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What is This?

Career Development: Load-Bearing Wall or Window Dressing? Exploring Definitions, Theories, and Prospects for HRD-Related Theory Building

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Career development (CD) has long been cited as a core area associated with human resource development (HRD). Despite this explicit connection, few publications focusing on CD are available in general HRD-related literature. This review outlines selected theories, examines selected definitions of CD, and analyzes the aims of career development in relation to HRD. The authors argue that there is much more opportunity to explore CD as a necessary component of HRD than has been undertaken to date. Furthermore, they make recommendations for multilevel integration and related theorybuilding approaches that may enhance the role of CD in HRD.

Keywords: career development; human resource development; training

When it comes to career development (CD) perspectives in the context of human resource development (HRD) literature, HRD scholars and practitioners appear to have paid little attention to the importance of CD. At present, there is a broad array of theory, practice, and knowledge-based perspectives that inform HRD (Desimone, Werner, & Harris, 2002; McGoldrick, Stewart, & Watson,

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2002; Swanson & Holton, 2001; Woodall, 2001). These theoretical influences have been articulated in various HRD literature, related texts, and ongoing discussions regarding definitions and foundations of HRD. Furthermore, exploration and development of HRD-related theory appears to be increasing—particularly within the Academy of Human Resource Development (AHRD) and since the launch of *Human Resource Development Review* (Torraco, 2004). Although little research has been published to support including CD in HRD, a central element in HRD definitional and theoretical discussions is the inclusion of CD.

Many HRD scholars and practitioners are familiar with McLagan's (1983) definition of *HRD* as the "integrated use of training and development, career development, and organization development to improve individual and organizational performance" (p. 7). Given this and related discussions, practitioners, scholars, and students may be led to believe that CD is a pillar or a load-bearing wall for HRD. Load-bearing walls in buildings provide support for the gravitational force exerted on a structure (*Encarta Dictionary*, 2005a). CD is often presented as providing major structural support for the practice and scholarly endeavors associated with HRD. Despite assertions that CD is a central element of HRD (e.g., McLagan, 1989; Swanson & Holton, 2001; Weinberger, 1998), support for these claims are difficult to locate in the general HRD literature. In fact, CD appears to be a relatively minor consideration in HRD research, and rarely the explicit focus of AHRD literature.

Our recent exploration of AHRD publications identified fewer than 40 total articles to date in the *Conference Proceedings* and only three in the four AHRD-refereed journals (*Advances in Developing Human Resources, Human Resource Development International, Human Resource Development Quarterly,* and *Human Resource Development Review*) from 1996 to 2005 that specifically discuss CD. This count is compared (using the same search parameters) to nearly 300 references to training or training and development (another identified foundational element of HRD) in AHRD publications overall and better than 50 times the number of CD articles in AHRD's refereed journals. CD does not appear to be overtly supporting the HRD structure or, to complete the analogy, may be more "window dressing"—defined as a "deceptively appealing presentation of something"—than part of the foundation or structure of the field (*Encarta Dictionary*, 2005b).

Despite this relative lack of attention to CD, examination of CD definitions is important to HRD scholars or professionals interested in the consideration of multiple levels of analysis (Garavan, McGuire, & O'Donnell, 2004) such as the meaningful integration of systems and organization-level development with individual development in the workplace. In addition, CD is relevant to HRD practice (McDonald & Hite, 2005; McLagan, 1989; Weinberger, 1998) and has a relevant theory base. Although it is difficult to fully ascertain why exploration of CD has been fairly limited in HRD and AHRD literature, an observation recently underscored by McDonald and Hite (2005), a few reasons include

- 1. the perceived high costs of individually oriented HRD efforts in the workplace
- 2. the existence of often-limited views of CD as a career counselor-client relationship only
- 3. the creation of employee assistance programs and other outsourced or external elements that remove traditional CD practice from the context of the organization making individuals responsible for their own development
- 4. the presentation of systems and organization-level learning and performance as superordinate, overriding concerns for individual level issues in the general HRD literature
- 5. a lack of foundational and theoretical literature elaborating on the often cited relationship between CD and HRD
- 6. the use of different terminology across international contexts
- 7. the dominance of a constructivist perspective that questions the use of acontextual or predetermined frameworks and, therefore, rejects efforts to formulate general definitions or explorations associated with HRD and CD.

We agree with the statement by Swanson and Holton (2001) that "career development is being overlooked as a contributor to HRD" (p. 312), and by McDonald and Hite (2005) that "HRD can renew its commitment to career development as one of its fundamental functions" (p. 437).

Several HRD scholars have engaged in exploration of HRD-related definitions and theory as attempts to clarify issues, identify necessary outcomes, explore related literature, and stimulate related research, applications, and discussions (Egan, 2002; Weinberger, 1998; Woodall, 2001). This article has a similar aim. Recognizing that there are many ways to approach explorations of definitions and related theories, we believe, like McDonald and Hite (2005), that failure to engage more specifically in CD-related discussion in general HRD will be a disservice to the field and a contradiction to the explicit linkages between CD and HRD as supported in foundational HRD literature.

Purpose and Research Questions

The purpose of this inquiry is threefold: (a) to review existing CD theories, (b) to examine definitions of CD and their concomitant dependent variables (DVs), and (c) to apply the outcomes of (a) and (b) to recommendations for future theory-building research connecting CD and HRD. To this end four research questions are used to guide and inform the inquiry, namely:

Research Question 1: Based on available resources, what are definitions of CD?

Research Question 2: Based on identified CD definitions, what are related DVs of CD?

Research Question 3: What patterns exist among identified definitions and DVs? Research Question 4: What is the potential for CD theory and definitions to inform or be integrated into HRD theory building?

Our desire is that this elaboration of theories and definitions will stimulate discussion, aid in the development of new insights, demonstrate connections between CD and HRD, and advance the possibility for more elaboration and progress in the development of CD-related definitions, theory building, research, and exploration in the context of HRD. In addition, our choice to explore DVs, or outcomes, is based on our position that shared aims between CD and HRD should be the starting point for exploring the interactions between them. According to Swanson (1996), "The dependent variable—the outcome—is the ultimate reason for human resource development" (p. 204). Swanson, therefore, stated, "HRD must get serious about the dependent variable. To accomplish this, HRD scholars must be willing to learn more about the dependent variable" (p. 206).

Limitations

It is important to note that this examination of definitions and dependent variables has several limitations. First, we used AHRD publications to support our argument that CD is not well represented in HRD literature. We were, however, unable to find articles in other journals that contradicted our position. We refute but are somewhat vulnerable to the contention that all CD-specific work is inherently HRD even if HRD is never discussed. In addition, our identification of core CD theories, definitions, and dependent variables is limited to our methods for doing so.

Overview of Definitions, Dependent Variables, and Theory Building

Theory building is often defined as a "process for modeling real-world phenomena" (Torraco, 1997, p. 126). The use of definitions in the process of modeling elements of the real world is essential to the theory-building process (Dubin, 1969). Without a clear understanding of the parameters and applied problems associated with a phenomenon, theory cannot be adequately constructed (Torraco, 1997). Nor can "coherent descriptions, explanations, and representations of observed or experienced phenomena [be] . . . generated, verified, and refined" (Lynham, 2000, p. 161). According to Dubin (1969) theory building should be aimed toward practical outcomes associated with explanation and prediction along with an intellectual interest in the characteristics and nature of the phenomenon about which a theory is formulated. In addition, Dubin's theory-then-research theory-building method requires, as the very first step, that the units or concepts associated with theory under construction be clarified or defined. Without clear definition, the goals of theory building in HRD—(a) to advance professionalism and maturity in the field, (b) to help dissolve tension between HRD theory and practice, and (c) to develop multiple approaches to HRD theory building and practice (Lynham, 2000)—cannot be accomplished. Dubin's insight contradicts Holton's (2002) expressed concern that ongoing exploration of HRD related definitions amounts to "scholarly 'navel examination" (p. 275) and further exploration may not help develop human resources or organizations. Although we share Holton's concern that discussion of nuanced issues, such as HRD-related definitions, can seem cumbersome, we also believe that the refinement of such discussions serve to support the goals of theory building in HRD.

Although those studying applied fields such as HRD and CD must be concerned with practice (McLagan, 1989), this concern is insufficient for sound theory building. Theorists, researchers, and practitioners alike must also concern themselves with outcomes, thus ensuring that the practice of HRD has clear aims and identifiable results (McLagan, 1989; Swanson, 1996)—what Van de Ven (1989) and Marsick (1990) term rigor and relevance. In an effort to inform the potential for interaction between CD and HRD at the theoretical level, we identify definitions, clarify outcomes, associate selected CD theories, and make suggestions for further progress associated with such theory building. Theory building in applied fields and practice can and should be linked. Definitions play a key role in theory building for the purposes of informing professionalism and practice-related outcomes (or DVs). In the following sections, we review current foundational CD theories (first of a general and then a specific nature), present CD definitions and their corresponding outcome and/or dependent variables, discuss briefly two thematic categories of CD DVs (individual, and organizational and social), provide an integration of CD and HRD perspectives, consider the interdependence among CD, HRD, and multilevel applied theory building, and finally, draw some conclusions on the topic of CD as a necessary load-bearing wall of HRD theory and practice.

Review of Core Career Development Theories

According to Hall (1987) a *career* can be defined as "the sequence of individually perceived work-related experiences and attitudes that occur over the span of a person's work life" (p. 1). *CD* has been defined by numerous scholars and supported by a number of theories. As identified above, theory, theory development, and definitions have important interrelationships. Although there may be no perfect way to organize CD theories, available literature often describes CD theories as (a) structural or (b) developmental (Osipow, 1983). Structural theories are focused on occupational tasks and individual attributes. Developmental theories, on the other hand, focus on lifelong learning and human development. Chen (2003) divided CD theories into objectivist–positivistic and constructivist approaches. Because precise categorization of CD theories into these dualistic domains is cumbersome, we have divided 19 core CD theories into two core categories (general and specific).

The first category deals with general CD theories (see Table 1) that include broad social science theories and perspectives framed in CD-related contexts.

(text continues on p. 456)

TABLE I: Career Development Theories

General Career Development Theories

Social cognitive career theory (SCCT)

Cited as a bridge or compliment between preexisting theories of career development (Lent, Brown, & Hackett, 1994). Supports the underlying assumptions advanced by Bandura (1986) focused on (a) personal and physical attributes, (b) external environmental factors, and (c) overt behavior. The interactions between these elements are said to be major considerations regarding individual development. SCCT, contextualized within career development (CD), identifies three determinants of CD: self-efficacy, outcome expectations, and personal goals. Self-efficacy is viewed as beliefs regarding a specific domain of performance and is developed through learning experiences such as (a) personal performance accomplishments, (b) vicarious learning, (c) social persuasion, and (d) physiological states and actions (Lent et al., 1994). Outcome expectations are regarded as personal beliefs about anticipated results or the significance of related results. Individuals may be more or less motivated by intrinsic or extrinsic rewards associated with careerrelated actions. Finally, personal goals are viewed as frameworks for the initiation and maintenance of self-directed behavior.

Cognitive information processing theory

Focuses on how individuals use information to make CD-related decisions (Sampson, Lenz, Reardon, & Peterson, 1998). Cognitive ability is identified as a major element influencing the degree to which individuals take control over their careers and CD. Uses 10 assumptions: (a) CD-related choices are problem-solving activities, (b) career choice is a result of affective and cognitive processes, (c) individuals approaching CD problems rely on knowledge and cognitive abilities, (d) CD-related problem solving requires high memory load, (e) motivation is important to CD-related success, (f) CD involves ongoing growth and evolution of cognitive frameworks, (g) CD and career identity are dependent on selfknowledge, (h) career maturity depends on individual abilities to solve career problems, (i) career counseling and/or CD has reached its highest point when information processing skills are facilitated, and (j) the ultimate goal of CD-related interventions is to enhance individual abilities associated with problem solving and decision making. These assumptions emphasize cognitive ability and frame CD as a learning event that can be catalyzed by a CD professional (Zunker, 2002).

Constructivist theory

Viewed as a framework associated with CD implementation, coaching, and support. The basic tenants for constructivist CD include:

(a) people create their identities and environments through individual interpretations that inform their decisions and actions—may or may not be useful or beneficial; (b) people are meaning makers and do so in ways that are self-organizing—individual life stories and/or constructs are under constant revision; (c) multiple meanings and

multiple realities are the foundation of the human condition; (d) individual fulfillment is the product of individual critical reflection and connection between thoughts, assumptions, and actions; and (e) regardless of their similarities or differences, individuals are likely to have different perceptions of events (Peavy, 1995; Savickas, 1997). CD practitioners working from this perspective often approach their work from a holistic or career life-planning perspective. The impact of interpersonal relationships in the construction of career and career success has also been explored as important to CD choice making (Crozier, 1999). Research and interventions may involve critical reflection, use of personal narrative, mapping, and personal reflection (Cochran, 1997).

Career decisionmaking theories Career decision-making theories are based on the notion that individuals are able to make choices from a variety of career options. Career decision events often include (a) problem definition, (b) generation of scenarios or alternatives, (c) information gathering, (d) information processing, (e) making plans, (f) goal clarification, and (g) taking action (Herr & Cramer, 1988). Career decision-making theory may emphasize critical life points when actions are taken that have significant influence on CD. Related actions include job and/or career choices, participation in formal education, and efforts to enhance work abilities and skills. According to career decision-making theory, our choices are influenced by our awareness of available options and our abilities to evaluate what is presented (Pietrofesa & Splete, 1975). In addition, environmental decision-making theories try to account for the complexities in the naturalistic job environment (Gelatt, 1991). Gelatt's (1962) career-decision model views career decision making as a cycle that describes individual career decision-making steps (similar to the career decision events a through g identified above), is a framework from which approaches to career counseling can be utilized, and emphasizes the relevance of individual values to the decision-making strategy.

Personalityoriented theories The underlying hypotheses are that workers select their jobs because they see potential for the satisfaction of their needs. Worker needs are seen to connect largely to personality dimensions. Personality-oriented theories additionally hypothesize that job-related experience influences the personalities of employees; so that, for example, information technology employees develop similar personality characteristics—there may also be a chance that the employees had a priori similarities. Personality-oriented CD theories range from detailed personality types for career areas described by Holland (1959; explored below) to specific lists of needs inherent in the process of vocational choice (Hoppick, 1957). The assorted empirical studies of Roe (1957), Small (1953), and

many others have explored particular personality factors involved in career choice and career satisfaction. Much of the published research in this area has focused on the personality dimensions of individuals in different career categories, lifestyles associated with various professions, psychopathology associated with a wide range of jobs, and the specific needs of employees in particular job categories or industries.

Self-concept theories

According to Osipow (1983, 1990), the core assumptions of CD-related self-concept theories include (a) individuals refine self-concepts as they grow older; however, self-concepts are influenced by aging and evolve along with individual perceptions of reality; (b) individuals make decisions by comparing their images of the world of work with their self-images; (c) the adequacy of career decisions for individuals are based on the similarity between self-concept and the career roles that are focused on. Self-concept theories emerged from the work of Dudley and Tiedeman (1977), Ginzberg (1952), Knefelkamp and Slipitza (1978), Samler (1953), Super (1957; explored below), combined with perspectives developed by Carl Rogers (1951) and client-centered orientations.

Socioeconomic perspectives

Socioeconomics is the study of the economic and social impact products or services, market interventions, or other related actions have on individuals, organizations, and the overall economy (Bürgenmeier, 1992). These effects are often measured in numerical terms, overall economic growth, unemployment and job creation, life expectancy, or education. These factors may influence consumption patterns, wealth distribution, the manner in which people choose to spend their time and resources, and general quality of life (Bürgenmeier, 1992). Socioeconomic theory in the context of CD relates to how individual values and identities associated with social and economic conditions, family background, and other factors outside individuals' control influence their CD and career-related decisions (Alfred, 2001). Socioeconomic perspectives can be utilized to detail the relationship between economic and social factors and career outcomes. Because of the assumption that we cannot choose our preadult starting points, the career opportunities that present themselves in early adulthood are viewed to be strongly associated with social and economic factors (National Occupational Information Coordinating Committee, 1989).

Social network theory

According to social network theory, individual behavior in social institutions such as families or organizations is affected by the structure of interpersonal relationships (Marsden, 1981). In general, a network is a set of interrelationships which may consist of connections or links between groups or social units

(Wellman & Wortley, 1990). Repeated interaction defines and maintains the links over time. Mutual benefit may emerge from social networks whereby members draw on the collective resources of the group. In the case of CD, networks may support or hinder the access to career-related opportunities, CD-related information, or even training that may enhance individual CD. When two individuals interact, regarding CD for instance, the information exchanged is viewed as a by-product of their relational networks that may consist of family members, friends, coworkers, or neighbors. The types and frequencies of exchanges between individuals and their relational networks are said to influence possibilities for information gathering and exchange. It is, therefore, likely that individuals who have large and active networks associated with their career interests will have enhanced CD-related options (Granovetter, 1974).

Social systems theory

The central assumption is that individual control over the impact of events and societal circumstances is limited. In addition, it is held that transactions between social systems and individuals contribute considerably to CD. The primary undertaking confronting individuals is the development of knowledge and skills to cope effectively with the environment. This approach is illustrated in the writings of Caplow (1954), Hollingshead (1949), and Miller and Form (1951). The ambitions or aspirations of individuals may also influence CD and career choice in the context of the social system (Sewell & Hauser, 1975; Sweet, 1973). Recent explorations of the influences of social systems on CD have often focused on proximal structuration, such as the impact of class membership on career access and CD, rather than larger system issues regarding the perpetuation of social structures (Grusky & Sørensen, 1998). From this perspective, social systems are perpetuated occupational levels and result in the generation of occupational subcultures. Such subcultures have been elaborated on by Caplow (1954) and Durkheim (1893/1933). Although the impacts of class effects on career have been documented in social science research for an extended period of time, the extent to which social structure influences individual CD and career outcomes remains under debate (Kingston, 2000).

Trait-factor theories

These theories are the oldest CD-related theories identified. The foundational theorists were Parsons (1909), Kitson (1925), and Hull (1928), and they assumed a match could be made between an individual and the world of work based on the characteristics of the person and the identified needs of the job or career context. A match between job and individual characteristics was believed to resolve the CD needs for any individual. Parsons suggested that

career and vocational choices depended on (a) accurate self-knowledge, (b) specific understanding of job-related requirements, and (c) a capacity to connect self-knowledge with job requirements. Career and vocational testing emerged from the trait-factor approach (Osipow, 1983). Several unique approaches and assessment tools have emerged from the trait-factor framework including interest inventories such as the Strong Interest Inventory (Strong, 1943) and aptitude instruments such as the Differential Aptitude Test (Harcourt Inc., 2005). Trait-factor theory has been integrated into many other CD approaches. Assumptions associated with trait-factor theory include (a) that job traits and individual attributes can be matched and (b) that job success and satisfaction result, to a great degree, from alignment between individual characteristics and career roles and tasks. These concepts continue to influence current-day CD.

Specific Career Development Theories

Brown's values-based theory

The underlying assumption of Brown's (1995) approach to CD is that individual values orientations are a core factor in career decision making. In fact, values are emphasized as a dominant feature in human development (Zunker, 2002) and are viewed as providing direction and guidance toward individual action and reflection on the actions of others. Brown, Brooks, and Associates (1996) advanced the notion that values are generated through experience and inherited characteristics. Environmental factors are given greater weight in terms of values development. Brown suggested that individuals are bombarded with values-laden messages from early childhood forward, and values-focused messages begin early in life and lead to individual cognitive, affective, and behavioral patterns. These patterns assist in the prioritization of values toward decision making in the natural environment. Six propositions were used to support this model: (a) individuals focus on and prioritize only a small number of values, (b) those values that are of the highest priority to an individual influence CD-related choices, (c) values are defined and applied based on learned experience in the environment, (d) holistic fulfillment is based on life roles that satisfy all of an individual's core values, (e) the salience of a particular role is associated with the level at which essential values are enacted in that role, and (f) life role and CD success depend on many facets including affective, cognitive, and physical capacities. Brown's focus on the values systems in specific environments suggests that power and relationships in the environment provide explanation for CD-related decisions. Brown also suggested that individuals focus on values clarification, mental health, and capacity as three key elements in CD-related processes.

Ginzberg and Associates' developmental theory of occupational choice Conclusions from a rigorous empirical study conducted by Ginzberg, Ginsberg, Axelrad, and Herma (1951) revealed three distinct phases that occur during occupational choice: (a) fantasy, (b) tentative, and (c) realistic. This development process was said to occur between the age 11 years extending to age 17 years, or further on to young adulthood. During the fantasy period, play was said to become work oriented generating specific kinds of activities in which various types of occupational roles were played, ultimately leading to specific individual assumptions or preferences about the world of work. The tentative phase had four specific stages: (a) the interest stage when individuals make more specific decisions regarding preferences; (b) the capacity stage whereby individuals make connections between perceived abilities and vocational aspirations; (c) the value stage, in which clearer perceptions of occupational style emerge, and the transition stage leading to a vocational choice and alignment regarding the requirements for such a choice. In addition, (d) the realistic stage is also characterized by thee substages: exploration, crystallization, and specification. Exploration involves educational or trainingrelated preparation for work. During this stage, the career focus narrows in scope. Commitment to a particular field and career is solidified during crystallization. Finally, specification involves the selection of a particular job or defined professional training opportunity. Although this research-to-theory approach has considerable limitations due to the homogenous population used in the study, the developmental approach was a substantial departure from the CD literature at the time, which focused largely on trait-factor theory and development. Subsequent research expanded the developmental considerations to a repeating cycle throughout the adult life span.

Holland's career theory

Holland's (1959) theory stresses the importance of accurate self-knowledge combined with specific career information necessary for career identification and planning. The foundation of this career theory and framework proposed that workplace performance was best considered along with the environment associated with a particular job or career. Holland also developed a set of assumptions associated with the manner in which job choice, job satisfaction, and job and career success occur in context with an extensive set of job and work environments. Holland also assumed that people select careers based on their personalities and that there is a connection between the environment selected and the personality of the individual. He then identified personality type and work environment combinations as realistic, investigative, artistic, social, enterprising, and conventional (creating the acronym *RIASEC*). Holland suggested that satisfaction would be

closely linked to the association between the work environment and the individual personality. Although all parts of RIASEC are considered partial preferences for each individual, often one and up to three types may be dominant preferences. Two examples of RIASEC categories are as follows: (a) Realistic persons often prefer working with things, tools, and machines and may be best suited for jobs such as mechanical or civil engineer or carpenter and (b) Investigative individuals like working with theories or abstract ideas like chemist, professors, or teachers. RIASEC has received criticism regarding unbalanced attention to gender differences and not accounting for many of the nuances associated with careers and environments. All accounting, sales, or social worker jobs are not created equal and, despite similarities in general job duties, may be situated in environments that make different demands.

Kram's career development functions

Kram's (1985) seminal qualitative work on mentoring relationships identified CD to be an essential element for protégés. Kram found that a commonly shared interest between mentor and protégé was the advancement of the protégé's career. In fact, available research has supported that career mentoring is associated with increased pay and promotion (Wanberg, Welsh, & Hezlett, 2003). The five essential activities that assist in the promotion of protégé career development include (a) challenging work assignments, (b) coaching, (c) exposure and visibility, (d) protection, and (e) sponsorship. By providing or arranging for protégé involvement in challenging work assignments protégés are supported in the development of critical learning experiences. Coaching is often a central part of the mentoring role. Through the offering of feedback, direction, and advice, mentors support protégé development of subject matter, practice, and political abilities necessary for organizational success. High-profile assignments often assist the protégé in the formation of relationships with the organization's upper level management and leadership, and this exposure and visibility may overlap with challenging work assignments. Mentors may provide protection for the protégé when, for example a mistake is made, or the protégé gets caught in organizational crossfire. The protection function is essential for the establishment and maintenance of trust in the mentoring relationship. Those mentors who offer protection for their protégés are often prone to provide other kinds of more personal assistance to their protégés. Provisions of sponsorship are efforts by mentors to support protégé opportunities for organizational promotion or advancement. Kram's work on CD-related functions is used frequently in mentoring research and general literature (Wanberg et al., 2003).

Krumboltz's social learning theory of career choice

Krumboltz (1994) formulated a career decision-making theory based on social learning, responses to environmental conditions, genetics, and learning experiences. Krumboltz suggested that people make career choices based on what they have learned and that particular behaviors are modeled, rewarded, and reinforced. Career-related development thus occurs because of learning and the imitation of others. From this perspective, individuals choose careers as an outcome of internalized learning; therefore, individual career choice is the result of innumerable learning experiences enacted through interactions with available persons, organizations, and experiences. Key learning experiences direct individuals toward the formation of beliefs about the nature of careers and their prospective life roles based on generalized selfobservations. Life experiences and learning that results, especially from observation and interaction with significant role models (e.g., parents, teachers, heroes), are believed to be persuasive in the development, differentiation, and execution of career choices. Positive modeling, reward, and reinforcement will likely lead to the development of appropriate career-planning skills and career behavior. Krumboltz viewed his theory as an explanation for the origination of career choice and as a framework by which practitioners may assist others in managing career-related challenges and choices.

Roe's needs theory approach Roe (1956) emphasized the importance of early experiences, particularly in family life, that influence the definition of and satisfaction with selected careers. Roe explored the relationship between parental decision making and choices that led to the later adult lifestyles chosen by their children. Drawing from Maslow (1968), Roe connected the need structures for individuals to early-childhood experiences involving need-related fulfillment and limitations. Occupations were divided into two major areas: person- and non-person-oriented and identified as rooted in family-related experiences. Roe (1972) later modified her theory to include environmental and genetic factors that may also influence CD and career choice. Applications associated with Roe's theory and classifications include the development of the California Occupational Preference System (Knapp & Knapp, 1985) and the Vocational Interest Inventory (Lunneborg, 1981).

Schein's career anchors

Schein (1996) expanded the notion of *career* to incorporate individual identity or self-concept including (a) self-perceived talents and abilities, (b) basic values, and (c) the evolved sense of motives and needs as they pertain to the career. Career anchors evolve only through work-related and life experiences (Schein, 1978), and the eight main career anchors are (a) technical and/or

functional competence, (b) general management competence, (c) autonomy and/or independence, (d) security and/or stability, (e) entrepreneurial creativity, (f) service and/or dedication to a cause, (g) pure challenge, and (h) lifestyle (Schein, 1990). According to Schein (1996), as careers and lives evolve most people discover that one of these eight "categories is the anchor, the thing the person will not give up, but most careers also permit the fulfilling of several of the needs . . . [of] different anchors. For example, as a professor I can fulfill my need for autonomy, for security, for technical/functional competence, and service. I was not able to discover that my anchor was autonomy until I had to assess how I felt about being a department chairman . . . when we face a job shift . . . we . . . become aware of our career anchors" (p. 81). Schein emphasized the importance of his CD framework in the context of the dynamic workplace that often leads to career changes or job reassignments. A major applied aim of the career anchor is to provide individuals with a reference point for their CD-related decision making.

Super's lifespan theory According to Super (1957), patterns associated with CD are byproducts of socioeconomic factors, mental and physical abilities, personal characteristics, and the opportunities to which persons are exposed. His notion of *career maturity* involves success in tasks associated with age and stage development across the life span. Self-concept is foundational to this model: "vocational self-concept develops through physical and mental growth, observations of work, identification with working adults, general environment, and general experiences. . . . As experiences become broader...the more sophisticated vocational self-concept is formed" (Zunker, 1994, p. 30). Super's definition of career-related tasks broadened the definition of transferability of skills to include experiences beyond those for which persons were paid to many roles individuals play throughout the life span. Super, Thompson, and Lindeman (1988) named six key elements of vocational maturity: (a) awareness of the need to plan ahead, (b) decision-making skills, (c) knowledge and use of information resources, (d) general career information, (e) general world of work information, and (f) detailed information about occupations of preference. Super's (1980) career rainbow concept also identified the integration of key life roles: child, student, worker, partner, parent, citizen, homemaker, leisurite, and pensioner. Super then identified that people have different "life spaces" based on personal factors (e.g., aptitudes, interests, needs, values) and situational factors (country of residence, economic policies, environmental acceptance of diversity, family, neighborhood). Personal and situational elements interrelate to cast our life-role self-concepts and supply CD

challenges or tasks to which we must respond effectively to make CD-related progress. Super later combined the evolution of self-concept and life span to create a theory that includes the variability and heterogeneity in most careers. Work by Hansen (1997) and others supported Super's view by suggesting CD be viewed from an integrated life-planning perspective.

Tiedeman's decision-making model

Tiedeman's framing of CD was truly holistic with the emphasis on total cognitive development and related decision making (Tiedeman & O'Hara, 1963). Tiedeman viewed CD as emergent from general cognitive development in which individuals are constantly evolving in terms of career-related awareness toward action at the appropriate age or time. Similar to the developmental stage model by Erikson (1950), Tiedeman focused on CD in the context of ego and identity development whereby individuals engage in a self-evaluative process involving differentiation and integration. From this perspective, the CD process is complex and highly individualized. Tiedeman's major contribution to CD was the focus on evolving self-awareness as key to the career decision-making process. Emphasis is given to influencing change and growth through adjustment to the existing social, interpersonal, and career context at hand. Although this broad view of CD has been compelling for many, there has been, to date, little research exploring Tiedeman's approach.

The second category relates CD-specific theories that have been most often devised by individual CD scholars. Identification of these two categories and related theories involved not only the authors but also input from five advanced scholars, each with 15 or more years of experience as university professors specializing in CD. These experts were asked to review a list of CD theories frequently cited in the literature to make recommendations or additions as core theories in CD. As a result of this expert feedback, several theories were added to those initially identified.

The theories listed in Table 1 are limited to those identified by the researchers and experts as foundational or core theories associated with CD. According to Osipow (1983, 1990), even though CD theories may be clustered into groups, they are intertwined and may draw from one another in actual practice and in empirical research. In addition, interrelationships exist between CD theories and CD definitions. In fact, as is discussed below, there has been a call for a convergence of CD theories into a more comprehensive theoretical framework (Chen, 2003; Osipow, 1983; Zunker, 2002). Nonetheless, each theory identified also has distinguishing features.

Method for Exploring CD Definitions

A review of literature, analysis, and synthesis was utilized to answer the research questions forwarded in the current study. Electronic databases were used in the literature search aimed at identifying a maximum number of CD definitions. Databases accessed included ABI Inform, ERIC, and PsychInfo. Electronic journals were accessed through Interscience/Wiley, Catchword, JSTOR, and ScienceDirect. In an effort to focus our search, articles were only selected if published after 1979. In the case where sources identified cited CD definitions published prior to 1980, original sources were accessed. Searches for books associated with the subject of this article were utilized using an internal electronic search engine at a major university in the central United States and online book purchasing catalogs www.amazon.com and www.powellsbooks.com. Books were considered for use only when a majority of references were from refereed journals and scholarly works. The initial search was conducted using the term career development and yielded more than 1,500 sources. In an effort to reduce the number of sources to only scholarly works, those sources not containing references were eliminated as were those from nonrefereed articles or books that did not use scholarly references. The remaining articles and books were reduced to fewer than 400 by searching the text of each publication to determine whether an explicit definition of CD was provided. The process identified above yielded 112 resources providing explicit definitions of CD. One limitation of the current study is that the vast majority of these sources originated from the United States. After eliminating redundant definitions the search yielded 30 distinct definitions of CD. A small number of the definitions were found to have modifiers (e.g., organizational CD); such modifiers are noted in the descriptions listed in Table 2.

It is important to note that we recognize that this exploration can be challenging for the following reasons: (a) CD literature and HRD-related literature are sometimes difficult to define; (b) given the relatively long history of CD, providing a comprehensive list of CD definitions and theories is problematic; (c) HRD-related literature may have CD-related implications without explicit acknowledgment; and (d) as presented by Lee (2001), there may be resistance to the notion of defining *HRD* or its domains all together.

Although CD literature and some literature in psychology and management may explore related issues, few explore theory building explicitly. Our desire is to explore CD definitions and stimulate integration and innovation within HRD theory-building literature and within other HRD and AHRD journals.

Career Development Definitions and Dependent Variables

The definitions of *CD* are featured in Table 2. Authors, year published, and DVs were identified and reviewed by CD experts. Then, the DVs were analyzed for themes and categorized by outcomes as described in the next section.

(text continues on p. 467)

TABLE 2: Career Development Definitions and Dependent Variables

Author	Date	Definition	Dependent Variable
Super	1957	Career development is "a lifelong, continuous process of developing and implementing a self concept, testing it against reality, with satisfaction to self and benefit to society" (p. 282).	(a) developing and (b) testing, and (c) implementing a self-concept; (d) self- satisfaction, (e) benefit to society
Super, Starishevsky, Mattin, & Jordaan	1963	Career development is a significant part of human development and is closely related to the formation and implementation of one's self-concept.	(a) formation and (b) implementation of one's self-concept
Kroll, Dinklage, Lee, Morley, & Wilson	1970	"Career development is a balancing operation-recognizing and meeting the needs of the individual while recognizing and responding to outer forces and a lifelong process of working out a synthesis between the self and the reality, opportunities and limitations of the world" (p.17).	(a) recognizing and (b) meeting individual needs, (c) responding to outer forces, and (d) the lifelong process of synthesizing: the self, reality, opportunities, and limitations presented by the world
Hansen	1972	"Career development is self-development, that it is a process of developing and implementing a self-concept, with satisfaction to self and benefit to society career development (is) one aspect of human development that forms a	(a) developing a self- concept, (b) self- satisfaction, (c) benefit to society, (d) unifies curriculum

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
		natural core for unifying curriculum" (p. 154).	
Gysbers & Moore	1975	"Life career development is defined as self-development over the life span through the integration of the roles, settings, and events of a person's life" (p. 315).	(a) self-development and (b) integration of individual roles, settings, and events
Pietrofesa & Splete	1975	"Career development is an ongoing process that occurs over the life span and includes home, school, and community experiences related to an individual's self-concept and its implementation in life style as one lives life and makes a living" (p. 4).	(a) development and (b) implementation of a self-concept as a life style and making (earning) a living (income)
Drier; Splete; Hoyt	1977; 1978; 1957	"Career development activities include (1) developing and clarifying self-concepts, (2) relating occupational information to self-information, (3) 'teaching' decision-making skills, (4) providing opportunities for occupational reality testing, and (5) assisting individuals in educational and occupational placement processes" (as cited in Peterson, 1984, p. 310).	(a) developing self-concept, (b) clarifying self-concept, (c) relating information regarding occupations and self, related decision making, engaging in reality testing, and being placed in a job and/or career

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
Bachhuber & Harwood	1978	Career development is "a developing, progressing process whereby an individual proceeds from a point of having no career direction to that of attaining a career consistent with his or her interests, abilities, and aspirations" (p. 2).	(a) obtaining a career aligning individual interests abilities, and aspirations
Wolfe & Kolb	1980	"Career development involves one's whole life, not just occupation. As such, it concerns the whole person, needs and wants, capacities and potentials, excitements and anxieties, insights and blindspots, warts and all. More than that, it concerns him/her in the ever-changing contexts of his/her life. The environmental pressures and constraints, the bonds that tie him/her to significant others, responsibilities to children and aging parents, the total structure of one's circumstances are also factors that must be understood and reckoned with. In these terms career development and personal development converge. Self and circumstance—evolving, changing, unfolding in mutual interaction—constitute the focus	(a) evolving, (b) changing, and (c) unfolding of self and circumstance

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
		and the drama of career development" (pp. 1-2).	
de str m fu ne or th of pa en		"Organizational career development is a structural mechanism for meeting the present and future human resource needs of the organization. It requires the development of career ladders or paths over which employees move within the organization" (p. 293).	Meeting the (a) present and (a) future human resource needs of the organization, (c) employee movement within the organization
Gysbers & Moore	1981	"Life career development is advocated as an organizing and integrating concept for understanding and facilitating human growth and development" (p. 57).	(a) understanding and (b) facilitating human growth and (c) development
Harren, Daniels, & Buck	1981	This model "promotes multicultural career development as a lifelong process of assessing and integrating knowledge of the self and the work-world as both change over the life span" (p. viii).	(a) assessing and(b) integrating, knowledge of self and the world of work
Leibowitz & Schlossberg	1981	A career development system is "an organized planned effort comprised of structures, activities, or processes which result in a 'mutual plotting' effort	Mutual plotting between employees and the organization

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Author	Date	Definition	Dependent Variable
		between employees and the organization" (p. 72).	
Brolin & Carver	1982	Lifelong career development (LCD) model is "a method of coordinating and providing services to disabled persons with the goal of helping them to achieve and maintain their optimum level of independent functioning throughout the life span" (p. 280).	(a) achieve and (b) maintain an optimum level of independent functioning throughout life
Brown	1984	"Career development is, for most people, a lifelong process of getting ready to choose, choosing, and typically, continuing to make choices from among the many occupations available in our society" (p. ix).	(a) getting ready to choose,(b) choosing, and (c)continuing to make choices
Chakiris & Fornaciari	1984	"The process by which an individual becomes aware, explores, understands and makes a commitment toward various aspects of his/her career The process of career development involves a number of behavioural actions including the giving and receiving of information, the experiencing of feelings, working through decisions,	An individual (a) becomes aware, (b) explores, (c) understands, and (d) makes a commitment. (e) Giving and (f) receiving information, (g) experiencing feelings, (h) working through decisions, and (i) selecting

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
		and selecting choices among alternatives" (p. 75).	
Domkowski	1984	"Career development is the result of the individual's planning and action, managed or not managed" (p. 295).	career development
Gutteridge	1984	"The outcomes created by the interface between individual career planning and institutional career management processes" (p. 24).	produces outcomes
Kanin-Lovers & Bechet	1984	"A clearly defined career development process can: assist a firm in internally developing the qualified technical and managerial talent it needs; satisfy employee desires to know about job opportunities and requirements and show them that the company cares about their careers; attract and retain high caliber employees; demonstrate a commitment to affirmative action" (p. 62).	(a) developing needed talent, (b) satisfying employee desires, (c) demonstrate to employees that the company cares about their careers, (d) attract and (e) retain high-caliber employees, (f) demonstrate a commitment to affirmative action
Pavloff & Amitin	1984	"(Organization career development) is the name given to formalized activity whose purpose is to raise productivity for the company while raising the level	(a) raise productivity for the company and (b) employee job satisfaction

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Author	Date	Definition	Dependent Variable
		of job satisfaction for the individual employee" (p. 29).	
Peterson	1984	"A career development intervention is viewed as a learning process in which generic competency skills are mastered and applied to making career decisions, executing them, and achieving satisfaction with jobs and life in general" (p. 312).	Competency skills are (a) mastered and (b) applied to (c) making and (d) executing decisions and (e) achieving satisfaction.
Stump	1984	"Career development = individual's career + organization's human resource development" (p. 92).	career development
Stone	1984	"Multicultural career development is an intervention and continuous assessment process that prepares institutions and individuals to experience the realities of life, work, and leisure in a culturally diverse environment (it also) considers the effect of and relationship among career options, ethnic-cultural demographics, and psychosocial factors that impact an individual's occupational choices in a pluralistic society" (272).	Prepares (a) individuals and (b) institutions to experience realities of life, work, and leisure

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
Slavenski & Buckner	1988	Career development process is made up of three phases: "(1) staffing and orientation, (2) evaluation, and (3) development. Each of these phases is composed of strategies from which the employer may choose to create a customized career development system" (pp. 1-2).	Provides (a) staffing and (b) orientation, (c) evaluation, and (d) development strategies for (e) creating a customized career development system
McLagan	1989	"Focus is to assure an alignment of individual career planning and organization career-management processes to achieve an optimal match of individual and organizational needs" (p. 52).	Align (a) career planning and (b) organization career-management; (c) achieve optimal match for individual and organization needs
Peterson, Sampson, & Reardon	1991	"Career development is the implementation of a series of interrelated career decisions that collectively provide a guiding purpose or direction in one's work life(it also) occurs through an ongoing pattern of decisions that constitute a general direction or	Provides a guiding (a) purpose or (b) direction in one's work life

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Author	Date	Definition	Dependent Variable
		purpose in life, which is referred to as a lifestyle" (p. 21, 39).	
Simonsen	1994	"Career development is an ongoing process of planning and action toward personal work and life goals. Development means growth, continuous acquisition and application of one's skills. Career development is the outcome of the individual's career planning and the organization's provision of support and opportunities, ideally a collaborative process" (p. 1).	Action toward (a) personal work and (b) life goals; (c) acquisition and (d) application of skills. (e) career development
Sampson, Lenz, Reardon, & Peterson	1998	"The career development process is generally thought of as a comprehensive system that includes not only the choice process, but also the implementation of that choice through acquiring or demonstrating the necessary skills and training, seeking employment, and adjusting to employment" (p. 3).	Implementing a choice through (a) acquisition or (b) demonstration of skills. Engaging in (c) training, (d) employment seeking, and (e) adjustment to employment

TABLE 2 (continued)

Author	Date	Definition	Dependent Variable
Boudreaux	2001	"Career development focuses on the alignment of individual subjective career aspects and the more objective career aspects of the organization in order to achieve the best fit between individual and organizational needs as well as personal characteristics and career roles." (p. 805).	(a) alignment of subjective and objective career aspects; (b) achievement of the best fit between individual and organizational needs and personal characteristics and career roles
Cummings & Worley	2005	"Career development helps individuals achieve their career objectives. It follows closely from career planning and includes organizational practices that help employees implement those plans. These may include skill training, performance feedback and coaching, planned job rotation, mentoring and continuing education" (p. 418).	Helps individuals achieve their career objectives

DV Categories

Although CD is primarily focused on the individual and HRD tends toward a focus on larger human systems, it is less clear, and at best understated, whether HRD and CD share similar aims. Theory and theory building are commonly utilized to describe and generalize about a phenomenon (Dubin, 1969). Therefore, theory, in whole or part, is connected to prediction and "the predictions derived from them [theories] are the grounds on which modern man [or woman] is increasingly ordering his [or her] relationships with the environing universe"

Individual Outcomes	Organizational and Social Outcomes	
Achieve self-satisfaction	Benefit society	
Achieve career objectives	Attract and retain high-caliber employees	
Make career decisions	Increase individual employee job satisfaction	
Develop a self-concept	Increase organizational performance	
Align individual needs with organizational needs	Align organizational needs with individual needs	

TABLE 3: Career Development Dependent Variable Categories

(Dubin, 1969, p. 3). Understanding the intended outcomes of CD may assist in clarifying the descriptive and predictive connections we often seek between HRD-related activity and outcomes. As a field of practice, and to work responsibly with organizational stakeholders (Swanson, 1996), HRD professionals and scholars must have something to say about theoretical and practice-based results. The starting point for theory building between HRD and CD should be at the point of mutual interest in the form of shared aims toward outcomes.

All of the definitions above contained a dependent or outcome variable. In several cases, the definitions included more than one DV. The identification of several DVs within the definitions presented by some authors suggests the broad views that some CD theorists have regarding the relevance and potential for multiple impacts of CD theory and practice. Ninety-three DVs were identified from the 30 definitions featured in Table 2. Table 3, Career Development Dependent Variable Categories, identifies the DV categories developed from the DVs listed in Table 2. The contents of Tables 2 and 3 were reviewed by the experts and the authors. Refinements were made based on the feedback provided.

The individual outcomes listed in Table 3 appear to have close similarities to the trait-factor, self-concept, and personality theories that, according to Osipow (1983, 1990), are some of the most enduring theories in CD.

Integrating CD and HRD Perspectives

Although McLagan (1989) defined *CD* as an area of practice for HRD, the focus on CD in the HRD literature rarely has gone beyond brief mention. According to Swanson and Holton (2001), the focus of HRD-related literature coalesced around training and development (T&D) and organization development (OD) as primary areas of emphasis. Perhaps the reason for the decline, or ongoing absence, of CD as a focus of HRD has been the perceived hierarchy suggested in the McLagan definition whereby OD is framed as superordinate to T&D, and CD subordinate to T&D. As the exploration of DVs has demonstrated, CD can be associated with organization-level interests and outcomes. CD may occur in many contexts yielding a variety of results.

In addition to being viewed as a relatively minor player in HRD, CD has often been framed exclusively as a one-on-one relationship between an employee and a manager or HRD practitioner. Traditional CD texts were often written for professionals in career placement or professionals working with adults in transition. These early writings may have biased HRD researchers and practitioners to conceptualize CD through a programmatic or counseling frame. CD, however, need not occur exclusively in the context of individually oriented activities (Zunker, 2002). Fundamental activities such as challenging work assignments and increased responsibility may contribute to CD, as might participation in systemwide HRD efforts. Research on other HRD-related activities, such as mentoring, identifies CD-related impacts such as increased job satisfaction, increased career commitment, and higher retention levels (Egan & Rosser, 2005).

CD has fallen off in importance in HRD because of the failure to ask questions, ascertain outcomes, and make links between HRD- and CD-related theories, research, and practice. Recent studies published in HRD journals regarding training results, relationships between training activities, theory building in HRD, and the integration of learning and work could be more impactful if they included CD perspectives. Unfortunately, CD theories and concepts are included infrequently, thus, justifying the question, "Career development—Is it a load-bearing wall or just window dressing?"

The current study also provides possibilities for connections and integration between theories of CD and HRD. Trait-factor theories could be included in explorations of employee preferences and competencies, and HRD practices. Behavioral theories present overlapping assumptions common to those found in HRD, such as learning theory, and the formulation of practice approaches. In addition, social systems theories support the examination of external or environmental factors associated with learning, development, and performance. HRD studies that include CD perspectives may provide opportunities for integrative research that examine systems and multilevel dimensions of learning and performance.

CD, HRD, and Multilevel Theory Building

As described above, dependent or outcome variables associated with CD can be categorized into those that focus on individual outcomes or organizational and societal outcomes. Despite the different outcomes identified, in general, CD theories have been perceived to maintain a focus on the individual (Upton, 2006). It has been argued that because of the frequent focus on the individual, CD perspectives are rarely included in HRD literature (Conlon, 2003). Although theory building in HRD has grown in recent years (as exemplified by Yang, 2003, and explored by Torraco, 2004) and has stretched our field to consider new ways of framing HRD research and practice, most HRD theory building has been conducted and framed at a single level—often the group or organization level (Swanson & Holton, 2001). Turnbull (2002) stated, "Theory is not static. It

is constantly evolving, and as our organizations change in response to their external environments, so the theories on which we build our disciplines need to keep pace" (p. 219). The theoretical frames and the DV categories for CD identified in this article reiterate that CD cannot be viewed solely as an individual or organizational responsibility. In actuality, CD is a multilevel phenomenon. This multilevel interchange occurring in practice can be represented in CD theory. Conversely, new multilevel theory building should guide more effective CD practice.

A link between individual and organizational orientations of CD may be better explored through multilevel theory building. Klein, Tosi, and Cannella (1999) pointed out that

multilevel theories span the levels of organizational behavior and performance, typically describing some combination of individuals, corporations, and industries. Multilevel theories attempt to bridge the micro-macro divide, integrating the micro domain's focus on individuals... with the macro domain's focus on organizations, environment, and strategy. (p. 243)

The current study and the work by Conlon (2003) expose that today's dynamic workplace has not necessarily been operationalized appropriately by CD theories that focus exclusively at the level of the individual because the organization does have a rational interest in CD. According to Klein et al. (1999),

The result [of multilevel theory building] is a deeper, richer portrait of organizational life—one that acknowledges the influence of the organizational context on individuals' actions and perceptions and the influence of individuals' actions and perceptions on the organizational context.... Multilevel theories connect the dots, making explicit the links between constructs previously unlinked within the organizational literature. (p. 243)

Multilevel theory building may very well be the key to bridging predominantly individually oriented CD theories with HRD theory-building efforts. It may also assist in addressing the frequent call for convergence of existing CD theories (Chen, 2003; Osipow, 1983; Zunker, 2002).

Although little has been presented in the HRD literature regarding multilevel theory building, there has been an ongoing discussion regarding systems theory and multilevel approaches in HRD (Garavan et al., 2004). Systems theory emphasizes interactions between multiple levels and, in principle, supports the multilevel theory-building concept. A systems approach not only supports the idea that CD be examined in the context of HRD but also makes the inclusion of CD essential. By definition, *open systems* include all units or elements bound within or connected to that system (Jacobs, 1988). If we are to explore and theorize about HRD at the organizational systems level, we must include a developmental framework at the individual level that embraces the existing CD theories and extends HRD theory building to embrace multiple levels. We have attempted to make a contribution to beginning that process.

There are many options for future research associated with CD in the context of HRD. Future multilevel theory-building research will have to engage in questions of alignment between issues at the individual level often connected with CD and HRD at the systems level. A key consideration for future multilevel theory building in HRD will be within-unit agreement, or homogeneity within the unit(s) of interest, and disagreement, or heterogeneity, within the unit(s) of interest (Klein et al., 1999). Within-unit agreement is a necessary component to multilevel theory building because there should be alignment between a given construct as a unit associated with, in this case, the individual or CD level and the system or HRD level. Too much variability or heterogeneity between the levels or units will diminish the likelihood for the development of a cohesive multilevel theory.

The DV themes identified (Table 3) suggest that there are significant opportunities for the development of multilevel HRD theories at the individual and organizational level. "Perhaps the most common form-and a very useful one—is the cross-level model in which higher-level variables are hypothesized to moderate the relationship between two or more lower-level variables" (Klein et al., 1999, p. 246). Using the DVs identified in the current study, interactions between organization-level efforts and employee achievement of selfsatisfaction, career decisions, career objectives, development of a self-concept, and individual alignment with organizational needs could be examined. There has been some exploration of these interactions in HRD-related literature; however, few have led to explicit development of multilevel theories. Although early work in the development of multilevel theories associated with HRD is promising, there are many opportunities to expand our understanding of the intersection between higher and lower level units or variables, such as theories of organizational leadership examining large system and the individual impact within organizations (Waldman & Yammarino, 1999).

Osipow (1990) suggested the possibilities for convergence between CD theories through an exploration of interactions between them. The notion of CD theory convergence involves the combining of key elements of more than one existing theory into a single theory that could provide more explanatory power or relevance. Krumboltz (1994) utilized the analogy of differently scaled maps to describe the diversity of approaches between CD theories. Some maps focus on topography, highways, or even climate at varying levels of detail and emphasis. Osipow (1990) and Chen (2003) suggested that convergence of existing CD theories could lead to new theories. Logically extended, such an effort could create theories, as suggested by Krumbotz, which are the product of more than one scale or level. Exploring such suggestions regarding the integration of CD theories may be supported using multilevel theory building. Needless to say, there is much work needed to elaborate on the theory convergence suggested by Osipow and Chen; however, the general concept appears to be promising for CD and HRD.

Summary

A number of aforementioned HRD scholars have explored HRD-related definitions. We examined HRD and related definitions available in the HRD literature for the purposes of clarification and theory building. Nineteen CD theories, 30 CD definitions, 93 DVs, and 10 DV categories and their associated theories were identified. Connections between HRD and CD and the potential for theory building approaches were examined.

Exploration of CD has not occurred in the HRD literature with sufficient frequency, specificity, or clarity. Through general discussions, (e.g., affirmation of the McLagan HR Wheel) many in the HRD community imply the inclusion of CD in HRD. Despite this, CD is not being addressed in specific terms that embrace historical literature associated with CD, nor are we examining the extent to which CD reflects the "alignment of individual career planning and organizational career management processes to achieve an optimal match of individual and organizational needs" (McLagan, 1989, p. 6).

HRD can be viewed as emerging from multiple pathways and dimensions. Further connections between CD theory and literature in HRD will enhance HRD research and practice. With its rich history and theoretical frameworks, CD is important to HRD and deserves more attention in HRD literature.

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