construct the client's story with the focus on the client's life roles.

The life roles perspective provides the career counselor with a framework from which to explore with clients their identity, motivations, and preferences in constructing a life story. The life roles perspective can be used with a variety of clients in career counseling to move from a narrow focus on occupation to an integrated life story frame of reference. The techniques described in this article include life space map, life line, life-space genogram, life roles circles, life roles assessment, life role analysis, and goal map. They are presented as a constructivist look at life roles.

References


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A Grounded Analysis Of Career Uncertainty Perceived By College Students In Taiwan

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The authors examined career-related uncertainties perceived by college students in Taiwan. Five hundred thirty-two Taiwanese students responded to a free-response instrument containing 3 questions related to career uncertainties: (a) the sources of career uncertainty, (b) the experiences at the moment of feeling uncertainty, and (c) coping efficacies toward the uncertainty. Responses were sorted into categories within each question based on the grounded theory methodology (B. G. Glaser & A. L. Strauss, 1967). A hypothetical model was developed to describe college students' perceptions of career uncertainties, experiences of feeling uncertainty, and coping efficacy toward the uncertainty.

Career uncertainty plays an important role in an individual's career decision-making process. In Taiwan, the rapid fluctuations in social, economic, and political situations influence the structure of the world of work as well as the career development of individuals. About 2 decades ago, the progress of economics, technology, and social welfare was more stable, and college students had more opportunities to enter the job market. It seemed that they did not have to worry about their future, nor did they encounter the problem of career uncertainty. In the past 7 years, the newfound political power assumed by a different party is not as stable. In addition, many people lost family members and jobs in the earthquake that occurred September 21, 1999. The political issues, social problems, and unstable economic development are interwoven and have influenced the opportunity structure of the work world. Career uncertainty has now become an important issue to be considered during the career planning process of college students. During the 4 years of college, the rapid changes of the external environment force students to modify their decisions from time to time. In addition, environmental changes also influence the development of students' personal values and interests. These interactions between an individual and the environment continue to play an important role in the process of career development.

Another aspect of the cultural background related to Taiwanese college students' career uncertainty is the educational system in Taiwan. Career counseling in the school setting has been sacrificed to the overemphasis on intellectual learning. During the period of compulsory education, which is from first to ninth grade in Taiwan, most students are encouraged to perform well on a variety of achievement tests in order to earn admission to excellent universities. The students spend too much time in study and do not have enough opportunities for self-exploration, nor do they have the chance to explore the world of work. At the college and university
stage, the students suddenly feel uncertain about what they really want to do or what they might be able to do regarding a career. Now, career courses are beginning to be provided in most of the high schools. Career planning courses are also popular in colleges and universities. However, unplanned events often lead many people to alter their career directions. Therefore, it is important to explore the sources of career uncertainty and help college students develop appropriate coping efficacy.

It is clear that uncertainty plays an important role in an individual's career decision process. Several studies found that career indecision was prevalent among college students in Taiwan (Lin, 1989; Tien, 2001, 2005; Xie, 1990). In Tien's studies, about two thirds of college students were undecided about their career futures. The undecided group, which was defined by the author according to Marcia's (1966, 1980) concept of identity status, included the anxious type of undecided (which was called indecisiveness), the explorative type of undecided, and the career diffusion group. These students were undecided about their career future because of lack of exploration, lack of a feeling of crisis and/or commitment to certain job fields, and other varieties of personal or external barriers. These barriers and difficulties were all possible causes of the individuals' career uncertainty.

Betz and Voyten (1997) believed that decision-making self-efficacy is a major predictor of career uncertainty. The concept of self-efficacy originated from Bandura's (1986) contention that people who believe in their ability to successfully complete the tasks required to achieve an outcome are more likely to engage in and persist at those tasks. Gender role socialization might also influence an individual's career uncertainty, especially for women who intend to pursue positions in traditionally male-dominated fields (Dawson-Threat & Huba, 1996).

Career uncertainty might also be caused by certain barriers perceived by individuals. Gottfredson (1981) emphasized the importance of an individual's recognition of career barriers in three domains: self-concept, socioeconomic environment, and the interaction of self-concept and environment. Russell and Rush (1987) specifically examined women's views of 28 internal and external barriers to management careers. London (1997), on the other hand, stated that career barriers stem from the individual, the work environment, and a combination of the two. He further proposed an emotional and cognitive model of coping with career barriers. In Taiwan, Xie (1990) explored the relationships among career decision-making self-efficacy, sex role attitude, field independence, decision-making style, and career uncertainty. The results indicated that the variable self-efficacy was highly correlated with the participants' career certainty. In the current study, we also want to explore college students' coping efficacy related to perceived uncertainty.

To further examine the cross-cultural influences on the students' careers, we believe that the ecological structures also have to be taken into account. Sue and Sue (1999) pointed out that some cultural values that are salient to the Asian American group are deference to authority, emotional restraint, and hierarchical family structure. Cultural values common to Asian people include collectivism, conformity to norms,
emotional self-control, family recognition through achievement, filial piety, and humility. This culture is categorized as a group-oriented culture; therefore, issues of family, conforming to authority, and collectivism are most important (Pope, Cheng, & Leong, 1998). To be successful means to honor and bring pride to the family. The individual's career development does not exist as an individual problem but within an embedded network of family obligations and expectations.

Hartung (2002) emphasized that collectivism relates positively and significantly to family expectations of and influences on occupational decision making and planning. Collectivism also relates positively to extrinsic work values stressing relationship to others (e.g., altruism, associates, and supervisory relations) and relates negatively to intrinsic work values signifying personal gains (e.g., achievement, independence, and way of life). In the current study, we also believe that the family issues are important sources related to the individual's career uncertainty and coping efficacy.

To be more specific, the meaning of career uncertainty in the current study was defined as "any factors that make the individuals feel uncertain of their career future." Even some of those who have decided what to do in the future might still feel uncertain about what could happen in their career journey. There might always be something that is not under their control. The idea of career uncertainty is different from the concept of barriers and difficulties in that career uncertainty is even more subtle. It focuses on the individual's feelings of inability to control a situation and the sense of efficacy to cope with circumstances. If an individual is aware of the uncertainty, he or she will be more comfortable with recognizing and coping with the inevitable occurrence of uncertainty. The reality of uncertainty must be incorporated into the career decision process.

The purpose of the present study was to explore the sources and experiences of career uncertainties perceived by college students in Taiwan. Coping efficacy related to uncertainties was also examined. More concretely, we used grounded theory analytic strategies to describe varieties of career uncertainty perceived by college students, their experiences in encountering those uncertainties, and coping efficacies perceived by these college students. We then used our findings to propose a hypothetical model to describe these aspects of Taiwanese college students' career-related uncertainties. As a result of our review of literature and our previous work with this population (Gelatt, 1989; Ito & Brotheridge, 2001; Lin, 1989; Swanson & Tokar, 1991; Tien, 1998, 2001, 2005; Xie, 1990), we had several general expectations regarding the results of our investigation: (a) Career uncertainty is a typical problem for college students; (b) sources of college students' career uncertainty are related to the individual, the environment, and the interactions between the two; and (c) internal/psychological and external/environmental support are the two main types of coping efficacies for college students facing career uncertainties.
Method

Participants

The participants were 532 college students (213 men and 319 women; 151 freshmen, 150 sophomores, 121 juniors, and 110 seniors) from seven different colleges in northern Taiwan. All participants were taking career-related courses at the time when they completed the open-ended questionnaire. To invite the participants, the second and third authors visited these career development classes, explained to the students the purpose of the study, and asked for their consent to complete the questionnaire in class. The final sample represented a range of seven different colleges and 32 majors, including English, Chinese, history, music, civil culture, accounting, physics, applied math, electrical engineering, medicine, nursing, and education.

Instrument

We developed the open-ended Career Uncertainty Questionnaire (CUQ) to explore career uncertainties perceived by college students. The CUQ included three open-ended questions related to three themes: the sources of feeling uncertain about one's future career, the experiences at the moment of feeling uncertainty, and coping efficacies related to career uncertainty. More specifically, the main questions were as follows: (a) Do you feel uncertain about your career future? What kind of experiences make you feel uncertain about the future? (b) How do you feel about those uncertainties? What kind of experience is that? and (c) What did you do or what would you do to cope with those uncertainties? Are you satisfied with the coping results or do you feel confident of coping with those uncertainties?

The CUQ was developed in an open-ended way because we believed that the bottom-up approach is the best way to explore the college students' feelings of uncertainty. The students can express any feelings and experiences about their future. This approach of collecting data can provide information indigenous to the student cultures in Taiwan. The questionnaire required approximately 20 minutes to complete.

Data Analyses

The three authors of this article formed the research team for data analysis. All the participants' responses were coded and classified into several categories based on the grounded theory method (Strauss & Corbin, 1998). The grounded theory method is a comprehensive method of data collection, analysis, and summarization whereby a hypothetical theory might be constructed. In the research process, data collection, analysis, and theory or concept construction occur concomitantly and thus stand in a "reciprocal relation" (Strauss & Corbin, 1990, p. 23) to each other as theoretical constructions are repeatedly verified by the data. However, due to time constraints, we did not collect data, analyze data, or construct theories repeatedly. Instead, we
scrutinized the data collected in this study in order to propose a hypothetical model describing the career uncertainties experienced by Taiwanese college students.

The data were analyzed by using the following process: (a) creation of a transcription derived from the open-ended questionnaire and scrutiny, (b) identification of irrelevant or contextual material, (c) identification and coding of meaningful units, (d) assimilation of meaningful units coded into conceptual categories, (e) grouping of conceptual categories into domain categories, and (f) development of core categories (Frontman & Kunkel, 1994). In Steps (a), (b), (c), and (d) of the process, the three authors read the responses and generated themes independently. We refer to Step (c) as "open coding." In Step (d), similarity comparison, categorization, and definition for each of the conceptual categorization were processed. We denote this step as "axial coding." After open coding and axial coding, we then worked together to discuss and agree on specific category themes in Steps (e) and (f), which is the step of "selective coding."

To describe this more specifically, we scrutinized the meanings of each participant's answers in the CUQ and recorded each meaningful unit on separate cards (open coding). We then compared these units, classifying them into different types. We then provided a name for each type (axial coding). The similarities among the category names were further examined and sorted into the core categories (selective coding). Each core category was given a "category theme." The hypothetical model was then established, based on these themes, to describe the career uncertainties and coping efficacies perceived by the participants.

During the process of data analysis, the three CUQ questions were analyzed separately. For the first question, which focused on identifying sources of career uncertainty, we collected approximately 248 meaningful response units (open coding procedure). These units were then compared with one another for similarities and subsequently grouped into 23 categories (axial coding procedure). A new name was given to each of the 23 categories. This process of comparing, categorizing, and providing names for categories was repeated until the core categories (selective coding) were created and considered saturated.

Results

Sources of Career Uncertainty

After the procedure of open coding, axial coding, and selective coding, the sources of career uncertainty were ultimately classified into three main categories: internal/personal (26.2%), external/environmental (46.8%), and the interactions between personal and environmental factors (27%). We adopted the classification of internal versus external because it sounds logical and has been adopted by previous studies related to career barriers or career decision difficulties (Crites, 1969; Farmer, 1976; Harmon, 1977; Russell & Rush, 1987). We added the category of interaction between internal and external because recent studies have examined those factors in
a more complex way (Gottfredson, 1981; Swanson & Tokar, 1991). We agreed that the sources of career-related uncertainties are complicated and need to be examined from a more detailed viewpoint.

The result of the grounded analysis indicated that the personal/internal sources of career uncertainty included abilities (e.g., low scores on the Learning Ability Test [LAT]; 21.5%), changes in interest (21.5%), personal health problems (18.5%), ability and performance in students' respective majors (15.4%), ambiguous goal setting (12.3%), lack of long-term time frames (4.6%), unfamiliarity with personal interests (3.1%), and religious beliefs (3.1%).

Environmental/external sources of career uncertainty consisted of the following factors: unexpected events (24.1%), rapid changes in the social environment and labor market (19.8%), high unemployment rate (19%), family expectations/pressure (15.5%), difficulties in choosing an ideal major (7.8%), changes in the educational system (7.8%), unfamiliarity with the future job market (3.4%), and peer competition (2.6%).

The categories of interactions between the personal and the environmental (P X E) include influence from significant others (26.8%), learning experiences (23.9%), career information processing (20.9%), misperceptions of the working world (11.9%), role model change (9%), do not know how to make a decision (4.5%), and multiple role conflict (3%).

Experiences at the Moment of Feeling Uncertainty

The experiences at the moment of feeling uncertainty included five categories: physical (5.2%), behavioral (9.9%), emotional (76.3%), cognitive (3.6%), and existential ultimate concerns (5%). Almost all of the feelings experienced by the college students in this study at the moment of uncertainty were negative.

Physically, students reported feeling tired, dizzy, numb, and sleepless and being unable to think. Behavioral responses included not knowing what to do, feeling inadequate to do anything, and avoiding action. Feelings of helplessness, fearfulness, anxiousness, depression, loss, nervousness, unhappiness, emptiness, discouragement, and disturbance are several main types of emotional responses that students stated they experienced at the moment of experiencing uncertainty. Negative self-attitudes included lack of confidence, insecurity, powerlessness, self-doubt, and identity failure. In addition, some participants mentioned existential ultimate concerns, such as the meaningless of life, isolation, irrelevance of one's existence, death, and contemplating the end of the world.

Coping Efficacies Related to Uncertainty

Coping efficacies reported by participants were the following core categories: personal/psychological adjustments (45.8%); physical adjustments (9.6%); social
support networks (25.8%); searching for information (10.3%); religious beliefs (0.5%); and cognitive changes in attitude, such as acceptance of the current situation (8%). Most of the reported coping efficacies were reactive types of adjustment, that is, adjustments to change oneself. Only a few participants actively changed their environment, such as changing their majors. Participants believed that exploring one's interests, abilities, values, and beliefs is important for self-adjustment at the personal/psychological level. To achieve self-adjustment at the physical level, most participants mentioned exercising, taking a walk, going shopping, traveling, and sleeping.

Discussion

The focus of this study was to investigate the career-related uncertainties perceived by Taiwanese college students. The results emerged to form a hypothetical model to describe the sources of career uncertainty, experiences of uncertainty, and coping efficacies perceived by college students in Taiwan. The model is represented in Figure 1.

The Hypothetical Model of Career Uncertainty

As shown in Figure 1, the hypothetical model consists of three parts. At the top of Figure 1 are sources of career uncertainties, which include personal factors, environmental factors, and personal-environmental interactions. In the middle are experiences at the moment of feeling uncertainty. These feelings include five core categories: physical, behavioral, emotional, cognitive, and existential ultimate concerns. At the bottom are three core categories of coping efficacy: physical, psychological/cognitive/religious beliefs, and social support network/information search.

The interactions between the three levels of this theory are relatively complex. As indicated in Figure 1, Experiences at the Moment of Feeling Uncertainty is the central part of the model. Those uncertainty feelings stem from different sources of problems such as personal and external barriers. Interactions between feelings of uncertainty and coping efficacies results in Reality Generalization About Self and the World of the Work, the outside circle around the uncertainty experience circle in Figure 1.

[FIGURE 1 OMITTED]

Career uncertainty perceived by college students results from three core categories: internal, external, and interactions between the two. As asserted by previous studies, this three-group categorization is more prevalently used than the earlier internal-external dichotomous category (Gottfredson, 1981; London, 1997; Swanson & Tokar, 1991; Tien, 1998).

External/Environmental Factors as Sources of Career Uncertainty
External/environmental factors were most frequently reported as causes of uncertainty by participants in the current study. Students perceive these factors—which include family expectations, societal change, public policy, political issues, labor market, and learning environment—as significant sources of career uncertainties. Most of these factors are similar to career barriers and difficulties perceived by college students in making career-related decisions (Tien, 2005). Interactions among these factors are also important and may be related to changes in career plans. The need to change career plans may suggest even more types and sources of career uncertainty.

There are two ways to change one's career plans: change oneself and/or change the environment. In recent years, political and economic problems in Taiwan have significantly interfered with the career development of many students. More than 10% of college students delayed their graduation in 2004 (Ministry of Education, 2004). Many of them attended graduate schools immediately after they completed their undergraduate studies. One reason for this trend is that it is very difficult for the "fresh graduate" to find a job. They are forced to change themselves, learn more about the working world, become more self-aware, and/or earn another degree or certificate to find a job. This idea of coping with uncertainty—either changing oneself or changing the environment—is just like the concept of the activeness/reactiveness type of work adjustment proposed by the Minnesota Theory of Work Adjustment (Dawis & Lofquist, 1984).

In our consideration of the environment, we divided it into two categories, objective and subjective. Objective environment is perceived similarly by most people. It is out there and might not influence the individual. The individual will not change it. Subjective environment, on the other hand, is perceived differently from individual to individual and could influence a given individual's decision-making process. In many cases, the external environment is genuinely out of the individual's control. The reality generalization about self and environment, the outside circle around the uncertainty feelings circle in Figure 1, is therefore important in career planning. In this study, the reality generalization about self and the environment is interpreted as the effects of an individual's use of one or more coping efficacies. It is a new status of self separated from the experiences/feelings of uncertainty.

Internal/Personal Influences on Career Uncertainty

In the category of personal sources of career uncertainty, many students indicated low LAT scores as the cause of uncertainty. The LAT is an important admissions factor for high school students hoping to enter a certain college department in Taiwan. Students risk being denied admission to the department of their choice if their LAT scores are not sufficiently high. Once one is accepted to a college, changing majors is a very difficult process. The difficulty in studying in the department of their choice might also be a reason why students report feeling ambiguous about their current major or are forced to relinquish their interests.
Unexpected events, including those originating from personal health problems, are additional sources of uncertainty for the future. Some careers require physical strength, such as civil engineering. Unstable health might interfere with students' future career plans and thus influence their current short-term goal setting.

Sometimes the unexpected events may also have their source in the family and thus force individuals to compromise and/or give up personal career plans. In Taiwan, family expectations have always played an important role in the individual's career decision. As a part of the Eastern culture, we emphasize the importance of the self in relation to others. We also encourage and value an interdependent self-construal. According to Sharkey and Singelis (1995), an interdependent self-construal can be defined as a flexible and variable self. Central to the interdependent self is the concept that the self and others are intertwined. Collectivists give priority to the goals and needs of the group rather than to their own goals and needs; collectivists' occupational choices should reflect less on their own individual preferences and more on what their in-groups expect of them.

Regarding the influence of religion, only 2 students referred to their religious beliefs as sources of career uncertainty. For those who are in the process of identity formation, religious beliefs might be a significant cause of career uncertainty (Marcia, 1980).

**Existential Concerns Could Be a Positive Aspect of Experiencing Uncertainty**

For most college students, the experience of feeling uncertain might always be negative, such as physical exhaustion, psychological powerlessness, low self-esteem, and the inability to accomplish any goals. Very few students mentioned emptiness, meaningless of life, irrelevance of one's existence, and the existential ultimate concerns proposed by Yalom (1980). Existential ultimate concerns often result in negative thoughts but could potentially be a positive force if the individuals who experience them can gain insights from them. Experiencing such negative thoughts is an important and valuable process for college students to go through.

**Coping Efficacy Related to Uncertainty**

As indicated in Figure 1, coping efficacy related to career uncertainty could be a three-dimensional framework: physical, psychological/cognitive/religious beliefs, and social support network/searching for information.

Physical adjustment. Physical types of coping strategies include exercising, taking part in leisure activities, sleeping, singing, and crying. This type of coping serves primarily as a short-term adjustment by helping individuals relax and re-energize.

Psychological adjustment. Psychological types of coping, which consist of psychological/cognitive adjustment and seeking support through religion, are the primary strategies adopted by students. In this study, psychological types of
adjustment included increasing cognitive awareness and task-approach skill exploration. It is likely that students would benefit from developing positive psychological attitudes such as tolerance for ambiguity, resilience, and openness toward new experiences. Lee and Johnston (2001) emphasized that diversity factors such as gender, race, socioeconomic status, and religion are also important to consider in the process of career counseling. Seeking support through religion and acceptance of one's current situation are basically cognitive types of coping.

Gelatt (1989) sees positive uncertainty as one of the alternatives to rational decision making. However, the nature of rational or linear decision making does not fit the nature of the contemporary work environment. In addition, such decision making may not be consistent with actual human experience. How does one cope with perceived uncertainties, which could potentially occur at any point during one's career development? Our findings suggested that positive thoughts, such as viewing uncertainty as a kind of challenge, could be a good chance for the college students to create a meaningful career. Career uncertainty would become an opportunity for them to set a new goal. A certain degree of uncertainty would then be a positive facilitator for their career development. In the Chinese language, the word crisis consists of two characters. The first one means "dangerous," and the second one means "opportunity." Positive cognition as a reaction to uncertainty can help students calm down, create problem-solving strategies, and lead them to a new career direction. Career uncertainty would be a positive turning point in such a scenario.

Career counselors should also consider encouraging students to be flexible with their goals so that they can be open to new information. Students are often able to successfully attain their original career goals. In many cases, however, students can benefit from reassessing their goals if they keep themselves open to new information and new experiences. This is also a new idea currently encouraged by positive psychologists (Seligman & Csikszentmihalyi, 2000).

External and social supports. Information seeking and social support networks are two important sources of coping efficacy. Types of information searching as a coping strategy include reading literature, magazines, and self-help books; attending lectures; and finding electronic resources.

Interpersonal skills and resources are becoming increasingly critical for career development. The current study found that interpersonal networks serve as important resources of coping efficacy when students encounter uncertainty. In the contemporary world, people develop competency within the context of collaboration with others. Communication skills learned are transferable to different job environments and are therefore valuable.

Support from family members, friends, professors, and counselors plays a vital role for college students coping with the career uncertainty. Palmer and Cochran (1988) emphasized the importance of strengthening family bonds to support adolescents as they make the transition to the adult world, noting that the support from family
members and friends was an important source of college students' coping efficacy. In our study, some participants indicated that they sought social support by talking to parents, friends, professors, and counselors as well as by reading about the successful stories of others. In the career domain, some of the findings suggested that siblings provide essential supportive functions for an individual’s career development (Blustein et al., 2001). Some siblings even serve as role models for the individuals in the process of their career exploration. Given their relative proximity in age and the high likelihood of being involved in each other's career development process, a sibling relationship could serve as an important source of support when an individual feels uncertainty in facing the career decision point. Schultheiss, Kress, Manzi, and Glasscock (2001) analyzed interview data from a group of urban college students and identified multidimensional aspects of social support and role model influences within their family systems. Such role models included parents, siblings, and other relatives. McWhirter, Hackett, and Bandalos (1998) indicated that perceived support from the father was directly associated with positive effects on educational plans and career expectations for Mexican American high school girls. Other studies also demonstrated the importance of supportive influences from parents, friends, and teachers (Fisher & Stafford, 1999; Paa & McWhirter, 2000). The prominent function of relational support and family roles in career development was also supported by Blustein et al. Family supports were also important sources of coping efficacy for individuals from various ethnic groups (Gomez et al., 2001; Juntunen et al., 2001; Pearson & Bieschke, 2001).

Implications for Practice and Research

The nature of the working world has changed considerably over the last 2 decades due to the political and economic instability in Taiwan. These changes have caused more career uncertainties for college students there. Young graduates with no job experience often cannot find a job immediately following graduation. Many college students put off their graduation or attempt to enroll in graduate school. The findings in this study have a number of implications for the future of career counseling.

It is conceivable that the participants' perception of career uncertainty may reflect the Chinese culture's emphasis on collectivistic rather than individualistic orientation in decision making. Cross-cultural psychology posits that culture imperceptibly, yet powerfully and pervasively, influences human behavior and interaction (Markus & Kitayama, 1991). Interpersonal resources such as social skills and contacts will be increasingly important for college students. Inaccurate or incomplete perspective of oneself, lack of occupational knowledge, and difficulties in knowing how to combine self-knowledge and occupational knowledge are still three important issues in career counseling.

Gysbers, Heppner, and Johnston (1998) provided a holistic model for career counseling. Building strengths is an important focus of that model, which emphasized that career counselors have to go beyond assessing students' current statuses and consider how to develop their potential. Mitchell, Levin, and Krumboltz
(1999) argued that the nature of the work environment is no longer compatible with the kinds of linear, rational planning approaches that have traditionally been used by career counselors to help clients make decisions and plan their future. It has been assumed that chance plays an important role for an individual's career development. Helping the clients learn to turn chance events into productive opportunities would therefore be an important task for contemporary counselors. Dealing with chance events is also related to clients' coping efficacy. Counselors can also help students understand the benefits of mentoring and encourage them to seek out such relationships.

Miller (1995), on the other hand, suggested that a career counseling framework based on chaos theory may help clients accept uncertainty. Mitchell et al. (1999) also elaborated the idea of planned happenstance and asserted that unplanned events are both inevitable and desirable. Openness to experiences is believed to be an important attitude that could lead to positive outcome. We, in the field of career counseling and development, need to develop career programs to encourage college students to be open to new experiences, enhance career opportunities, and seek for meaning of work and life.

Conclusion

The current study examined Taiwanese college students' perceptions of career uncertainties. Sources of uncertainty, experiences right at the moment of feeling uncertain, and coping efficacy are three important issues in analyzing the obtained data from the open-ended CUQ developed for this study. To summarize, types of career uncertainty sources included internal/personal, external/environmental, and interactions between the two. Experiences of uncertainty consist mainly of negative emotional feelings. However, existential concerns perceived by the individuals could potentially be transformed into positive thinking once the individuals attain helpful insights from dealing with such concerns. Coping efficacy is represented by a threefold framework. To facilitate college students' career development, it is important to help them explore feelings of uncertainty and learn how to cope with such feelings. Facilitative programs of this kind could be developed in future studies.

In conclusion, the results of the present study are only generalizable to the college students in Taiwan. Further and deeper exploration through other qualitative methods such as narrative analysis could be conducted to understand the detailed coping mechanism toward career uncertainty. Future studies can also be conducted to further examine the gender differences or cultural differences in college students' perception of career uncertainty and coping efficacy. With respect to career counseling practice, it is important for career counselors not to ignore uncertainty but to incorporate the strategies to help college students cope with the uncertainty.
References


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INCOME: A Culturally Inclusive And Disability-Sensitive Framework For Organizing Career Development Concepts And Interventions

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This article demonstrates how the INCOME model (S. Beveridge, S. Heller Craddock, J. Liesener, M. Stapleton, & D. Hershenson, 2002; D. Hershenson & J. Liesener, 2003), developed with special reference to persons with disabilities and from diverse backgrounds, provides a framework for organizing, selecting, and implementing concepts from career theories and career intervention practices. Rather than using stages or processes typical of existing career development theories, this framework uses J. E. Helms's (1995) multicultural construct of statuses, which may occur or recur in any order or combination. The 6 career statuses in the INCOME framework, which occur across demographic and cultural groups, are Imagining, iNforming, Choosing, Obtaining, Maintaining, and Exiting.

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Currently, almost a century after being identified as a domain of counseling by Frank Parsons (1909), the career area encompasses a broad range of theories of career development and a wide array of facilitative and remedial career interventions (Liptak, 2001; Niles & Harris-Bowlsbey, 2005). Unfortunately, these theories and interventions emerged, for the most part, from different historical roots (career theories from personality theory and career interventions from applied counseling practice) and so are not consistently coordinated with each other (Hershenson & Liesener, 2003; Savickas & Walsh, 1996). Furthermore, questions have been raised about the applicability of many career theories and interventions to diverse segments of the population (based on gender, race, cultural background, sexual orientation, disability status) that were not included in the development of these theories or interventions (Arbona, 1996; Curnow, 1989; Fitzgerald & Betz, 1994; Leong, 1996; Pope, 1995; Szymanski, Enright, Hershenson, & Ettinger, 2003). Finally, it has been observed that no existing career development theory is a complete theory, let alone a comprehensive model of the career development process (Savickas & Lent, 1994).

In reality, there will probably never be a single, unified, comprehensive theory of career development and intervention, because the career development process is too complex, too dependent on the idiosyncratic interaction of personal and environmental variables, and too contextually determined. Nevertheless, a common framework within which to fit both career theory constructs and interventions that have been empirically validated (e.g., S. D. Brown & Ryan Krane, 2000) could be helpful in systematizing the field and in determining where lacunae exist. Moreover, to be useful with today's clientele, the framework must be applicable to a diverse population. This article proposes that the INCOME framework can fill this role. This
framework was originally developed to conceptualize the career development of persons with disabilities (Beveridge, Heller Craddock, Liesener, Stapleton, & Hershenson, 2002) and subsequently expanded in scope to make it applicable to career counseling with diverse populations (Hershenson & Liesener, 2003). As Hershenson and Liesener indicated, "INCOME is intended as neither a theory of career development nor a model of career counseling, but rather as an inclusive framework to assist career counselors in responding systematically to the great heterogeneity among those with whom they work" (p. 306). The framework aims to be inclusive by (a) including concepts from as wide a range of career development theories as possible, (b) including both career development and career intervention considerations in a common universe of discourse, and (c) seeking to be applicable to diverse population groups. This article seeks to demonstrate the applicability and utility of the INCOME framework for career counseling practice.

Career Statuses

The INCOME framework uses the concept of career statuses (Beveridge et al., 2002). To understand the utility of this concept, one must examine existing approaches to career development. On the basis of this examination, I concluded that most theories (other than matching models that do not focus on developmental processes, such as Dawis, 1996; Holland, 1992; Parsons, 1909; and Rounds & Tracy, 1990) can be placed into one of two categories: stage models or process models. Stage models view career development as a series of sequential steps, focusing on one step at a time that must be substantially accomplished before the person can move on to the next step (e.g., Ginzberg, Ginsburg, Axelrad, & Herma's, 1951, periods of fantasy, tentative, and realistic; Super's, 1990, stages of growth, exploration, establishment, maintenance, and disengagement; Tiedeman's, 1961, stages of exploration, crystallization, choice, specification, induction, transition, and maintenance). Process models focus on one aspect of the career development process (e.g., early childhood experiences [e.g., Bordin, Nachmann, & Segal, 1963; Roe, 1957], social learning [e.g., Lent, Brown, & Hackett, 1996; Mitchell & Krumboltz, 1996], the role of values [e.g., D. Brown, 1996], decision making [e.g., Katz, 1966; Peterson, Sampson, Reardon, & Lenz, 1996]) to the exclusion or minimization of other aspects (e.g., intervening experiences, environmental constraints, nonrational aspects of decisions).

Rather than using either stages or processes, with their attendant problems, the INCOME framework adopts Helms's (1995) concept of statuses, presented in her multicultural model of racial identity development. Helms defined statuses as "mutually interactive dynamic processes by which a person's behavior could be explained" (p. 183). She found the concept of statuses preferable to that of stages because (a) a person could simultaneously "exhibit attitudes, behaviors, and emotions reflective of more than one stage...; (b) ... stage seems to imply a static place or condition that the person 'reaches' rather than the dynamic interplay between cognitive and emotional processes...; and (c) neither theory nor measurement supports the notion of the various stages as mutually exclusive or 'pure' constructs"
Similarly, the concept of statuses appears to be more reflective of in vivo career development than stages because statuses have no implication that a person must substantially achieve one status before progressing to the next status. A person can skip or return to a status, and statuses may recur in any sequence. Moreover, a person can simultaneously be in multiple statuses. The concept of statuses appears preferable to the notion of processes because statuses are more inclusive; that is, a given status can encompass multiple processes. Finally, the concept of statuses derives from Helms's inclusive multicultural model of racial identity development and so may better fit the diverse populations that experience career development (i.e., women and men, old and young, members of minority and majority groups, persons with and without disabilities). Indeed, Helms and Piper (1994) suggested the applicability of the concept of statuses to the study of the career behavior of diverse racial and cultural groups in American society.

The framework proposed here consists of six statuses: Imagining, iNforming, Choosing, Obtaining, Maintaining, and Exiting, the initials of which form the acronym INCOME (Beveridge et al., 2002). Structured feedback from groups of counselors to whom these six statuses were presented (Hershenson, 2001) indicated that (a) each of the statuses can be found in the career patterns of at least some members of each of the diverse population groups and (b) there does not appear to be any career behavior of members of any of these diverse groups that does not fall within one of these statuses. I next define these six statuses and indicate concepts from existing career development theories that are applicable to each status. Then, I provide examples of career interventions appropriate for assisting a person in each status. Finally, I discuss the use of this framework in career counseling practice.

**Imagining Status**

Imagining is the status in which the person becomes aware that work, occupations, and jobs exist or that occupations or jobs that she or he was not formerly aware of exist. As Beveridge et al. (2002) posited, this status includes three types of imagining: awareness (e.g., realizing that there is such a thing as work, that there are occupations such as being a carpenter or a computer network systems manager, and that these phenomena have direct relevance to oneself), fantasy imagining (e.g., playing nurse or firefighter, having adult career daydreams about being in a different occupation or a different job), and reality-based imagining (i.e., limiting one's imagining to those occupations or jobs that one believes are possible in light of one's belief about one's capacities, resources, and opportunity structure).

Awareness begins in early childhood, with the observation of a family member going to work or doing work at home and by exposure to images of work on television and other media. Then, at school, children do schoolwork and homework. Furthermore, many elementary and middle schools seek to promote career awareness, as called for by the National Career Development Guidelines (National Occupational Information Coordinating Committee, 1992). The concept of fantasy imagining has been identified by Ginzberg et al. as the first of their three periods of the occupational
choice process, by Super (1990) as the first substage of his Growth stage, and by Tiedeman (1961) in the first stage of his Anticipation period. As Lewin (1936) pointed out, it is easier to move on the level of fantasy because there are fewer barriers present. This proposition was supported by Ginzberg et al. (1951), who concluded, based on their study of boys, that in the earliest stage of the career choice process "a child is free from any urgency to deal with his occupational choice in a concrete manner. He can choose any occupation and there are no limits to his fantasy" (p. 63). Children engage in fantasy imagining from a very early age, and this behavior continues through adulthood, as may be inferred from movie attendance figures. The early onset of fantasy imagining means that parental influence and early life experience must significantly affect the process, because these are the principal stimuli available to the very young. Therefore, those career development theories that posit early childhood influences on career development (Bordin et al., 1963; Roe, 1957) but have failed to receive substantial empirical support in terms of their effect on adolescent or adult career choices, might well prove useful if applied to the study of career fantasy patterns in childhood and later life. These theories should be tested for their applicability to the Imagining status. Reality-based imagining is affected by factors addressed in social learning career theory (Lent et al., 1996; Mitchell & Krumholtz, 1996) in terms of developing values (D. Brown, 1996), attitudes, and expectations about work and occupations that determine what the person considers realistic. Reality-based imagining is also affected by Gottfredson's (1981) process of circumscription (i.e., eliminating occupational alternatives primarily on the basis of gender and social class stereotyping). Blau and Duncan's (1967) status attainment theory is relevant to reality-based imagining because, like Gottfredson's concept of circumscription, it emphasizes family social status as a determinant of an individual's level of occupational aspirations. Imagining status is not limited to childhood but can be present at any point in one's career. Adolescent and adult career fantasies and daydreams fall within this status, as do adolescents and adults who become aware of options of which they were formerly unaware.

iNforming Status

The status of iNforming encompasses attaining the first two of Parsons's (1909) "three broad factors" in the choice of a vocation: "(1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes; (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work" (p. 5). Thus, formal and informal self-assessment and career assessment are major sources of input while the individual is in this status, as are obtaining and integrating career information. While in the iNforming status, individuals develop a conception of their work competencies (i.e., work habits, physical and mental skills that are applicable in work) and work-related interpersonal skills based on feedback about these competencies from their school or work setting (Hershenson, 1996). Individuals also acquire a conception of the supports and barriers to their career progress that both the general culture and the local school or work culture provide. The information about oneself (from family, teachers, peers,
and employers), about one's competencies, about the world of work, and about cultural supports and barriers determines one's career self-efficacy and outcome expectations (Lent et al., 1996). Career self-efficacy and outcome expectations, in turn, serve to filter what career information is taken in, cognitively processed, and retained for consideration. Following the example set by the Myers-Briggs Type Indicator ("iNtuition" following "Introversion"), this status of the INCOME framework is identified by its second letter, N, to avoid having two statuses start with the letter I.

Choosing Status

Choosing, the third status in the INCOME framework, is the status in which the individual integrates information about self and about the world of work and selects an occupation, job, or educational program from among those known to the person at the time that the choice is made. This status, together with the next two statuses of the framework (Obtaining and Maintaining), derive from Danley and Anthony's (1987) Choose-Get-Keep model for employment of persons in psychiatric rehabilitation (Beveridge et al., 2002). The Choosing status incorporates the third of Parsons's (1909) three broad factors in choosing a vocation, "true reasoning on the relations" (p. 5) between self-knowledge and knowledge about occupations. In more contemporary terminology, this involves the process of career decision making (e.g., Mitchell & Krumboltz's, 1996, social learning theory of career decision making; Peterson et al.'s, 1996, cognitive information processing model; Tiedeman's, 1961, pioneering model of career decision making). Given the focus of this status on decision making, the literature on differences in decision-making style (Arroba, 1977; Harren, 1979; Herr & Cramer, 1996; Johnson, 1978) and on the validity of conscious decision making as a construct (Krieshok, 1998) is applicable to this status. This status also encompasses Ginzberg et al.'s (1951), Gottfredson's (1981), and Super's (1990) concepts of compromise and Super's process of synthesis in arriving at career decisions. Furthermore, Maslow's (1987) hierarchy of needs may affect the choice process in that higher level needs may enter into the choice only if lower order needs have been sufficiently satisfied. Finally, because people generally seek occupations that they believe will be congruent with their personalities, abilities, and needs, trait and factor theory (Rounds & Tracy, 1990), the most recent iteration of the theory of work adjustment (Dawis, 1996), and Holland's (1992) focus on person-work environment congruence are particularly applicable to the choice made while in this status.

Obtaining Status

In the Obtaining status, the individual seeks and obtains a job, preferably in the occupation of his or her choice or in as closely related an occupation as possible. This status includes preparing for, implementing, and successfully concluding the job search process (i.e., job finding, networking, resume preparation, employment interviewing skills, negotiating). These topics constitute much of the literature on employment counseling. This status is reflected in Salomone's (1982) fourth stage of
career counseling, which involves implementing a career decision through job placement or starting one's own business. This status is also informed by human capital theory (Becker, 1964), which concerns people's willingness to invest in further training in order to obtain a better paying job after the completion of that training. Also, accident or happenstance theory (Cabral & Salomone, 1990; Mitchell, Levin, & Krumboltz, 1999) is relevant to this status; that is, unplanned or chance encounters that catch a person's attention can be turned into career opportunities. The environment is a major determinant of outcome in the Obtaining status. The economy affects the availability of jobs in the labor market. Also, family, community, and cultural influences may particularly affect this status (e.g., child care considerations, transportation accessibility, family contacts within a company or a union, institutional racism, affirmative action policies). As Miller (1999) noted, for members of marginalized groups, the reality of the occupational opportunity structure and the person's perception of it are frequently more important considerations in career development than the person's interests, abilities, or values.

Maintaining Status

Maintaining status involves the process of adapting to, performing in, and sustaining an occupation or a job. This status includes Super's (1990) Establishment and Maintenance stages. This status involves the dynamic interaction between the person and the environment that is the focus of person-environment (PE) interaction theories (Dawis, 1996; Rounds & Tracy, 1990). The focus of this status on the relationship between the person and the work setting makes work adjustment theories particularly applicable to this status. As Dawis stated concerning Lofquist and Davis's theory of work adjustment, "A basic tenet of the theory is that person and environment attempt to achieve and maintain correspondence with each other" (p. 81). I have posited (Hershenson, 1996) that work adjustment was the sum of three components: work role behavior (the interaction between the person's work personality and the behavioral expectations of the work setting), task performance (the interaction between the person's work competencies and the skill requirements of the work setting), and worker satisfaction (the interaction between the person's work goals and the rewards and opportunities offered by the work setting). In this status, the work environment and the cultural context are highly influential in enhancing or blocking successful outcomes. Therefore, organizational career theory (Hall & Associates, 1986) is also particularly applicable to this status. Finally, because Maintaining involves balancing work and other life roles, Super's life-career rainbow is applicable to this status.

Exiting Status

Exiting, the sixth status of the INCOME framework, involves the process of thinking about leaving or actually leaving one's current vocational situation. Because exiting, by definition, involves a transition, Schlossberg's (1984) transition theory is particularly applicable to this status. Exiting encompasses not only getting fired or retiring but also being promoted to a different position or departing voluntarily from
one's present position to enter a new work setting or avocational (e.g., volunteer) experience. Stressful life event theory and research (Holmes & Rahe, 1967) indicate that being fired, being promoted, and retiring are all stressful events. Several factors may cause an individual to move into involuntary Exiting status, including poor job performance, employer downsizing, and reaching mandatory retirement age. Voluntary exiting may result from such factors as lack of job satisfaction, lack of opportunities for advancement in one's present setting, or intolerable conditions in the workplace. In these cases, work adjustment theories (Dawis, 1996; Hershenson, 1996) are applicable to this status. Maslow's (1987) hierarchy of needs may also be germane to this status in that a job taken to fill a particular level of need may have succeeded in meeting that need, motivating the individual to seek a different job that will meet a higher level need. For example, an individual who became a stock-broker to meet financial needs might, once those needs have been met, exit that occupation and become an artist to fulfill creative, aesthetic needs (e.g., the French postimpressionist painter Paul Gauguin). An individual may be in the Exiting status a number of times over the course of her or his career and may consider exiting while in other statuses (e.g., while simultaneously maintaining one job and imagining himself or herself in a different job) but then decide not to act on it. When exiting involves retiring, Super's (1990) Disengagement stage is relevant, as is Richardson's (1993) work on the personal and societal meanings of retirement.

**Career Interventions**

Having examined the six statuses of the INCOME framework and career development theory concepts that are applicable to each of these statuses, I present some examples of career interventions that are pertinent to each status. Because an individual may be in more than one status at the same time and statuses can occur and recur in any order (e.g., one may obtain a number of jobs before maintaining any job; or one can simultaneously maintain one job, imagine oneself in a different job, and seek to obtain a third, still different, job), the career counselor may have to engage in interventions aimed at several statuses at the same time or in rapid succession. For example, a client who lacks funds for food or shelter may have to deal with obtaining a paying job before taking the time to become informed of all preferable occupational options.

Moreover, the same intervention technique can serve different functions for persons in different statuses. For example, interest inventories can expand the range of options of which the person is aware for someone in the Imagining status, clarify areas of interest for someone in the iNforming status, narrow the focus for someone in the Choosing status, suggest related fields for someone in the Obtaining status, assist in planning next steps in career pathing for someone in the Maintaining status, and ease transitions by suggesting alternatives for someone in the Exiting status.

Finally, because there is good meta-analytical evidence concerning the effectiveness of different components of career interventions (S. D. Brown & Ryan Krane, 2000), all interventions should be structured to incorporate as many as possible of those five
components determined to be most effective: "(1) written exercises, (2) individualized interpretations and feedback, (3) world of work information, (4) modeling opportunities, and (5) attention to building support for choices within one's social network" (S. D. Brown & Ryan Krane, 2000, p. 744). Given these caveats, I present some examples of interventions that address the issues associated with each status.

Imagining Interventions

Imagining, as the status in which the person becomes aware of the existence of work, occupations, and jobs that he or she was formerly unaware of, suggests the utility of interventions such as career awareness education, guided imagery, exposure to representations of occupations in one's immediate environment and in the mass media, and narrative approaches to career counseling that emphasize career as constructed life story (Cochran, 1997; Peavy, 1992). The first three of these interventions provide sources for new awareness, and the last of these interventions, narrative career counseling, facilitates the integration of newly discovered career possibilities into one's personal history.

iNforming Interventions

The status of iNforming is concerned with gaining knowledge of oneself and of the world of work. Relevant interventions include formal and informal career assessments and self-assessments; computerized self-assessments; career genograms; printed, video, and computer-based occupational and labor market information; feedback from academic and from career and technical education courses; informational interviews; job shadowing; volunteer experiences; hobbies; internships; and trial employment.

Choosing Interventions

Choosing is the status in which the person integrates the self-knowledge and career information that are then available to her or him and, on that basis, selects an occupation, job, or educational program. Relevant interventions include the application of decision-making models (e.g., Dudley & Tiedeman's, 1977, model for career exploration and commitment; Gati, Fassa, & Houminer's, 1995, sequential elimination approach; Lent et al.'s, 1996, social cognitive approach; Mitchell & Krumboltz's, 1996, learning theory of career counseling; Peterson et al.'s, 1996, cognitive information processing approach to career problem solving and decision making), decision-making aspects of computer-assisted career guidance systems such as DISCOVER (ACT, 2000) and SIGI Plus (Educational Testing Service, 1997), career development courses and workshops, transferable skills analysis, and counseling or mentoring to address family or peer pressure and environmental barriers.
Obtaining Interventions

In the Obtaining status, the person seeks and obtains a job in the field of his or her choice or in as closely related a field as possible. Relevant interventions include equipping the person with job search skills (locating job leads, networking, resume preparation, job interviewing skills, negotiating), obtaining training in required job skills, using employment or job placement services, participating in job fairs and job clubs, developing and using career portfolios, recognizing and advocating against barriers, and converting trial or probationary employment into a regular job.

Maintaining Interventions

Maintaining status involves adapting to, performing in, and sustaining an occupation or a job. Applicable interventions include life role analysis, career coaching, career pathing within the work organization, using feedback from performance reviews, participating in job-related continuing education, developing and using new skills as required by changes in the way the job is performed, consultation with and advocacy on the part of the person's employer to improve the job site or working conditions, and supportive follow-up with former career clients.

Exiting Interventions

Exiting status involves thinking about leaving or actually leaving (voluntarily or involuntarily) one's current position. Relevant interventions include job change counseling; transition counseling (Schlossberg, 1984); and, possibly, grief counseling in the case of involuntary exiting. Because exiting is frequently stressful, even in the case of a promotion, stress management training may be needed. If the postexiting goal is retirement, applicable interventions include preretirement counseling (Richardson, 1993) or retirement counseling (Jensen-Scott, 1993).

Applying the Framework

In applying this framework to select an appropriate intervention, the counselor must address three considerations. First, in which INCOME status or statuses is the individual engaged, and in which of these statuses is the problem located? A corollary to this consideration, if the individual is having simultaneous problems in more than one status, is which should be addressed first or should they be addressed simultaneously? The answer to this will depend on the relative severity and the interaction of the problems, as is the case in all types of counseling. That is, the decision on whether to first address the most severe problem, the easiest problem to solve, or the problem that is basic to the widest range of other problems depends on the client's personality and life situation. Second, when a career problem exists in a particular status, is it primarily caused by factors within the individual, by factors within the environment, or by a combination or interaction of the two? Career development inevitably involves the interaction between the individual and the environment. Family, school, peer group, work setting, subculture, and society
provide expectations, values, options, barriers, and rewards that largely shape the
goals and course of the individual's career development. At the same time, the
individual's capacities and internal career agenda filter and reshape environmental
influences. As Rounds and Tracy (1990) noted, "The process of PE fit is reciprocal,
involving the individual shaping the environmental context and the environment
influencing the individual" (p. 18). Third, what degree of intervention is needed to
resolve the problem: facilitation or remediation (Hershenson, 1969)? Facilitation
involves supporting natural career development processes to take their course, such
as telling a student or client who is in the iNforming status about the Guide for
Occupational Exploration (Farr, Ludden, & Shatkin, 2001) or other sources of
occupational information, or helping a person in the Obtaining status prepare for a
job interview. Remediation, however, involves working with the individual to change
behaviors or environmental factors that impede the individual's career development
process, such as helping a student or client in the Choosing status deal with
domineering parents who are pressuring the person to enter an inappropriate
occupation or working with the employer of a woman in the Maintaining status to
eliminate a corporate glass ceiling.

Using these considerations, interventions that are appropriate to the client's problems
in each respective status can be selected. For example, a displaced homemaker may
have to deal with issues of giving up her former role (Exiting), determining her
marketable skills and the workplace options that are open to her (iNforming), finding
a job to meet her immediate financial needs (Obtaining), and then Maintaining that
job while Choosing one more to her liking. Using the theoretical constructs
associated with each of these statuses as an initial checklist, the counselor can
explore the client's issues in each status. For instance, as the client is in the Exiting
status, is she having problems with making the transition, with stress, or with
grieving for her lost role as a homemaker? Once that is determined and the primary
locus (in the person, the environment, or PE interaction) and severity (requiring
facilitation or remediation) of the problem have been ascertained, status-appropriate
interventions suggested by the framework can be applied. Thus, the counselor may
use Schlossberg's (1984) transition counseling approach or stress management
techniques to assist this client to deal with Exiting issues, may direct the client to
self-assessment instruments and to local labor market information to address
iNforming issues, and may help the client prepare a functional resume to assist in
Obtaining a job. Then, the counselor could offer supportive counseling to help the
client Maintain herself in her current job while teaching the client decision-making
skills so that she can Choose a personally fulfilling occupation. Each intervention
should incorporate as many of S. D. Brown and Ryan Krane's (2000) components of
effective career interventions as possible. For example, the decision-making skills
training could include written homework, occupational information, personalized
feedback, and modeling.
Conclusion

The INCOME framework was designed to be inclusive, that is, to use constructs applicable to diverse clients (men and women, young and old, different ethnicities and sexual orientations, minority and majority cultural backgrounds, with and without disabilities), to encompass concepts from a wide range of career theories, and to suggest a variety of career interventions applicable to each status. Furthermore, the INCOME framework allows researchers to put theoretical constructs of career development and career interventions into a common frame of reference. The framework itself, its six constituent statuses, the actual relevance of the suggested interventions for each of these statuses, and the extent of applicability of the framework across diverse populations need to be empirically tested. At the same time, because INCOME is intended as a framework for organizing as broad a range of career theory concepts and interventions as possible, it would not be consistent with its function to compare the INCOME framework with any single theory or intervention. Part of the rationale for proposing INCOME is that no existing career development theory is a complete and comprehensive theory (Savickas & Lent, 1994) nor is there ever likely to be one. Moreover, by grouping constructs from a variety of theories within a single INCOME status, each status is necessarily broader in scope than any individual concept from any given theory. Interventions are only to be included within the INCOME framework if their effectiveness has been empirically demonstrated. Thus, the INCOME framework is not intended to replace any career theory or intervention. It is not in competition with them but seeks to integrate and enhance their contributions. When alternative frameworks are proposed, however, the merits of the INCOME framework should be tested against them.

References


and strategies, in career development and job placement (2nd ed., pp. 91-153). Austin, TX: PRO-ED.


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The Internationalization Of Educational And Vocational Guidance

The authors identify and discuss the main themes from the discourse on the internationalization of educational and vocational guidance at the 2004 Symposium on International Perspectives on Career Development, cosponsored by the International Association for Educational and Vocational Guidance and the National Career Development Association. Participants from 46 countries discussed international perspectives on and comparative features of educational and vocational guidance. They concentrated on issues of designing and adapting models, methods, and materials for career education and counseling. Three additional themes revolved around the importance of public policy initiatives, training enough practitioners to meet the growing international need for career services, and the promise of information technology for expanding the delivery of educational and vocational guidance and for supporting career counselors.

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Globalization of the world's economies is causing diverse cultures to become more alike through trade, immigration, and the exchange of information and ideas. It is also changing the way the world works. Today, individuals around the world are experiencing a transformation in forms of work, the social organization of occupations, and the personal experience of careers (Herr, Cramer, & Niles, 2004). This break with past practices in the work world has been accelerated by rapid advances in information technology and the emergence of knowledge societies. In response, educational and vocational guidance practices in many countries are changing to better assist the world's workers adapt to their new situations. As occupational roles have become more alike in different countries, guidance practices in these countries have also become more similar. This growing similarity among guidance practices in many countries has made it possible to envision the internationalization of educational and vocational guidance. This international perspective may be evolving, in part, because more counselors are receiving their training abroad and more counselor educators are attending international conferences and studying abroad. Through the exchange of information and ideas in international journals, Web sites, and national conferences with international participants, the internationalization of guidance even touches counselors who choose to stay at home. Internationalization of guidance denotes the process of designing career interventions and services so that they can be adapted for local use in various languages, regions, and cultures. Internationalized applications of guidance interventions should be easily adapted to the customs and languages of users around
the world. The localization of these practices, of course, requires the addition of local components, data, and sensitivities.

The internationalization of guidance differs from cross-cultural and multicultural approaches to guidance. A cross-cultural approach examines how cultural differences in developmental, social, and educational experiences affect both individual vocational behavior and career guidance practices. A multicultural approach seeks to transform guidance so that it critiques and addresses holistically current shortcomings, failings, and discriminatory practices in career services while advancing social justice and equity. We view cross-cultural guidance as comparing features between countries and multicultural guidance as comparing features within countries among diverse groups. In comparison, internationalization of guidance deals with the process of "globalocalization," which means importing general knowledge about work, workers, and careers and then adapting it to the local language, customs, and caring practices of each country (Savickas, 2003).

To promote the internationalization of guidance, the International Association for Educational and Vocational Guidance and the National Career Development Association cosponsored the 2004 symposium on International Perspectives on Career Development. The articles in this special issue report the contributions made by the participants at that symposium. The goal of the symposium was to initiate dialogue among specialists from 46 countries about international perspectives on public policy, resource commitments, theoretical models, delivery methods, deployment of practitioners, and intervention outcomes. The structure of the symposium relied on seven working groups who intermittently convened to hear an invited address or plenary session. Participants had to limit themselves to remaining in one discussion group for the duration of the 2-day meeting. This limitation meant that no single individual had a good overview of the contributions from all the groups. The lack of overview is redressed to some degree in this special issue, which makes available a summary of the contributions and concerns of each group. In addition, this special issue concludes with a summary of the summaries that identifies and discusses the main themes that emerged from the participants' perspectives on, thoughts about, and worries over the internationalization of educational and vocational guidance.

Certainly, as reported by Feller, Russell, and Whichard (2005), the symposium reflected the growing international interest in career development and planning programs. This is due, in part, to the globalization of economies that affects where work can be found and who has access to it. With the expansion of the global economy, an increasing number of world workers are seeking educational and vocational guidance for themselves and for their families. The symposium provided a forum for colleagues from 46 countries to discuss the current status and future possibilities for educational and vocational guidance around the globe. By design of the organizers of the symposium–Raoul Van Esbroeck and Edwin L. Herr (the second and third authors of this article)--the discussions were focused on general issues of international interest rather than on particular concerns within specific
countries. Attention was focused on having guidance professionals from different countries engage in dialogue about mutual problems and how they might be addressed. Part of this sharing involved the exchange of models, methods, and materials for direct service delivery. In addition to issues of service delivery and professional practice, much discussion concentrated on the importance of public policy work. A third concern that drew much attention dealt with the training of practitioners to meet the growing international need for guidance services.

Counselor Shortages and Training Issues

One of the most significant issues raised by the participants in the symposium concerned the shortage of counselor training programs and professionally trained counseling staff to deliver career services to individuals who need them. Many countries that are developing their guidance services report that there is a serious shortage of trained counseling staff to meet the needs of their citizens (Watts, 2005). There appears to be a need for countries with highly developed training programs to share the expertise of their counselor educators and maybe even adopt a train-the-trainers approach to enlarge and improve the counselor training programs in countries where counselor training programs are just beginning. This training could be best provided by counselor educators taking up temporary residence in the countries they are serving. As discussed during the symposium, a model in which universities with advanced programs in counselor education and those with beginning counselor education programs form linkages might prove quite effective.

The shortage of career counselors, or maybe lack of counselors interested in careers work, is problematic even in countries with numerous well-developed counselor education programs, because these programs often include in their curriculum just a single course on career development and counseling (Hartung, 2005). In the United States, for example, counselor education programs, which once centered on vocational guidance, have marginalized career development training (Watts, 2005). A surprising number of counselor education programs do not have a faculty member with a specialty in career counseling; this results in the career course being taught by adjunct faculty or by 1st-year assistant professors. Even in the United States, a surprising number of counselor education programs have a single course at the master's-degree level and no course at the doctoral level. Part of the reason for the omission of career counseling from the mission of many counselor education programs seems to be that their students want to be "therapists," not career counselors. This accounts for the strong interest these program have in producing marriage and family counselors, psychotherapists, and mental health counselors. Practitioners in these specialties often do not value training in careers work.

To address this estrangement between counselor educators and career counselors, the National Career Development Association and the Association for Counselor Education and Supervision have formed a joint commission. Despite the efforts of this commission, led by Sunny Hansen and Dennis W. Engels, at this point in time, training in the techniques and tools of career counseling appears to be in incipient
decline in the academy. Because the need for career counseling in the United States is not declining, a new discipline has grown to provide career services, namely career coaching. Another response to the need for career services is cybercounseling. Career coaching and cybercounseling have emerged as new occupations in the opening created by the gap between the societal need for career services and the disinterest of the counseling profession at large. Hansen (2003), among others, has lamented the "deprofessionalization" of the career counseling field caused by the anyone can do it mentality of "substitute practitioners" such as career coaches and cybercounselors.

The Promise of Information Technology

Given the shortage of trained counselors, some individuals and countries look to technology to fill the gap (Watts, 2005). They perceive a need to maximize technology's potential to serve an ever-expanding set of career development needs (Feller et al., 2005). Although technology certainly has the potential to be a great aid, the greatest disparity in career service delivery among the countries participating in the symposium concerns access to information technology, such as the Internet, CD-ROM, and computer-based career guidance programs. Many of the participants reported that the citizens in their countries had limited access to information technology (Hartung, 2005).

In countries where access is widely available, Harris-Bowlsbey and Sampson (2005) pointed out that hardware is advancing more quickly than the conceptual applications of it in educational and vocational guidance. Wireless delivery, broadband, and handheld devices make it possible to deliver career information or guidance at a place and time that meets the needs of diverse clients. Advances in the conceptual foundations laid by past and present systems suggest that in the future career decision makers will have ongoing access to records in which they have stored personal information, assessment results, educational portfolios, work histories, occupational databases, decision-making algorithms, and motivating audio/video programs. As one example, Richard (2004) and his colleagues at the Association of American Medical Colleges have already implemented just such a system. Starting with the 1st year of medical school and running throughout their career as physicians, doctors will have available on the Careers in Medicine Web site a personal cumulative record of their career assessment results, educational portfolio, work history, and occupational information.

Another exciting application of information technology to careers work is being developed by Bimrose, Hughes, and Brown (2004) in England. They are constructing Web sites that support career counselors. In due course, career counselors will have available Web sites that provide access to labor market information, educational and training information, research-driven guidelines about best practices, guidance materials, continuing education programs, and moderated forums for discussing current issues.
Although there is growing excitement about the application of information technology to career service delivery, some participants urged caution because several ethical issues arise when using the Internet to deliver computer-based career guidance and counseling (Harris-Bowlsbey & Sampson, 2005). In particular, there is concern about the quality of the assessment and information resources provided on some Web sites as well as about the quality of services provided at a distance by practitioners with limited awareness of local conditions, events, and cultural issues. Although there was extensive discussion of the issues of both counselor training and the use of information technology, by far the most widely discussed issues dealt with the models, methods, and materials for providing educational and vocational guidance.

Internationalization of Guidance Theories, Techniques, and Tools

A major topic was the export and import of career counseling models, materials, and methods. At issue was the appropriateness of adapting theories, techniques, and tools constructed for use in one cultural context for use in a different cultural context. When a country begins its investment in providing vocational guidance, the early practitioners often import and then adapt the models, methods, and materials that they have seen used successfully in other countries. While these adaptations are useful, they have limitations. So, in due course, the practitioners begin to design and develop indigenous tools and techniques that better suit their culture and express their preferred ways of providing help to others.

Many of the participants in the symposium agreed that the major international challenge in this regard is to bring forward what has meaning beyond their immediate settings and is common across cultures (Guichard & Lenz, 2005). This often means that counselors in different countries use the same constructs but that they develop local linguistic explications and operational definitions of those constructs. For example, some counselors have imported the Career Maturity Inventory (Crites & Savickas, 1996) and found it to be useful in their country yet not as useful as they had hoped it would be. Rather than rejecting the construct of career choice readiness because the Career Maturity Inventory did not work as well for them, they refine the construct of career choice readiness in ways suited to their context and then devise inventories and tests to measure their new definition of the construct. Savickas (2003) referred to this process as "globalocalization." Constructs such as readiness, interests, and abilities usually are relevant, but counselors must apply them with culturally sensitive measures and materials. After adapting general knowledge from other countries, it seems that counselors in many countries that are just now originating career services then develop new and innovative models based on their own experience.

Theories

The need for new models, methods, and materials probably originates in the diversity of societal questions that have progressively emerged in the field of career
development and self-construction. Consideration of epistemic issues has prompted the adoption of new ways of viewing old problems. Sometimes the problems look quite different through the lenses of constructivism, action theory, and systems theory than they do through the lens of logical positivism. This new look has prompted emphasis on context and cultural diversity, including both cross-cultural and multicultural concerns. It has also prompted a move away from grand theories and metanarratives to more specific models and local knowledge. In response, new models for educational and vocational guidance have emerged. Newer models discussed at the symposium included action theory, self-construction model, transition model, dynamics of entering the workforce, narrative in career guidance, dilemma approach, interactive identity construction, and paradoxical theory. All these theories recognize culture and context and emphasize self-construction and life planning more than matching and making a choice.

Techniques

These new models have each advanced intervention that is more holistic and comprehensive. An emphasis on viewing career development in the context of other important life roles and from a perspective of the life span was an obvious theme repeated throughout many papers and discussions at the symposium. There is burgeoning awareness worldwide that career development is no longer just about “getting a job.” In fact, it is more about learning how to live a full life in which a career is only one aspect (Feller et al., 2005). Of course, this holistic emphasis calls for more counseling and less guidance (Guichard & Lenz, 2005), yet there are not enough counselors to provide this service.

The group led by Feller et al. (2005) identified six considerations when designing or adapting career interventions to a new cultural context: (a) sensitivity to the values and belief systems of the individuals who will be served; (b) appreciation for their social expectations about work roles; (c) attention to key decision-making points and transitions in that society; (d) understanding the economic climate in terms of globalization, unemployment, and political stability; (e) regard for the available resources and support from governments and institutions; and (f) design of implementation methods that fit public policy, local practices, and availability of information technology.

Tools

The group on assessment, led by Watson, Duarte, and Glavin (2005), emphasized the difference between using psychological inventories, such as those that measure personality traits (e.g., the Self-Directed Search; Holland, 1994) and psychosocial inventories (e.g., the Career Maturity Inventory; Crites & Savickas, 1996) that measure adaptation of the person to the community (Glavin, 2004). The group focused on the issues of cultural validity and cultural specificity in career assessment. Watson (2004) examined Leong’s (1996) description of these terms. He concluded that most attempts to address the issue of culture in career assessment had focused on
cultural validity that is, validating the use of career tests with different cultural groups based on Westernized theories of construct, concurrent, and predictive validity. Watson argued for more use of Leong's model of cultural specificity, that is, the exploration of concepts, constructs, and models that are specific to a cultural group.

In that same discussion group, Duarte (2004) asserted that defining career tests as culture fair, culture free, or culture reduced was outdated. She proposed that ecological validity was a more useful concept than culture itself. This implies that to assess behavior in a particular culture, test development should be based on situation sampling (defining the relevant and observable aspects of a particular career construct), function sampling (refining test items in terms of how they could be operationalized within a specific cultural context), and the identification of differential variables and context information (for example, patterns of cultural or subcultural rewards).

The Role of Guidance Practitioners in Public Policy Initiatives

A final thematic thread that ran through the presentations and discussion at the symposium was the importance of viewing educational and vocational guidance as a sociopolitical instrument for advancing national goals. Goodman and Hansen (2005) identified a conclusion that emerged strongly from virtually every presentation in their group's discussion. There is a gap, often profound, between policy and reality. Although every nation about which they heard had laudable policies and had made genuine attempts to assist its citizens with career development, many individuals do not have access to quality services or, in many cases, any services at all.

Both Plant (2004) and Watts (2005) pointed out that guidance plays a role for both the individual and society--a classic pair of perspectives. These two views should complement each other, but often they do not. In the history of guidance, the two views were called "guidance" and "selection." Today, the proponents of each view may be pitted against each other in debating issues of human resources development versus social inclusion. Guidance must straddle the fence between fostering individual development and economic development. Nevertheless, guidance has its historical roots and contemporary commitments in the social welfare work of supporting and helping the socially excluded who are at risk because they are poor or disabled or are immigrants or the "wrong" race or sex. At the same time, educational and vocational guidance workers are employed by societal institutions that serve the greater good in terms of economic development. Thus, guidance professionals must actively advance public policy initiatives and institutional reforms that serve both individuals and society.

Related to this concern, Plant's (2004) group examined the enduring question of how can we ensure access to career services for all individuals and groups. Participants in the symposium worried that economic competition in the global marketplace might be increasing social exclusion and exacerbating the problems caused by such
exclusion. Plant asserted, rightly, that a way out of this is the strategy of "upskilling" the labor force through the use of a lifelong learning perspective. What is needed is "education, education, and education." Guidance has a pivotal role to play in this strategy by helping people to access training and education, to unfold their potential, to have their real competencies recognized and accredited, and to offer them support services as they traverse their life-long learning path. This may be done by offering outreach guidance services to workers who may be at risk, low paid, or low skilled. To create better access to guidance for those in risk of social exclusion, these services should be provided in the actual workplace at guidance corners staffed by educational ambassadors and learning advisers. Offering educational and vocational guidance services in community-based sites and at workplaces would enable guidance to play a more significant role in terms of formulating and implementing social inclusion policies. Locating guidance services outside schools and universities would also address the problem of the services not being widely available to adults (Watts, 2005).

Conclusions

The main conclusion of the symposiasts was that their engagement in dialogue about international perspectives on and comparative features of educational and vocational guidance around the globe provided a comprehensive understanding of the issues faced by scholars and specialists concerned with the internationalization of educational and vocational guidance. This symposium helped to establish a new network of practitioners and professors who are interested in the internationalization of guidance to meet the needs of world workers in a global economy. As they returned to their home countries to continue their work, they brought fresh ideas and enlarged perspectives to their colleagues and clients. Furthermore, their thoughts about the problems and prospects for international educational and vocational guidance have sharpened the field's focus on what could be done to expand and improve career services for the world's citizens and to further the debate about the internationalization and localization of the career counseling profession itself.

References


Duarte, M. E. (2004, June). Assessment and cultural niches: Adaptation of psychological instruments and "the global (research) village." In International perspectives on career development. Symposium conducted at a joint meeting of the
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The Career Theory in an International Perspective group highlighted 7 approaches: action theory, self-construction model, transition model, dynamics of entering the workforce, narrative in career guidance, dilemma approach, and interactive identity construction. Three main characteristics appear to be common to these different contributions: (a) emphasis on contexts and cultural diversities, (b) self-construction or development emphasis, and (c) a constructivist perspective. Such conceptualizations are quite distinct from the methods and tools most often used by career and school counselors in their daily activities. A proliferation of models was noted. The need for new models, methods, and materials probably originates (a) in the diversity of societal questions emerging in the field of career development and self-construction and (b) in some differing points of view regarding goals of personal and career development interventions.

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Career theory provides a foundation for personal and career development interventions. These interventions aim to help people find answers to personal and career development questions that stem from the societal context in which they live. For example, in Western societies during the transition from a predominantly rural society to a predominantly industrial society around 1900, a key focus was helping young people find suitable apprenticeships. The definitions that societies give to these career questions lead to two consequences: On the one hand, these questions differ from one culture to another. On the other hand, in industrialized societies, the questions evolve along with the contexts in which they are expressed.

The questions that society submits to individuals regarding their fundamental life choices are likely to differ significantly in "individualist" and "collectivist" societies. An example of these differing points of view was summed up by Hofstede (1991) in this way:

> Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty. (p. 51)
Hofstede (1991) pointed out that today's industrialized societies are, as a whole, individualist ones. In these societies, two major factors played an important role in the evolution of career counseling questions during the 20th century--transformations of work organization and employment distribution and the development of schooling and school systems (Guichard, 2003). It seems that there is a link between forms of work organization and career development questions. According to Touraine (1955) and Dubar (1998), three major forms of work organizations successively emerged during the 20th century. Concurrently, three major career counseling questions were expressed. The career guidance question, induced by the "occupational work system" that dominated at the beginning of the 20th century, was, "How can individuals be helped to find an occupation that fits them best?" The "Taylorist" work organization, which began to develop in the 1920s, led to another question, "How to help individuals find a job setting that fits them best?" The "technical work system," which developed as a consequence of automation, led to a third question, "How can individuals be helped to capitalize on their diverse experiences and define occupational and personal plans?" Most recently, the globalizations of economies and work prompted a growing instability in people's occupational and personal life. This led to a new question, "How can individuals be helped to cope with the multiple transitions they face during the course of their life?"

Schooling, which increased considerably during the 20th century in all wealthy societies, became more differentiated in those societies because of a need to enroll a growing number of socially heterogeneous pupils. Because of this development, a new question was submitted to each student and family, "Which kind of education or training should I choose, considering my school results and interests; explicit and implicit rules for allocating students in the different tracks, schools, subject matters, training, and so on; and my personal and family expectations regarding my future social and occupational positions?" This question led to a more specific counseling question, "How can students be helped to make such a decision?"

These five societal questions may be combined into a broader question, representing the current view of the societal issues relating to personal and career development interventions. It may be phrased thus, "How can we help individuals direct their lives, in relation to the contexts in which they are embedded?" This synthetic question encompasses all previous questions. It addresses issues that relate to the "choice" of a career, the integration of a work situation, the development of competencies, and the coping with transitions occurring in the person's personal and professional life.

Career theories can be considered as reconstruction of these different questions within the framework of certain scientific models, meaning that in each case, the initial societal question is "re-elaborated" or "formalized." "Formalization" should be understood here in the sense of a conceptual reconstruction according to the state of the art in the field of social and human sciences. That is precisely what early career theorists and practitioners did with the question, "How can we help individuals find the occupation that suits them best?" They reconstructed it in the form of the
following scientific one: "How can we best match individuals and occupations?"
Their answer was in terms of capacities, interests, and values.

These differing questions guide the positioning of each contribution presented as part of Group 1's focus, Career Theory in an International Perspective, in relation to the other presentations. These contributions differ from each other along two major dimensions. The first dimension is the opposition between the approaches that consider the diversity of cultures and the approaches that are embedded in the culture of today's industrialized countries. The second distinction concerns the target of a given theory: Is it focused on occupational activity or does it consider personal construction in all its aspects? As will be seen, during the symposium the primary emphasis was placed on this last view.

Articulating Universal and Local Considerations

During the symposium, Richard Young (2004) and Jean Guichard (2004; the first author of this article) each presented general models for understanding the intertwining of universal and particular phenomena and processes that determine a career.

Cultural Sensitivity, Action Theory, and the Heuristics of Theory

Young's (2004) analysis stemmed from the observation that many counselors face localized, culturally specific issues pertinent to their clients' career development. If career theories and the interventions that flow from these theories are to be meaningful and used by counselors, they must reflect the complexity and specificity of their culture. This issue of whether career theories should be more culturally sensitive arises in the context of increased cultural contacts between peoples, the rise of multiculturalism within national groups, the growth of globalization as an economic and political force, and dissatisfaction with approaches to career development that do not explicitly address culture. There are several ways that cultural diversity makes certain aspects of career theory problematic—particularly the ethnocentric view and the "time-boundedness" of the career construct, epistemological paradigms that reduce culture to a variable to be controlled, the discourse of globalization that may have the effect of harmonizing theories across cultures, and career theory's highly individualistic orientation.

The attempt to make career theory more culturally sensitive hinges on distinguishing between grand theories that take a universalist perspective and the particular theories or local narratives that are more culturally responsive. The challenge is to find what is common across cultures in such a way that localized, particular theories have meaning beyond their immediate setting. Understanding theory as a heuristic that both counselors and laypeople use in their everyday lives enables us to connect culture and career in a new light, one that illuminates more culturally sensitive conceptions of career.
The contextual explanation of career from the perspective of action theory is based on the notion that, regardless of culture, people's actions are goal directed. The construction and coalescing of actions over the long term are termed career, which, in turn, provides an important link to culture. Culture represents ongoing, intergenerational, shared, and joint processes that reflect actions, projects, and careers.

Using this broad conceptual approach, action theory proposes the following six steps to more culturally sensitive career theories, theories that will, by their nature, be localized and particular. The first two steps orient individuals to these processes: understanding culture as a fluid and dynamic process of actions (and careers) and establishing links between career and culture by seeing that culture and career are complex, higher order constructs, both incorporating action. At the specific level, one begins with the narrative and folk explanations that are unique to the culture and show how meaning is constructed over medium and longer periods of time. To bring this process beyond just narrative, a further step is to observe naively in local communities to uncover the specific behavior, intentionality, and meaning of career-related actions. Furthermore, recognizing ongoing processes reveals the projects and careers that are constructed from observed actions and in which larger and larger social networks participate. Finally, subjecting naive observations and reports of ongoing processes to systematic analysis shifts the basis for these theories to sophisticated and detailed descriptions of action and projects consistent with conceptualizations and evidence.

Self-Construction

In his self-construction model, Guichard (2004) also articulated some universal human characteristics and phenomena that are proper to given societal contexts. The analysis combines three fundamental proposals. The first proposal is a sociological one that stresses the history of individuality, that is, of individuals conceived as autonomous beings endowed with an inner sense. Individuals construct themselves in a specific way, in relation to specific modes of relating to themselves that prevail at a given moment, in a given society (Foucault, 1982, 1988). Each society is characterized by an identity offer of various social categories (e.g., gender, religion, occupation, typology, characterology); each individual can recognize herself or himself and/or recognize others as belonging to one or more of these categories (Dubar, 1998). This identity offer is more or less diversified, depending on the dictates of the individual's society. In industrialized societies and a global economy, this identity offer is diverse and evolving. Each individual is engaged in a continuous self-reflecting activity. Individuals construct themselves according to several different self-relating modes in relation to the contexts in which they interact. Psychologists speak of a plurality of "self-concepts" and sociologists of a "plural (wo)man."

The second proposition, a cognitive one, states that because of their interactions and interlocutions in a given social context, individuals construct, in long-term memory,
cognitive structures that allow them to organize their conception of others and construct themselves. These structures can be called identity frames. These identity frames are relative to all kinds of social categories: gender, religion, sexual preference, occupation, and so on. Cognitive frames are structured sets of attributes that have default values (Minsky, 1975). The default values of identity frames' attributes are social stereotypes (for example, a default value "masculine" given to the attribute "gender" of the identity frame "engineer"). These frames create in people's minds a system of (cognitive) identity frames. This system constitutes this individual's internalized representation of the identity offer of the society in which she or he interacts. As with any cognitive structure, these identity frames are substrata of representations, judgments, and actions. They are the grounding of others' perception and of self-construction in identity forms. An identity form constitutes a "view" of some other individual or a self-construction, according to the structure of one of these frames. Subjective identity forms are forms in which a given individual sees and constructs her- or himself. Self-construction, in a particular subjective identity form, leads to giving some particular default values to the attributes of the underlying frame: the individual "identizes" herself or himself (Tap, 1980).

The last proposition, a dynamic one, contends that human conduct cannot be reduced to a simple reproduction of internalized behaviors learned during previous experiences. The dynamism of the self-construction process originates in a tension between two fundamental types of reflexivity. Reflexive self-anticipation describes the primordial process of relating to oneself, what Lacan (1977) termed the mirror stage. Around 12 to 15 months, before mastering language, the child creates a primordial mode of relating to oneself, in which she or he anticipates herself or himself in a deceptive image (as the image in the mirror)--an autonomous and unified individual--when, in fact, the child still experiences herself or himself as dependent and multiple. Thus, in this primordial mode of relating to oneself, the "me" present is created as oriented according to an imaginary future "I." This primordial reflexivity is temporally oriented and creates the dynamism of the individual. It constitutes the foundation for future identifications (of self-construction in certain subjective identity forms). It is a "dual" relation to oneself, because it is not fundamentally mediated by others: It is instead an "I-me" reflexivity.

The "trinity reflexivity" of the "person dialogical interpretation" (I--you--s/he; Jacques, 1991, p. 52) constitutes another mode of relation to oneself. The trinity reflexivity implies the three positions of "I," "you" and "she/he" that is language mastery. "Person" is defined by this internal or external trinity dialogue that consists of an ongoing circulation between these three positions: (a) "I" who enunciates something to "you," (b) "you" who answers "I," and (c) "she or he," who is spoken of by the two dialoguing "yous." Fundamentally, self-consciousness is "trinity," grounded in a dialogue articulating these three positions. It is a process of "personalizing"--a process of self-construction as a person in a society of persons.
Help Clients Cope With the Problems They Face

Five contributions to the symposium were focused on intervention models to help clients cope with the problems they face. Each model refers to some specific societal contexts; nevertheless, they do not exclude possible adaptation for use in other cultures. These contributions were (a) the transition model by Nancy Schlossberg (2004); (b) the practical implications of research on dynamics of transitions in Switzerland by Jean-Pierre Dauwalder (2004); (c) the use of narrative in career guidance in the United Kingdom by Hazel Reid (2004); (d) the dilemma approach by Wouter Reynaert (2004); and (e) the Argentine personal, educational, and career development programs by Diana Aisenson, Gabriela Aisenson, Fabian Monedero, Silvia Batlle, and Leandro Legaspi (2004).

The Transition Model

The transition model (Schlossberg, 1981, 2004; Schlossberg, Waters, & Goodman, 1995) serves as a guide for practitioners, researchers, and clients as they try to understand the confusion and mystery surrounding most transitions. No transition is exactly like another. Nevertheless, transitions can be categorized according to three major types. "Anticipated transition" refers to major life events that are usually expected to be part of adult life, such as marrying, becoming a parent, starting a first job, or retiring. "Unanticipated transition" designates the often disruptive events that occur unexpectedly, such as major surgery, a serious car accident or illness, or a surprise promotion or factory closing. "Non-event transition" pertains to expected events that fail to occur, such as not marrying, being unable to afford to retire, or not being promoted.

The transition model consists of three major propositions. The first proposition is that transitions change an individual's roles, relationships, routines, and assumptions. Everyone experiences transitions, whether they are events or non-events, anticipated or unanticipated. Transitions alter individuals' lives--their roles, their relationships, their routines, and their assumptions. It is not the transition itself that is critical, but how much it changes an individual's roles, relationships, routines, and assumptions. The bigger the change, the greater the potential impact and the longer it may take to incorporate the transition and move on in life.

The second proposition is that transitions take time and people's reactions to them change, for better or worse, while they are underway. At first, people are consumed by their new role--being a new graduate, a new widow, an unemployed worker, a recent retiree, and so on. Schlossberg (2004) noted that persons in transition are eventually able to move away from past roles and embrace new ones but may initially teeter between both while adjusting to their new situation. The process of leaving one set of roles, relationships, routines, and assumptions and establishing new ones takes time. For some, the process happens easily and quickly, for others it might take years.
The third proposition is that people differ in how they cope with what seems to be the same transition, often coping well with one transition but feeling ineffective dealing with the next one. How can this phenomenon be explained? How can individuals be helped to handle a given transition? To answer these questions, the transition model identifies the features common to all transition events and non-events, however dissimilar they appear. These features are the potential resources or deficits an individual brings to each transition. They can be described as the 4S system for coping with transition:

* Situation: This refers to the person's situation at the time of transition. Are there other stresses? For example, if one person retires and his or her significant other becomes critically ill, coping with retirement may become difficult.

* Self: This refers to the person's inner strength for coping with transitions. Is the person optimistic, resilient, and able to deal with ambiguity? Clearly, what one brings of oneself influences how one copes.

* Supports: The support an individual receives or that is available at the time of transition is critical to his or her sense of well-being. If, for example, a new mother is single, with no support system, this situation can be extremely challenging, and the adaptation might be slowed.

* Strategies: There is no magic coping strategy. Rather, the person who uses many strategies flexibly will be better able to cope. For example, a person who handles transitions just by talking to others may be better served by using additional coping strategies, including exercising, gathering information, brainstorming, or joining a support group.

In summary, the transition model intends to clarify the transitions that people are experiencing by identifying (a) the degree to which their life has been altered, (b) where they are in the transition process, and (c) the resources they can apply in making it a success. The model provides a cognitive framework that counselors, coaches, and others can use in listening to clients, helping them assess their resources for dealing with change, and identifying ways to strengthen their resources.

**Entering the Workforce: Research on Dynamics of Transitions in Switzerland**

The research presented by Dauwalder (2004) constitutes an example of studies conducted under the auspices of the concept of transition. A longitudinal study was done with four waves of measurements over a 5-year period (1997-2002). Participants were 423 young people who were making the transition from apprenticeship to work in five domains (cooking, banking, nursing, sales, and electronics). On each occasion, they answered a questionnaire. In-depth studies assessing social interactions at work by way of a diary in one case and physiological indicators of stress in the other case were conducted with subsamples of participants. The groups differed significantly on the variable of job control. For example, those in
the nursing group perceived a loss of control over time and quit jobs frequently. This is in contrast to participants in the banking group, who reported an increase in perceived job control. Groups differed in the extent to which they had a resigned attitude toward the job. Women reported a greater sense of well-being than did men. With regard to cultural differences, comparisons were made between French and German speakers. French-speaking youth scored higher on the self-esteem variable.

Dauwalder (2004) noted that this research provided four snapshots in time of the various groups with respect to single variables but did not tell the individual stories and might have obscured levels of complexity. He suggested that the key is to consider configurations of variables. In fact, among the 16 possible configurations of four dichotomized variables, only four variables served as "attractors" for nearly all of the observed transitions over time. Despite this, very few individuals kept exactly the same configurations over time. Understanding transitions might be facilitated by looking at the common rules behind those attractors. For example, in this study, trying to have no job change, combined with positive attitude toward the job, seems to be the rule governing most of the observed transitions. Formerly identified discriminating single variables, such as perceived job control or belonging to specific professional groups, however, proved to be of little help for understanding observed transitions. Dauwalder stressed the importance of future research involving configurations of interacting variables rather than research on single variables to better understand the complex dynamics behind vocational choices and transitions.

Narrative and Career Guidance in the United Kingdom

Interpretative and narrative-based approaches to guidance in a postmodern world constituted the core of Reid's (2004) contribution to the symposium. Narrative-based approaches emphasize the need to explore meaning by allowing clients to construct a career narrative that resonates significantly with their values and interests for life, not just for a job. When trying to build a new identity, individuals can be overwhelmed by the problems they face and will find approaches that do not engage with the social interchange in their lives to be unrealistic.

Criticism of a humanistic, narrative approach can be made if the model views individuals as the sole author of their story. Gergen (1994) stressed that personal narrative is arrived at through interaction with others, including the helper. Therefore, the reality test of career/life narrative work with a young person needs to focus on both self-esteem and the esteem of others in order to recognize that actions occur in a social context and in an interactive world. Furthermore, this action orientation moves a narrative approach out of a retrospective past. Young and Valach (2000) noted, "Once we bring narrative into fields like action and culture, we begin to address the problem of the separation of narrative and reality. Narrative is more than persons spinning stories as they sit in their armchairs" (p. 186).

Narrative-based approaches can help place context in the foreground. Rather than use theory that is more concerned with general laws of behavior, they place the focus on
the interaction between the adviser and young person and locate this within what is meaningful for the individual. People do not separate the rest of their lives from the career choices they make. Decisions in a changing world are influenced by and grounded in prior experience. Allowing individuals to tell their stories can help them construct and understand their concept of career and what is possible.

Narrative-based approaches pay due attention to the person's story by recognizing the importance of identity-related goals that help reveal personal preoccupations. Thus, the approaches are goal oriented, but they place goals in context, leading to realistic plans. Narrative approaches acknowledge individual traits and contextual influence and change, thereby challenging self-imposed (limiting) "horizons for action." By using testing and enactment steps, they can encourage a sense of achievement and agency. Finally, they avoid the "revolving door" syndrome, because clients are less likely to be offered quick-fix solutions. Narrative-based approaches appear to offer an insightful way of working with individuals when long-term benefits are really the goal.

The Dilemma Approach

Reynaert (2004) presented the dilemma approach, based on a constructivist view, as one of the theories in the field of career development in the Netherlands. In a world characterized by fading standards, norms, and values, society, organizations, and individuals need a new perspective on work and must construct their identity in interaction with others. The career dilemma approach postulates the existence of a fundamental dilemma that exists beneath the surface of indecision, questions about person-environment fit, lack of career information, poor communication in work situations, loss of meaning in work, and so on. Examples of dilemmas are involvement versus distance, external versus internal locus of control, safety versus risk, conflicting values (e.g., economic versus ethical), shame versus pride, and individual versus common interest. Such dilemmas are created in early childhood. They are connected with uncertainty in critical situations when individuals must show who they really are and what they really stand for. According to this analysis, a dilemma can block an individual's energy, thereby sapping vitality and strength.

In this model, during the "tuning phase" of a counseling intervention, individuals receive support to recognize their personal dilemma. Counselor and client choose an actual situation reflecting the client's greatest concern. Then, three key questions are examined: Who is involved in it (context)? What has the client done (behavior)? and How has she or he felt (emotions)? The key questions elicit information about clients' convictions--their values, strengths and weaknesses, and important rules of conduct. They also elicit an impression about a client's learning strategies. Sometimes, these strategies are one-sided, for example, clients repeat again and again a cognitive approach to problems, or they follow only their feelings. They do not have a great deal of imagination or are not people of action. Convictions and learning strategies determine the way clients cope with their dilemmas.
The second step of the dilemma approach involves the counselor choosing a theoretical model that fits the client's particular dilemma. This could be any available model: communication, transition, values, spiritual, and so on. It also could be a test or an assessment. The model is used to create a learning device, consisting of exercises aimed at stimulating clients to try different learning strategies, reflect on their convictions, see things from another perspective, experiment with different behavior, and so on. The fundamental goal is to make clients create a career that gives them vitality.

In most cases, the discovery of a fundamental dilemma appears to enhance clients' freedom to choose and to energize them. They better understand their fears, anger, or loss of energy. It seems that such an approach gives them a new vocabulary for deconstructing old coping routines and constructing new ways of developing their careers.

Argentine Personal, Educational, and Career Development Programs

Aisenson and her colleagues (2004) based their approach to personal, educational, and career development programs on the postulate that if the objectives of such interventions are founded on theoretical bases, these theoretical foundations should be based on research that provides them with meaning and puts them in context according to the population involved.

Theoretical models must be built in such a way that will enable counselors to address the issue of transitions and take into account the complexity of the different kinds of effective inclusions (i.e., entry into higher education, the labor market, or both) of young people as they build their life paths. Since 1986, the Vocational and Occupational Guidance Department of the University of Buenos Aires has been conducting research, providing community services, and training counselors. One core idea of its approach is that institutions mediating between youth and society can, in inconsistent situations, provide support and help young people overcome crises of meaning and values by guiding their actions and sustaining their identities (Aisenson, 2002; Berger & Luckman, 1966). This Argentine approach to personal and career development includes the issue of subjectivity (identity, self) in its multiple interactions with the social contexts. Psychological processes that are linked to social processes in the contexts in which individuals interact are analyzed. This research and model provided by the Argentine panel members contribute significantly to understanding the career contexts of young people in their society; the significant problems they face; and the role of "career work" in identifying, analyzing, and addressing these problems.

Conclusion: What About the Issue of "Choosing a Vocation"?

Three main characteristics appear to be common to all the contributions made during this symposium: (a) the emphasis placed on contexts and cultural diversities, (b) the
emphasis on self-construction or development more than on occupational choice or occupational career development,

and (c) constructivist approaches to these questions. Such conceptualizations are quite distinct from the methods and tools (e.g., computer software, tests, information resources, questionnaires, guides, career education brochures) that are most often used by career or school counselors in their daily activities. This conclusion was made by Robert Reardon, who noted, first, that occupations continue to exist, jobs continue to be described and posted, and people continue to work in organizations (including staffing services companies) and, second, that most vendors in the exhibits during the conference were selling systems based on person-environment matching models.

Capitalizing on Holland's (1997) observation that individuals engage in career planning and problem solving with the use of a personal career theory (PCT), Reardon noted that people may seek help when their PCT is no longer effective and they need assistance from an expert in the field. Therefore, the longstanding person-environment theories have a natural, heuristic value, because it can come down to a matching process for most people. This is very likely the reason that Holland's Self-Directed Search (SDS; 1994) has been translated into approximately 25 languages and is very likely the most widely used interest inventory in the world. The SDS is, however, not simply a person-environment matching device; it makes use of a client's occupational aspirations, seeks to identify multiple options for further exploration by clients, and uses raw scores in a simulation that can easily be understood and discussed by clients. In this sense, it is also reflects a constructivist view of career development.

Holland's (1997) theory of vocational personalities was not the only theory not discussed during the symposium. Some examples of models that are based on solid theoretical references and many empirical studies but that were not the focus of presentations included the person-environment-correspondence theory (Dawis & Lofquist, 1984), the cognitive information-processing approach to career problem solving and decision making (Peterson, Sampson, Lenz, & Reardon, 2002), the theory of circumscription and compromise (Gottfredson, 2002), the analysis of the psychological processes in the evolution of occupational attitudes and preferences (Huteau, 1982), the inventory of activities systems (Curie & Hajjar, 1987), and many others. Such a proliferation of models in the field of career development and self-construction (as opposed to the "matching model" that was dominant for more than half a century) can probably be partly explained, as seen in the introduction, by the diversity of societal questions that have progressively emerged in the field of vocational, educational, and personal counseling during the 20th century.

References


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Career Development And Guidance Programs Across Cultures: The Gap Between Policies And Practices

The authors summarize the presentations and discussions contributed to the symposium International Perspectives on Career Development by members of Group 5, who considered the topic of the structure and organization of career development programs in different nations. A capsule picture of the national setting, primary goals, components, objectives, and implementation strategies is presented. Papers fell largely into 4 categories: national programs with several components; large, but more specific programs, serving a national population; smaller programs serving diverse populations; and focused programs. One theme emerged strongly from virtually every presentation: There is a gap, often profound, between policy or vision and reality. Although every nation about which participants heard had laudable policies and had made genuine attempts to assist its people with life career development, many individuals do not have access to quality, or even any, services.

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Group 5's focus in the symposium organized by the International Association for Educational and Vocational Guidance and the National Career Development Association was the structure and organization of career development programs in different nations. The planning committee described the group's focus in this way:

There are large differences in the way in which career development provisions are made available among countries and regions. These structures have considerable influence on what the guidance practitioners can do and how it has to be done. The impact on the efficiency and outcome of certain techniques and methodologies is related to these structures and the policies, legislation, or other factors that shape such structures. Developing a comprehensive view of the structures in which programs of career development function may increase international understanding of why guidance methodology IS often different across settings and nations.

The group's chairperson pointed out that it is difficult to discuss the structure and organization of career guidance programs without saying something about the context in which programs are being developed. With this in mind, participants were asked to provide a capsule picture of the national setting, along with the definition of career guidance being used in each country. They also were asked to describe the primary goals, components, objectives, and implementation strategies. Additional information about context included describing primary populations, a brief history of
career guidance in their country, and the theoretical framework used, if any. They were also invited to share information about program funding; involvement of government, business, and industry; and the training available to career service providers.

Questions were raised about programs for specific populations, such as ethnic minorities, girls and women, persons with disabilities, and others. Another important question was on the effectiveness of programs and the methods used to evaluate them. Presenters were asked to describe how programs have changed over time. Because of time limitations and the differences in the stage of career development and guidance across countries, the speakers were not able to address all questions.

The papers presented fell largely into four categories: national programs with several components by country (e.g., Australia and the United States); large, but more specific programs, serving a national population (e.g., United Kingdom and Slovenia); smaller programs serving diverse populations (e.g., Torres Strait Islanders, Colombians, African Americans, and Finns); and focused programs such as career centers in China, lack of career counselor training programs in Japan, and adult programs that address gender issues of women and men in the United States.

Because of the nature of the group's topic, which was to learn about how the wide range of ways that nations are approaching the challenge of helping their citizens prepare for, find, and manage the transitions and decisions necessary in today's global world of work, the members of the group did not invest time in coming to conclusions. They instead attempted to learn about the programs of career development in diverse nations and provided the opportunity for several additional members to provide information about their country's programs. One theme emerged strongly from virtually every presentation: There is a gap, often profound, between policy or vision and reality. Although every nation about which the group heard had laudable policies and had made genuine attempts to assist its people with life career development, many individuals do not have access to quality, or even any, services. We present the papers approximately in the order in which they were delivered during the symposium.

Wendy Patton (2004), from Australia, continued the theme of the differential between the ideal and the real in her paper as she summarized the state of career development policies and realities in Australia, emphasizing recent changes in coordination of efforts, federal support, and credentialing and standards. The discussion included a question about counselor–student caseload, which she said was typically 1 counselor to 1,500 students. She was also asked to describe TAFE (technical and further education). It was noted by some participants that the programs and services provided by these institutions seem to be quite similar to those provided by community colleges in the United States.

Career development work, originally called career guidance, is a term applied across a spectrum of career-related processes, including the provision of information,
counseling, curriculum, and program interventions, such as work experiences, and the coordination of events, such as career markets. It is conducted by a large variety of professionals, including teachers, counselors, and career advisers. Recently, career has been related to life-long learning, especially with the creation of a National Careers Task Force responsible for oversight of most policy and practice. A recent development is the Australian Blueprint for Career Development.

In Australia, career education is the responsibility of states and is inconsistent across them. Career education has received little attention in curriculum reforms across the country and, in the postschool context, is considered to be uneven, although a number of tertiary institutions have begun offering career development programs as credit-granting elective units. Targets for the programs have moved from students in secondary schools to people at all ages and career development stages. There has been a dearth of training provisions for career development practitioners.

Regarding the provision of guidance services, the Australian House of Representatives Standing Committee on Vocational Educational training has recommended that career education be a mandatory part of the core curriculum of the compulsory years of schooling, distinct from vocational educational training programs; that all secondary schools have at least one full-time professional career adviser who has appropriate specialist training; and that the professional development needs of career educators be better met through appropriate training and a clear-cut set of standards for delivery of career education in schools. Although the Australian Association of Career Counselors has expressed the need for quality standards of training, an overall lifelong career development strategy has not yet been articulated.

Norman Gysbers (2004), from the United States, summarized in his paper the history of the K-12 comprehensive guidance movement, including the trend that guidance in schools includes vocational and educational guidance with an early emphasis on holistic and developmental programs, such as those developed by the University of Missouri and the University of Minnesota. Recently, counselors are paying more attention to the personal/social needs of their students, as defined in the new standards of the American School Counselors Association. Gysbers described comprehensive guidance and its alignment with academic standards, including a guidance curriculum and individual planning.

After hearing Gysbers's (2004) paper, participants wondered if the curriculum was provided for students of all ages and if counselors were the sole providers of this curriculum. He explained that in an ideal program, students of all ages were to be served by counselors but that many schools used other, often less well-trained, personnel, and in many places, elementary students ages 5-12 had little counseling available except through teachers. The issue of theory versus reality in schools was raised here, an issue reiterated often in the working group, as was the need to work with administrators and school district policies. The initiative for implementing a comprehensive program often comes from an individual counselor in a school or
district rather than from administrators or school governing bodies. In responding to another question, Gysbers indicated that keeping personal and career guidance functions separate by having different people provide the different types of guidance has been less effective in meeting students' needs than having well-trained counselors responding to and providing programs that address an integrated set of needs.

Sasa Niklanovic (2004), from Slovenia, gave details about specific issues of guidance in Slovenia's Public Employment Service. Slovenia, a developing country, joined the European Union in 2004, after a 7-year process, and Niklanovic stated that Slovenia was highly developed compared with other new European Union countries. He told the group that the Employment Service of Slovenia, for which he worked, was very strong, providing primarily job placement services. Approximately 5% of staff are psychologists who are trained to provide more intensive counseling, and schools also have counselors. Staff members have surveyed their customers, and the satisfaction rate is about 50%; however, he perceived a problem in that the indicators used to evaluate such programs were all quantitative. He believed that they also needed to use qualitative measures. There is a danger in judging outcomes solely by the number of people placed into jobs or into training for jobs; that perspective eliminates the role of counseling and the needs of individuals. The aim is to keep the guidance principles but be less mechanistic in how services were provided.

Niklanovic was also asked to describe policy duties that are seen as a distraction from career guidance. The answer was that employment service personnel must spend a great deal of time dealing with benefits and eligibility and monitoring the activities of the unemployed as they look for a job.

Niklanovic continued the theme of the policy-practice gap by describing to the group that school counselors have similar jobs to those described by Gysbers, with problems similar to those in the United States in the difference between policy and practice. In addition, policies are still focused on reducing unemployment rather than looking at longer term interests.

Agnes Mieko Watanabe-Muraoka (2004), of Japan, chose to focus on three critical issues in her paper on the three major programs that are needed by Japanese society. She first described four major developments. They were introduction of a career education program for 1st through 12th graders, college education reform, career programs for highly educated women, and career management programs for midcareer workers. Second, she identified four competency areas for these programs, based on the American National Occupational Information Coordinating Committee model: future planning, information management, decision making, and human relations. Her third major point was that there is a need for professional training for career counselors.

Watanabe-Muraoka (2004) expressed concern about the fact that counselor training in Japan has now become a business, with emphasis on adapting the U.S. Career Development Facilitator training model to prepare career advisers (career
paraprofessionals). No university has provided a career development training program in graduate schools, as has been done in the United States.

Sunny Hansen (2004; also an author of this article), from the United States, gave a brief history by decades of career development and career guidance over the last 40 years in her discussion on adult career development programs. Consistent with the theme of career development over the life span and building on Gysbers's K-12 Career Profile, she provided examples of career development programs for adults: traditional-age college students and adult learners, individuals in business and industry, human resource personnel, women and multicultural populations, and additional specific and multilevel populations. Her paper provided a selected overview of adult career development programs (note that in the United States, the term career development rather than career guidance is used to discuss programs for adult populations). Such programs began in the 1970s with the advent of the adult development movement.

Hansen (2004) pointed out that the systematic programs in colleges and universities often had a career center as the most visible component. She also noted the trend toward organizing specialized college and university career centers in various academic disciplines, such as liberal arts, medicine, business, technology, agriculture, and other fields. Career centers have also been created to serve specific cultural groups and for persons with disabilities.

Programs for specific adult populations were also cited (e.g., programs for women and specific multicultural populations). Multilevel programs (kindergarten through adult) such as the National Career Development Guidelines and BORN FREE, the recently updated University of Minnesota multimedia training program to expand career options and reduce sex role stereotypes for women and men, were also described. Hansen (2004) also discussed Integrative Life Planning, a holistic model that she developed for the career development of adults. It seems clear that although the United States has created a number of adult education programs, the people--from college students to midlife adults to older adults--who receive the most attention are college students and unemployed adults. The gap between the ideal of life span career development and the reality of career development programs for adults is still wide.

During the discussion, Jeff Garis, of the United States, described a collaborative relationship between Florida State University and the Peoples' Republic of China to help China develop college career centers. He described the deep sense of responsibility felt by Chinese universities to place their more than 9 million graduates annually in jobs and stated that it may well be an impossible task. His team found that career center staff had little formal training in career development, which presented a challenge as they attempted to change from offices of career assignment to true career centers. Florida State is working with its Chinese counterparts in an ongoing training relationship.
Xiaolu Hu, who is now with a university in the United States but was originally from China and had just returned from a visit there, responded to Garis's presentation. She agreed that the universities have a responsibility to place students, as both students and the universities agree, but that placing students is often not possible. The training that students receive is frequently too theoretical to lead to easy placement; this is true even at the graduate level. This situation has led to real problems and a problematic gap between students' expectations and reality. Hu stated that universities are looking at creating learning societies that focus more on the career implications of various courses of study.

She also discussed the problem of forced early retirement, which happens at age 50 for women and 55 for men in China. She believed that retirement at these ages forces people to retire when they are too young and creates societal problems of how to support such a large group of the nonworking population. One response to addressing many of these problems has been the formation of a professional association similar to the National Career Development Association. Although here the gap is between desired policies and the reality of students' lives, it seems again to show a gap between what is wished and what is real.

Heather Jackson (2004) reported on a unique approach to career guidance for workers in the United Kingdom's National Health Service (NHS), for which she worked. Employees of the NHS in Britain were the target of the program. The NHS is working to develop programs for change and to create its own university. The National Health Service University is responsible to more than 2 million NHS employees. NHS is the largest employer in Europe and the third largest in the world. The government ensures that the health and social care sector reviews its practice in light of social, demographic, environmental, and technological changes. Jackson identified three barriers to learning: individuals' state of readiness, level of self confidence/self-esteem, and motivation. The size and complexity of the NHS make change and modernization a real challenge. She also stated that effective information, advice, guidance, and personal support are required to tackle the barriers to access.

Twinet Parmer (2004), from the United States, presented a paper on career development programs for African Americans that addressed the questions: Has the concept of career development and its many facets adequately addressed the career needs of African Americans based on their work history? Specifically, has career development examined the cultural context, lifestyle, and identity issues from a holistic perspective of African Americans that is consistent with race and class issues across the life span and life context? Her paper diverged from the theme of the gap between policy and practice to suggest that appropriate policies to meet the needs of African Americans might not even exist.

Parmer (2004) stated that discouragement about positive work experiences is common among African Americans; many do not have career dreams, except for hopes of "making it big" in sports or entertainment. Others only dream of a "good job," defined as a blue-collar occupation providing enough money to lead a middle-
class life and to have security, requiring hard work but having little educational requirements; however, many African Americans will never work in legitimate jobs. Furthermore, they have the highest unemployment rate in the United States, officially about 10%, although this probably is an underestimate because discouraged workers are often not counted in government statistics.

Parmer (2004) reminded the group that African Americans’ history of work is unique. A history of slavery is different from a history of immigration. Emancipation changed the situation of American Blacks from full employment (as slaves) to a group with high rates of unemployment. She suggested that work provides purpose, meaning, and direction to life and criticized the lack of relevance of many career development theories to Blacks and other minorities. She presented her holistic model of culture, identity and lifestyle, life span, and life context as a suggested way to improve career development models to better meet the needs of African Americans.

In Anna Lichtenberg’s (2004) presentation on practical steps for developing resources for an indigenous population in Australia, she described the current career development situation for Aboriginals and Torres Strait Islanders, in particular the barriers they face and their disadvantaged condition in the labor force. For example, they have higher unemployment and lower literacy than the Australian population in general. Lichtenberg then described a project (a program of research and strategic consultation and then resource development) designed to ameliorate these conditions.

Lichtenberg (2004) concluded that the usual Western models for career development seem to be less effective with this population and stated that new, collaborative, and more holistic research approaches may be required to identify appropriate career practices strategies and resources. She also emphasized that new approaches and ways of thinking will be needed if career counselors are to empower young people to live and work in this new era. This presentation provided reinforcement for Parmer’s contention that current models do not necessarily meet the needs of African American youth and adults, again pointing up the gap not only between policy and practice but the gap in knowledge about what makes good policy for increasingly diverse populations and cultures.

Heli Piikkila, from Tampere, Finland, delivered a paper, coauthored by Helena Kasurinen and Elise Hanninen (2004), that described projects that promoted the social inclusion of young people in Finland. One of the projects described was aimed at young people who do not complete basic education programs or who do not find "a study place" after graduation. The project was directed by a consortium of stakeholders, including representatives of education, labor, teachers’ union, municipalities, and students, among others. Also organized collaboratively by various stakeholders, a second project focused on students in the final stages of compulsory education and those in transition between primary and secondary education. The third project described was a special program in Tampere that again
focused on mobilizing assistance for students who might need extra help to navigate their transition from school to work or further education.

Marcela Mesa (2004), from Colombia, described her country's career programs in a presentation on vocational guidance in Columbia. Because only about half of Columbia's students go to high schools, and fewer still to tertiary or collegiate education, good career development is critically important from the standpoint of effective use of resources. Mesa informed the group that international and private schools have elaborate vocational guidance programs; public schools, however, have very few programs. They do have extensive plans and goals based on policies and programs they have learned through the International Association for Educational and Vocational Guidance.

Mesa (2004) described a growing, "consciousness about the importance of vocational guidance in our [Colombia's] educational context" (p. 4). Between them, two conferences in the last 2 years attracted more than 600 participants, including counselors, teachers, and students from all over Colombia. These conferences focused on vocational guidance and academic counseling in both public and private educational settings. She believed that these landmark meetings were representative of a growing consciousness about the needs for these services but that "the political and social will" is not yet there to make this happen. Mesa concluded with a series of recommendations.

Dennis Engels (2004), from the United States, presented a paper that addressed four ethical issues across cultures that relate to career counseling: (a) the universality of ethics, that is, the concept that diverse professions share beliefs of respect for human beings, privacy, accountability, and honesty; (b) the distinction between ethical and legal principles, making the point that the two types of principles may be in conflict; (c) the relative paucity of articles and literature on ethical issues in career counseling; and (d) the visibility of ethics, "in spirit, motivation, intention, and focus" (p. 7) as empowering counselors to focus on "promoting human worth, dignity, uniqueness, and potential" (p. 7). Points that arose during discussion included the statement that ethics are easy to overlook if they are infused in graduate education rather than being addressed separately and specifically.

References


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