Career Development Challenges for the 21st Century Workplace: A Review of the Literature

Thomas J. Conlon University of Minnesota

Career development theories have focused on the human lifespan, traits, vocational choice, assessment tools, values and self-understanding to guide adults in their career decisions. However, many of these early theories have questionable value in today's diverse workforce and where business practices have changed to reflect emerging economic competitiveness in a global economy. This paper reviews literature on career development and contemporary business trends. Career development implications and research questions for the $21^{\rm st}$ century workplace are identified.

Keywords: Career Development, Career Planning, 21st Century Workplace

The 21st Century workforce looks and feels considerably different from the past century when the first career development theories emerged (Bierema, 1998). Career development practice, like 100 years ago, will always be necessary as long as students, adults or employees are seeking careers and employers seeking labor. Beyond this commonality, however, career development's practices and theoretical relevance have changed and will look different in the 21st Century (Herr, 2001). This paper briefly identifies career development theories and theorists, with more detail on contemporary workplace issues in the literature which impact career development. While focusing primarily on a North American career development context, commonalities may impact other industrialized nations and growing economies of the world. It also highlights issues likely to evolve in the 21st Century workplace and propose questions for future research.

Methodology, Methods and Scope

The research problem is how to assist individuals and organizations in career development practices that are consistent with a 21st century workforce and workplace. The methodology is a literature review to develop a grounding in past and current career development definitions, practices and workplace issues, with the purpose of identifying likely career development issues in the 21st century workplace and proposing future research questions or conclusions for empirical or qualitative testing. No studies or tests based on these findings are within the scope of this study. A large amount of career development research also focuses on career counseling and assessment, including for children and students. The scope of this review is to focus primarily on the adult worker and workplace characteristics rather than professional career counselor practices seen in schools and job placement organizations.

The method of this study was to conduct a literature review, using both library and electronic sources of scholarly journals, books, U.S. Government data, career development-related websites and other relevant publications during 2002 and 2003. Sources were chosen based on scholarly relevance, including key journals in the career development field (Career Development Quarterly; Journal of Career Development) and related HRD or business management journals. This paper assumes the view that career development is, and will likely remain, a part of HRD. Therefore, scholarly works of HRD, including journals, recent Academy of Human Resource Development conference proceedings and books were included in the research. To identify broader business trends in both a scholarly and practitioner context, the World Wide Web's Google.com search engine was used, testing different words such as career development, workplace trends and the 21st century workplace. Electronic scholarly sources were sought using similar words under ProQuest and ERIC. Finally, manuscripts themselves often revealed additional sources for research, which were pursued using one or more of the methods noted above. A collection of sources were then categorized by themes reflected in the findings of this paper, supplemented with the author's conclusions and recommendations.

The limitations of this study may be the shortage of global literature, particularly in developing nations or in cross-cultural contexts. However, as country-specific studies (many in Asia) were found, the decision to focus more on broader career development contexts (which generally reflect a North American and, to a lesser extent, a European tradition) limits the scope of these findings. Since the findings have not been tested, they are not generalizeable but do provide a grounded framework for future researchers to confirm or refute these findings.

Copyright © 2004 Thomas J. Conlon

Definitions and Theorists

Career development is a component of HRD (McLagan, 1989; Marsick & Watkins, 1994), although some scholars feel it has, at best, lost its influence, or worst, its place in HRD due to the shift of career development responsibilities from organizations to individuals, where individual choice generally falls outside the traditional bounds of HRD (Swanson & Holton, 2001). McDougall & Vaughn (1996) argue that "career development involves aligning individual subjective and more objective career aspects of an organization to find a match between individual and organizational needs, personal characteristics and career roles." This author views career development as a mutual role, based on the needs and circumstances of both individuals and organizations.

Career development definitions have evolved over time. Once known as vocational guidance, this definition implies that someone other than the individual (e.g. vocational guidance counselor or an organization) is responsible for the career guidance function, which was largely true for this era (Herr, 2001). This began to shift as Super (1951) defined vocational guidance as "the process of helping a person to develop and accept an integrated and adequate picture of himself [sic] and of his role in the world of work, to test this concept against reality, and to convert it into a reality, with satisfaction to himself and society," where the career choice gave way to the characteristics of the chooser, or the psychological nature of vocational choice. Super (1954) defined occupation as "the specific activity with a market value that an individual continually pursues to obtain consistent and steady income" while one's career is "the sequence of occupations, jobs and positions in an individual's life," a foundation of his life-span career development theory taking workers through formal education, a career, and retirement.

Pietrofesa & Splete (1975) stated that "career development is an ongoing process that occurs over the lifespan and includes home, school and community experiences related to an individual's self concept and its implementation in lifestyle as one lives life and makes a living." Robbins (1993) defines career development as "a means by which an organization can sustain or increase its employees' current productivity, while at the same time preparing them for a changing world," thus supporting an organizational role that is consistent with HRD. Applebaum, Ayre & Shapiro (2002), while acknowledging an employee's responsibility for career management, see the organization's human resource professionals who "define and implement career management programs within organizations, including succession and retirement planning facing all organizations." This view distinguishes career development from career management, which falls more into human resource management rather than HRD functions. Noe (1996), however, argues that organizations can best use their resources to train managers in skills to support employee development rather than career management programs for improved employee performance.

Parsons (1909), who first proposed people's traits could be matched with work conditions and vocations, brought career development to the forefront during the U.S. industrial revolution. Holland (1985) viewed career development as a person-environment fit and developed many career assessment tools that are still used today. Gottfredson (1996) saw career development in an individual's development role; Krumboltz (1996) in a social cognitive learning context. Brown (1996) focused on the broader life roles of individuals. Others have made contributions within one or more of these contexts as well. Future theorists must study current and future workers and workplaces to determine how changes have confirmed past theories, or created need for new theories reflecting today's realities.

The Workplace Today

Osipow & Fitzgerald (1996) stated that "careers are influenced by conditions that emerge in one's early years, especially gender and family socioeconomic status," an implicit recognition that early career development theory was designed for a white, male, and middle-class workforce (Betz & Hackett, 1986; Perrone, Sedlacek & Alexander, 2001; Isaacson & Brown, 2000; Opengart & Bierema, 2002; Fitzgerald & Betz, 1994). Career practitioners need to understand that cultural differences in today's more diverse workforce impact their vocational behavior (Leong & Brown, 1995).

Up through the 1960s, the employer-employee relationship was characterized as a parent-child relationship: narrowly-defined jobs; community status and job security were provided in exchange for employee hard work, loyalty and good performance. By the 1990s, a new contract had firmly taken hold and is in effect today. In this era, the employee-employer role is a partnership, where employers provide opportunities and tools for employee development, but the employee takes responsibility for career management and exercises opportunities. They must continually update their skills and be self-reliant (Collard, Epperheimer & Saign, 1996).

In 1985, the National Vocational Guidance Association formally changed its name to the National Career Development Association, formally reflecting new theories, assessment practices and inclusiveness of additional perspectives and populations (Herr, 2001).

Eight themes emerged in reviewing comparisons between the past, present and likely the future workplace.

- 1. *Demographics*. Longer life expectancy, rising retirement ages, along with economic, social and psychological reasons, has increased the number of elderly in the U.S. workplace (Henretta, 2000). The traditional two-parent family with the father as sole bread-winner declined from 60% in 1955 to 11% of families in 1980 (Robey & Russell, 1984). Within the early 21st Century, the U.S. labor force will contain about 30% people of color, and, combined with women of all races, will become the new majority of U.S. workers (U.S. Department of Labor, 1995). Generation Xers, born roughly from 1961-1981 and who are the workforce's younger workers, have grown up in a time where divorce rates doubled from 1965 to 1977, single parent homes became the norm, and where over 40 percent of them come from a broken family (O'Bannon, 2001). Between 2000 and 2010, women will outpace men in U.S. labor force growth 15.1 percent to 9.3 percent; white workers share of the workforce will drop from 73.1 percent to 69.2 percent; and workers over age 55 will increase from 12.9 to 16.9 due to the aging baby boom population (U.S. Department of Labor, 2003).
- 2. Old vs. new economy. One-third of Fortune 500 companies existing in 1980 were gone by 1990, and another third of the remaining firms were targeted for hostile takeovers. U.S. exports rose from 11% in 1960 to 31% in 1990, and continue to rise (Whitman, 1999). Knowledge workers are currently 40% of the U.S. workforce, but are expected to form at least 90% of the workforce by 2010 (Drucker, 1999). Between 2000 and 2010, U.S. employment is expected to grow from 146 million to 168 million, primarily in the fastest growing services industry (3 out of every 5 new jobs, mostly in business, health and social service), as well as more modest growth in durable good manufacturing. In this same time period among occupations, professional jobs will grow the fastest (26 percent increase), followed by service (19.5 percent), transportation (15.2 percent), management, construction, and sales occupations. Non-durable goods manufacturing will continue its current decline due to increased job automation and international competition. Nearly two-thirds of projected job openings by 2010 will offer low pay and benefits, yet require on-the-job-training arising mostly from replacement needs (U.S. Department of Labor, 2003). Zemsky, Shapiro, Iannozzi, Cappelli & Bailey (1998) found 78% of U.S. companies were using lower-paid contract or contingent workers (project-based, temporary or independent contractors), with 40% of them expecting such use to grow. Today's workplace reflects the impact of globalization, where worldwide competition to once-domestic markets has created new demands for higher productivity and lower costs to remain competitive with cheap labor outside the U.S.
- 3. Career patterns. Leach & Chakiris (1988) note the traditional linear career development model of education, employment and retirement likely accounts for less than one-third of all U.S. careers, and new ways of looking at adults' developmental diversity are needed such as free-form (part-time work, entrepreneurial, consulting or volunteer) or mixed-form (transitions between linear and free-form, or unemployed/underemployed). Many job titles did not exist when current older workers made their initial career decisions (Robey & Russell, 1984). Women and minorities don't typically follow a linear or life-span career as their career development is disproportionately influenced by their differential experience of home, school and workplace. Women's lives are also more closely characterized by social interaction and personal relationships, thus affecting their career development with interruptions not reflected in traditional career development theories (Hughes & Smith, 1985; Eastmond, 1991; Sharf, 1997). As the U.S. workforce continues to diversify, people with differing individual value systems and unique needs will also enter occupations with varying expectations and rates of success (Isaacson & Brown, 2000), making career development a more customized process.
- 4. Workplace justice. Has career development been caught in the ideological debate over globalization, job access, employment discrimination and opportunity? As these characteristics dramatically increase in future decades, the impacts of globalization, discrimination, technology, workplace laws and a lack of dignity may pose new career development challenges (Herr, 2001; Santos, Ferreira & Chaves, 2001). Critics of globalization see the 21st Century as 'the new ruthless economy,' characterized by a growth in inequality, a shift in power from labor to capital, and a proliferation of low-wage employment (The New York Review of Books, 1996).). The 21st century must also adapt to meet social justice needs of the new immigrants, poor youth, victims of discrimination, disability, economic status and others who face obstacles in their career development (Hartung & Blustein, 2002). Theories need updating that consider gender, age, race, social class, sexual orientation, socio-economic status and English language proficiency (Bierema, 1998) as well as in training and development opportunities (Knoke & Ishio, 1998). Career development must also take into account people with disabilities, who also have been underrepresented in traditional workforces (Szymanski & Hershenson, 1998).

- 5. Lifestyle & welfare trends. The average U.S. American today stays on the same job for fewer than four years (Kurian, 1994). Downsizing and outsourcing of the U.S. workforce has created a more stressful worker (Gowing, Kraft & Quick, 1997). And as employees experience greater career uncertainty, their focus shifts from employment security to employability security (Gould & Levin, 1998). Job seekers increasingly will emphasize the quality of work life as work-life balance issues become more important in an era of job turnover. While individual job seekers no longer think in terms of one career path or job family as they did in Parsons' or Super's day, organizations will still play a small yet different career development role by creating multiple career paths (Lock & Hogan, 2000). Career counseling will continue to become less and less about jobs and more about life themes, values, strengths, family patterns and personal identity development, requiring more skills of future career counselors (Severy, 2002). Career counselors will also need to expose students, peers or clients to non traditional jobs in non traditional places and communicate that future workers will be non-linear, non-singular, non-traditional and non-secure. Developing social skills, technological expertise and broad-based experience in counselees will also be key, be they in an organization, school, or on their own (Herr, 2001).
- Employer responsibilities. Is it in the employer's best interest to provide career development, and in what form? How has it changed through they years? Organizations now focus on the advancement of a few carefully selected employees for career growth as cost-cutting, downsizing and flatter organizational structures have reduced or eliminated career development functions (Cox & Cooper, 1988). But Gutteridge (1986) argues that career development should be a broader organizational concern to "help ensure a continued supply of qualified, talented personnel" and that employees expect career advancement benefits, while Applebaum, Ayre & Shapiro (2002) note succession and retirement planning require organizations to remain involved in career development. On a more basic level, 25% of U.S. organizations of over 50 employees had to provide formal training in basic reading, writing and arithmetic skills (Bureau of Labor Statistics, 1995). Career counseling has become an integral part of human resource development programs as employers recognize the need to blend individual and organizational goals (Peterson & Gonzalez, 2000). As formal learning and career development continues to decline in organizations, we will likely see informal learning filling the gap: the rise of networking, trial-and-error, and growth from personal experience. However, HRD practitioners, in or outside of organizations, can assist employees with goal setting and developing a career vision, resulting in whole-person learning for the employee and improved organizational performance. (Powell, Hubschman & Doran, 2001). Pencil-and-paper career assessment tools are being replaced by the internet and will continue to grow, but with technological advance come new issues: privacy, ethical use of data, user readiness, methods of administration and equity of access (Sampson & Lumsden, 2000; Oliver & Whiston, 2000). The shift will go from employee-sponsored career training or actions to the creation of multiple career paths. The difference is one must generally seek it out themselves (Lock & Hogan, 2000).
- 7. Employee & individual responsibilities. Are individuals primarily responsible for their own career development? Or is it a blended responsibility? Loughlin & Barling (2001) argue that the notion of a 'job for life' has been replaced with a 'survival of the fittest' as downsizing has forced employees to develop their own personal career plans and portfolios. Koonce (1995) notes that decentralization, constant change, and new learning environments have forced employees to accept the responsibility and challenge for developing their own careers by upgrading skills, preparing a personal career plan and customizing that plan to fit the organization's plan. As a result, younger workers whose parent's careers may have ended or changed due to organizational downsizing will be more demanding and less willing to make sacrifices to their employers, not to mention a loss of employee loyalty to their organizations, especially when work-life balance issues arise. The non-union service sector has largely replaced the traditionally unionized manufacturing sector (and private sector unionism in general), making retraining and further education necessary to remain employable. Employees who actively embrace change and are tolerant of ambiguity are more likely to prosper in today's highly turbulent organizational environments (Patterson, 2001).
- 8. Education & training. The power of informal learning should not be underestimated, as up to 90% of organizational learning takes place through informal work networks (Marsick & Watkins, 1991). Will careers be shaped more by personal mentoring relationships within organizations, rather than a planned career track? Education curriculum and career development must address basic skills while matching relevance to future careers in a knowledge-based economy, especially where traditional distinctions of training, learning, educational and performance are blurring and traditional job roles are shifting to performance roles. Learning has also shifted from the classroom to the point or moment of value, and

specific job descriptions have given way to performance expectations (Harkins & Kubik, 2001). Palomba and Banta (1999) believe colleges must be accountable for career success of their students, not only academic success, and that employers are requiring additional competencies beyond basic skills, many of which are lacking in students (Newton, 2000).

Career Development in the 21st Century: A Conceptual Domain (w/diagram)

Based on the literature, this author proposes the following theoretical domain comparing career development between the 20th and 21st centuries, to create a foundation for future research on career development's role and effectiveness in the 21st century workplace:

Career Development Domain	20 th Century	21 st Century
Demographics	Largely White & Middle Class, but shifting towards greater workforce diversity (Harris- Bowlsbey, 2003).	Ethnicly, Racially, Gender Diverse with non-traditional family structures and role.
Old vs. New Economy	Shift from Manufacturing to Service and information Economy (Blocher, Heppner & Johnson, 2001); technology emerging, Productivity and loyalty valued.	Work crosses national borders, knowledge workers in highest demand. Adding value key to return on investment
Career Patterns	Linear, generally within one career in lifespan, job security good (in exchange for employee loyalty), but economic shifts and global competition force changes	Flatter organizations, multiple careers in lifespan, non-traditional work setting (e.g. telecommuting). Growth in entrepreneurship as downsizing, restructuring forces career changes.
Workplace Justice	Unionization and increased regulatory environment largely shaped domestic reforms, but this began to disappear.	Now a decentralized, global economy; wider economic gaps between workers and upper management. (Hansen, 2003). Focus on global business ethics practices.
Lifestyle & Welfare Trends	Work and life largely separate, yet generally compatible. More stable and traditional family and career structures	Work-life balance essential to career satisfaction; careers must appeal to this need
Employer Responsibilities	Provide a career path and opportunity for all employees within the organization, for its own benefit. Supervise employees closely.	Offer development opportunities for career growth, in or out of the organization. Management serves as coach and facilitator rather than traditional supervisor (Fisher, 1993).
Employee/Individual Responsibilities	Loyalty, hard work and often times seniority led to career growth within the organization.	Seize development opportunities, continued education, change organizations for career growth.
Education & Training	Mostly completed before joining the organization; more structured training	Ongoing expectation of all employees, much of it outside the organization to stay current and maintain marketability
Career Development Role	Largely organizational role	Mutual, but primarily individual role

Conclusion, Implications and Future Research

As demographics show, the U.S. workforce is more diverse and likely to continue, reflecting population and societal trends. Many cultures view work and cultural roles quite differently, such as new immigrants coming from a collectivist or teamwork orientation to the U.S., generally viewed as more individualistic in business and cultural practices (Palladino Schultheiss, 2003; Hartung, 2002). Future research can assist career development by exploring

the role of cultural values, choice methods and outcomes in the career decision-making process. As globalization creates more cross-national and cross-cultural commerce, research will be needed that look beyond traditional North American and European career development models. Career development practice will grow worldwide as a sociopolitical force designed to facilitate the economic health of nations and the purpose and productivity of individuals. (Herr, 2001). Other questions to address or test include: Has an employer's hands-off approach to career development caused higher turnover, or reduced costs? Is career development an HRD or Human Resource Management role? In what contexts? In a global economy, can a single career development theory address career growth in multinational organizations, or will cultural and business conflict intervene? What are the experiences of workers who have worked in such organizations? Are there differences in career development roles between entrepreneurs and members of larger organizations? Is career development a social justice and ethical issue, and whose responsibility is it?

The HRD profession stands to gain when it reinforces its historical role of linking an individual's career development to organizational performance, and where organizations see career development's value in improving productivity, employee morale, and recruiting and retaining the best people.

References

- Applebaum, S., Ayre, H. & Shapiro, B. (2002). Career management in information technology: A case study. *Career Development International*, 7(3), 142.
- Betz, N. & Hackett, G. (1986). Applications of self-efficacy theory to understanding career choice behavior. *Journal of Social and Clinical Psychology* 4, 279-289.
- Bierema, L. (1998). Women's career development across the lifespan: Insights, and strategies for women, organizations and adult educators. *New Directions for Adult and Continuing Education, No. 80.* San Francisco: Jossey-Bass.
- Blocher, D., Heppner, M. & Johnson, J. (2001). The world of work: New paradigms mean new challenges. *Counseling and Human Development*, 33(7), 1.
- Brown, D. (1996). Brown's values-based, holistic mode of career and life-role choices and satisfaction. In D. Brown, L. Brooks & Associates, (Eds.), *Career choice and development* (3rd ed., pp.337-372).
- Bureau of Labor Statistics (1995). *Contingent and alternative employment arrangements*. Report 900. Washington DC: United States Department of Labor.
- Collard, B., Epperheimer, J., & Saign, D. (1996). *Career resilience in a changing workplace*. Columbus: ERIC Clearinghouse on Adult, Career and Vocational Education (ED 396 191).
- Cox, C., & Cooper, C. (1988). High-fliers: An anatomy of managerial success. Oxford: Basil Blackwell.
- Drucker, P. (1999). Management challenges for the twenty-first century. New York: Harper Business, 1999.
- Eastmond, D. (1991). Since Levinson: View of life cycle theory and adult education. *Journal of Adult Education* 19(2), 3-10.
- Fisher, Y. (1993). Leading self-directed work teams: A guide to developing new team leadership skills. New York: McGraw-Hill.
- Fitzgerald, L. & Betz, N. (1994). Career development in cultural context: The role of gender, race, class and sexual orientation. In Savickas, M. & Lent, R., (Eds.), *Convergence in career development theories*, Palo Alto, CA: CCP Books.
- Gottfredson, L. (1996). Gottfredson's theory of circumscription and compromise. In D. Brown, L. Brooks & Associates (Eds.), *Career choice and development* (3rd ed., pp. 179-228). San Francisco: Jossey-Bass.
- Gould, S., & Levin, B. (1998). Building a free agent community. *Compensation & Benefits Management*, 14(3), 24-30.
- Gowing, M., Kraft, J., & Quick, J., Eds. (1997). *The new organizational reality: Downsizing, restructuring and revitalization*. Washington DC: American Psychological Association, forward.
- Gutteridge, T. (1986). Organizational career development systems: The state of the practice. In D. Hall (Ed.), *Career development in organizations*, San Francisco: Jossey-Bass.
- Hansen, S. (2003). Career counselors as advocates and change agents for equality. *The Career Development Ouarterly* 52(1), 43.
- Harkins, A. & Kubik, G. (2001). Closing the paradigm gap separating worker and student support. *On the Horizon* 9(1), 10-12.
- Harris-Bowlsbey, J. (2003). A rich past and a future vision. The Career Development Quarterly 52(1), 18.
- Hartung, P. (2002). Cultural context in career theory and practice: Role salience and values. *The Career Development Quarterly 51*(1), 12.

- Hartung, P., & Blustein, D. (2002). Reason, intuition and social justice: Elaborating on Parsons' career decision-making model. *Journal of Counseling & Development 80*(1), 41-47.
- Henretta, J. (2000). The future of age integration in employment. The Gerantologist 40(3), 286-292.
- Herr, E. (2001). Career development and its practice: A historical perspective. *The Career Development Quarterly* 49(3), 196-211.
- Holland, J. (1985). *Making vocational choices: A theory of vocational personalities and work environments.* Englewood Cliffs, NJ: Prentice Hall.
- Hughes, A. & Smith, B. (1985). Career development and the ethnic minority. In *Career Development*, Alexandria, VA: National Career Development Association.
- Isaacson, L. & Brown, D. (2000). *Career information, career counseling, and career development.* (7th ed.). Needham Heights, MA: Allyn & Bacon.
- Knoke, D., & Ishio, Y. (1998). The gender gap in company training. Work and Occupations 25(2), 141-167.
- Koonce, R. (1995). Becoming your own career coach. Training & Development 49(1), 18-43.
- Krumboltz, J. (1996). A learning theory of career counseling. In M. L. Savickas & W.B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 55-81). Palo Alto, CA: Davies-Black.
- Kurian, G. (1994). Datapedia of the United States 1790-2000. Lanham, MD: Bernan Press.
- Leach, J., & Chakiris, B. (1998). Future of jobs, work and careers. *Training and Development Journal* 42(4), 48-54.
- Leong, F.T.L., & Brown, M. (1995). Theoretical issues in cross-cultural career development: Cultural validity and cultural specificity. In W.B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology: Theory, research and practice* (2nd ed., pp.143-177). Hillsdale, NJ: Erlbaum.
- Lock, J., & Hogan, R. (2000). Expanding the focus of career assessment. Journal of Career Assessment 8, 411-417.
- Loughlin, C. & Barling, J. (2001). Young worker's work values, attitudes and behaviors. *Journal of Occupational and Organizational Psychology* 74, 543-558.
- Marsick, V., & Watkins, K. (1991). Informal and incidental learning in the workplace. London: Routledge.
- Marsick, V., & Watkins, K. (1994). The learning organization: An integrative vision for HRD. *Human Resource Development Quarterly* 5(4), 333-360.
- McDougall, M., & Vaughn, E. (1996). Changing expectations of career development: Implications for organizations and for... *Journal of Management Development* 15(9), 36-47.
- McLagan, P.(1989). Models for HRD practice. Alexandria, VA: *American Society for Training and Development*, 6. The New York Review of Books (1996). *The New Ruthless Economy* 43(4). February 29, 1996.
- Newton, F. (2000). The new student, about campus. December, 2000, pp. 8-15.
- Noe, R. (1996). "Is career management related to employee development and performance?" *Journal of Organizational Behavior 17*, 119-23.
- O'Bannon, G. (2001). Managing our future: The generation X factor. Public Personnel Management 30(1), 95.
- Oliver, L., & Whiston, S. (2000). Internet career assessment for the new millennium. *Journal of Career Assessment* 8, 95-103.
- Opengart, R. & Bierma, L. (2002). Emotions in women's career development. In Egan, T. & Lynham, S., (Eds.), *Academy of Human Resource Development 2002 Conference Proceedings* (1-2). Bowling Green, OH: Academy of Human Resource Development.
- Osipow, S., & Fitzgerald, L. (1996). *Theories of career development* (4th ed.). Boston: Allyn & Bacon.
- Palladino Schultheiss, D. (2003). A relational approach to counseling: Theoretical integration and practical application. *Journal of Counseling and Development* 81(3).
- Palomba, C., & Banta, T. (1999). Assessment essentials. San Francisco: Jossey-Bass, 211-238.
- Parsons, F. (1909). *Choosing a vocation*. Boston: Houghton Mifflin, p. 5.
- Patterson, F. (2001). Developments in work psychology: Emerging issues and future trends. *Journal of Occupational and Organizational Psychology* 74(4), 381-390.
- Perrone, K., Sedlacek, W., & Alexander, C. (2001). Gender and ethnic differences in career goal attainment. *The Career Development Quarterly* 50(2), 168-178.
- Peterson, N., & Gonzalez, R. (2000). The role of work in people's lives: Applied career counseling with vocational psychology. Belmont, CA: Wadsworth/Thomson Learning.
- Pietrofesa, J., & Splete, H. (1975). Career development: Theory and research. New York: Grune & Stratton.
- Powell, T., Hubschman, B., & Doran, M. (2001). Career development through informal learning: A review of the literature. In O. A. Aliaga (Ed.), *Academy of Human Resource Development 2001 Conference Proceedings* (33-3). Baton Rouge, LA: Academy of Human Resource Development.
- Robey, B., & Russell, C. (1984). A portrait of the American worker. American Demographics 6, 17-21.

- Robbins, S. (1993). *Organizational behavior concepts, controversies, and applications*, (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Sampson, J. Jr., & Lumsden, J. (2000). Ethical issues in the design and use of internet-based career assessment. *Journal of Career Assessment* 8, 21-35.
- Santos, E., Ferreira, J., & Chaves, A. (2001). Implications of sociopolitical context for career services delivery. *The Career Development Quarterly* 50(1), 45-55.
- Severy, L. (2002). What's the story? Postmodern career counseling in student affairs. *Journal of College Student Development* 43(1), 84-96.
- Sharf, R. (1997). Applying career development theory to counseling, (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Super, D. (1951). Vocational adjustment: Implementing a self-concept. Occupations 30, 88-92.
- Super, D. (1954). Career patterns as a basis for vocational counseling. Journal of Counseling Psychology 1, 12.
- Swanson, R., & Holton, E. (2001). *Foundations of human resource development*. San Francisco: Berrett-Koehler Publishers, Inc., p. 312
- Szymanski, E., & Hershenson, D. (1998). Career development for people with disabilities: An ecological model. In Parker, R. & Szymanski, E., (Eds.), *Rehabilitation counseling: Basics and beyond*.(3rd ed.) Austin, TX: Pro-Ed.
- U.S. Department of Labor (1995). Employment and earnings. Washington DC: US Government Printing Office.
- U.S.Department of Labor. Occupational Outlook Handbook. Retrieved Nov. 24, 2003 http://www.bls.gov/oco/oco2003.htm
- Whitman, M. (1999). New world, new rules: The changing role of the American corporation. Boston: Harvard Business School Press.
- Zemsky, R., Shapiro, D., Iannozzi, M., Cappelli, P., & Bailey, T. (1998). *The transition from initial education to working life in the United States of America* (NCPI Project Paper No. 1). Stanford, CA: National Center for Postsecondary Improvement.