

Toward A Multilevel Theory of Career Development: Advancing Human Resource Development Theory Building

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The established limitations of career development (CD) theory and human resource development (HRD) theory building are addressed by expanding the framing of these issues to multilevel contexts. Multilevel theory building is an approach most effectively aligned with HRD literature and CD and HRD practice realities. An innovative approach multilevel theory building aimed at bridging the theoretical gap between individuals and organization is introduced along with an example of a multilevel theory integrating CD and HRD perspectives.

Keywords: Career development, Multilevel theory building, Theory building

The intersections between career development (CD), which has a long history and rich theoretical base (Osipow, 1990), and HRD, a relatively young field of study still developing and refining its theoretical base (Lynham, 2000b; Swanson, 2001; Torraco, 2004; Weinberger, 1998) have long been framed as central within the HRD literature (McLagan, 1989; Egan, Upton & Lynham, 2006). Since theory is a way of organizing thoughts about a phenomenon to aid in human comprehension of that particular phenomenon (Dubin, 1978), the development of theory, specifically in emerging fields such as HRD, should lead to explanations that aid practitioners and scholars alike in explaining issues that impact people and organizations. The refinement of theory is also an important aspect of theory building and, in the established field of CD, scholars are now calling for the convergence of existing CD theory into a framework to address the current theoretical inadequacies (Chen, 1998; Osipow, 1990; Patton & McMahon, 1999; Savickas, 1995; Savickas, 2001; Savickas & Lent, 1994; Sharf, 1997; Zunker, 2002). In response to a clearly identified need in the CD and HRD related literature, one element reported in this paper is the development of a multilevel theory of CD aimed at strengthening the important connection between CD and HRD. Additional goals include, advancing theory building in HRD and contributing to the identified need for convergence of existing CD theories.

Context

It is becoming increasingly clear that the days of working for a single employer for a lifetime with the career goal of “moving up the ladder” seem to be nothing more than a distant memory for many, if not most, employed today. Replacing those memories and the concept of employee and organizational loyalty are a working world characterized by globalization, downsizing, reorganization, streamlining, contract labor, and outsourcing (domestic and international). As a result, organizations no longer bear the primary responsibility for their workers’ career development (CD), instead expecting each individual to take on that responsibility (Egan et al., 2006). How does an employer ensure that individual CD choices enhance the organizational effectiveness? Is CD an “individual-only” issue or does the organization share some responsibility in developing the individual employee? Scholars and practitioners alike are asking these and related questions in the fields of CD and human resource development (HRD). Given the intersections between CD and HRD identified in the HRD literature, it is implied that matters such as this are important for HRD and related theory development.

Based on the current state of CD theory, it appears that there is no cogent theoretical framework that captures the dynamics of CD realities in the 21st Century while accounting for key perspectives developed in previous CD theories (Chen, 1998, Egan et al., 2006, Osipow, 1990). Similarly, HRD theory development appears to be accounting for neither CD in general, nor the multilevel concerns that involve CD-HRD intersections at the systems level or between levels of interaction. Active consideration of systems perspectives and levels, or strata, influencing the context for theory development provides a more realistic basis for the advancement of CD and HRD theory. In the process of considering the need for CD-HRD theoretical integration toward new and convergent theories that inform CD, a second equally important issue emerges. What is the capacity of currently endorsed HRD theory building approaches for handling multilevel concerns? Through careful review of both CD and HRD theory and theory building approaches, we concluded that a multilevel approach to theory building would create a better opportunity for advancing both CD theory and HRD theory building. Within the page limitation requirements of this

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publication, we present a multilevel approach to theory building and provide a brief CD related example. It is our conclusion that a multilevel theory building approach is an important next step for CD, the exploration of CD-HRD connections, and for HRD overall.

Review of the Literature

Although specific definitions of theory differ among scholars, most focus on explaining a phenomenon through a systematic approach in an effort to add to our understanding. In the relatively young field of HRD there continues to a debate regarding the necessity and importance of specifying its core theories (McLean, 1998; Swanson, 2001). Torracco (2004) specified that the foundational theories of HRD are “constituted by those theories and bodies of knowledge considered to be essential for explaining the distinctive purpose and defining characteristics of...HRD” (p. 177). Most HRD scholars agree that continued theory development is essential to the advancement of the field. Additionally, although current HRD theory building falls short of linking the individual, group, and organization levels, instead focusing on one level at a time, future theory building efforts should connect levels in order to prevent a widening of the research gap between the individual and the organization (Garavan, McGuire, & O’Donnell, 2004; Wright & Boswell, 2002).

An initial exploration of the importance of theory building and the current limitations to theory building will also add to the ability to develop a multilevel theory of CD in HRD. Current theory building efforts in HRD do not include multilevel considerations. Instead the individual or organization is most commonly framed orthogonally (Garavan, et al., 2004). The result is that theory building in HRD is not being advanced beyond a generic examination of complex and multilevel issues within the field. The overarching purpose of this study is to add to the understanding of the phenomena of CD in HRD through multilevel connections and as a result, advance theory building in HRD.

HRD scholars and practitioners continue to wrestle with their role in addressing both individual and organizational needs and, as a result, have begun to address questions such as, “should HRD practice focus on the well being of the individual, or should interests of the shareholders predominate” (McGoldrick, Stewart, & Watson, 2002, p. 5)? In supporting the dual responsibility assertion, Jacobs and Washington (2003) emphasized, “There is much support for the belief that employee [and career] development programs make positive contributions to organizational performance. However, there is limited information beyond this basic relationship” (p. 351). By exploring both the individual (micro) and organizational (macro) responsibility for CD, HRD can avoid what Wright and Boswell (2002) characterize as the “parallel, yet independent paths” taken by researchers. Theory building that considers multiple levels within organizations provides the chance to integrate all levels of research.

Specifically related to CD, Egan et al. (2006) explored CD definitions, dependent variables, and theories, identified an overlap between individual and organizational outcomes and acknowledged the interests of both the individual and the organization to support in CD. Based on the HRD literature, both individuals and organizations are identified as important to HRD (Swanson & Holton, 2001). However, current HRD theory falls short of supporting or addressing these foundational HRD beliefs, instead focusing only on one level at a time rather than exploring a multilevel perspective (Egan et al., 2006; Garavan, et al., 2004;). Multilevel theories provide a means of exploring levels of an organization, including individuals, because they “span the levels of organizational behavior and performance” (Klein, Tosi, & Cannella, 1999, p. 243). In general theory building, all of the interactions between units are examined at a single level without regard to the influence of units at other levels within the organization (Dubin, 1978), thus ignoring the complexity of multilevel issues and interactions. The need for exploring CD from a multilevel perspective stems from the need to examine the interaction of units within *and* between levels of organizations (Upton & Egan, 2005).

Further support for multilevel explorations in HRD is provided by Garavan, et al. (2004) who identified “a significant gap in the current body of HRD theory and research...[that] concerns the investigation of multilevel questions and the adoption of multilevel perspectives” (p. 418). Additionally, having acknowledged “that research and theory within the field need not all be multilevel in focus...the field...is now at a point where it can be more explicit in considering...issues that pertain to different levels” (Garavan, et al., p. 418). Since MLTB is intended to “begin to bridge the micro-macro divide” (Klein et al., 1999, p. 243), CD is ideally suited for additional study. Specifically, Klein et al. further emphasized that, “multilevel theory building fosters much needed synthesis and synergy,...connect[ing] the dots, making explicit the links between constructs previously unlinked...[and] illuminat[ing] the context surrounding individual-level process, clarifying precisely when and where such processes are likely to occur within organizations” (Klein et al., p. 243). Reynolds Fisher (2000) also stated, “Multilevel theory is not necessarily one that considers every level within a hierarchical system equally, but rather one that takes into account the effects of levels subordinate and supraordinate to the focal level” (p. 11). According to Kozlowski and

Klein (2000) “fundamental to the levels perspective is the recognition that micro phenomena are embedded in macro contexts and that macro phenomena often emerge through the interaction and dynamics of lower-level elements” (p. 7). As a result of the ever-present interaction between micro and macro levels, MLTB is an important process to undertake in order to further understand the dynamics of individual and organizational life.

Statement of the Problem

Current CD theory is limited due to its predominant focus on the individual and CD scholars are beginning to recognize that CD has both individual and organizational implications with CD scholars calling for the integration/convergence of existing CD theory (Chen, 1998; Patton & McMahon, 1999; Osipow, 1990; Savickas, 1995; Savickas, 2001; Savickas & Lent, 1994; Sharf, 1997; Zunker, 2002). Theory building in HRD has long focused on a single level of interest, primarily the individual or organizational level, and HRD scholars are beginning to recognize the importance of multilevel exploration (Garavan, et al., 2004). Despite this recognition, there has been little multilevel theory and theory development research published in HRD. Additionally, HRD scholars and practitioners continue to struggle regarding where and how CD should be positioned in the field. The aim of this study is to address these issues by providing a possible solution for both CD and HRD scholars while further connecting the two fields in theory and practice.

Purpose of the Study

As identified above, CD is a multilevel topic involving individuals, organizations and other strata. The established limitations in current CD theory (Osipow, 1990) and HRD theory building can be addressed by examining the topic of CD through a multilevel lens. Since MLTB can be utilized to bridge the theoretical gap between individuals and organizations, this approach to theory building provides an opportunity for HRD professionals to address goals important to both parties. Another issue relevant to the field of HRD is the need to “strengthen organizational capacity overall” by “integrat[ing] multiple interests and goals within a given structure” (Upton & Egan, 2005, p. 633), further emphasizing the need to explore CD from a multilevel perspective.

Based on the CD and HRD interests described above, the threefold purpose of this study is to develop a multilevel theory of CD as a means of strengthening the theoretical connection between CD and HRD, contributing to the advancement of CD theory, and advancing theory building in HRD. The MLTB frameworks developed by Kozlowski and Klein (2000), Morgeson and Hofmann (1999), and Reynolds Fisher (2000) are synthesized into an improved MLTB process and used to develop an example multilevel theory of CD. Finally, future research options are suggested in an effort to set the stage for empirical and qualitative testing of the resulting multilevel theory of CD in order to make the appropriate theory refinements and continue the dialogue about MLTB.

Research Methodology

The MLTB methodology developed in this study served as the guiding research method for the resulting theory development. The methodology for MLTB utilized is the result of systematic analysis, critique and relevant integration of the MLTB work of Kozlowski and Klein (2000), Morgeson and Hofmann (1999), and Reynolds Fisher (2000) and is represented in Figure 1. In this improved MLTB methodology, there are three distinct components or aspects of the theory that must be established in the theory development process: theory components (Phase One); levels components (Phase Two), consisting of within level considerations and between level considerations; and theory specification and operationalization components. Theory specification and operationalization generally follow the theory development process (Dubin, 1978; Kozlowski & Klein, 2000; Lynham, 2000a; Morgeson & Hofmann, 1999; Reynolds Fisher, 2000) and focus on readying the developed theory for research study. Due to the nature of synthesizing three unique models into one, there is a need to clarify the terms used to describe particular aspects of the improved MLTB methodology developed in this study. As a result, every attempt was made to remove language from the descriptions that would misrepresent the process of developing a theory that is to be verified in the future. Thus, terms such as “laws of interaction” were excluded, opting instead for the less statistically charged terms “within and between level interactions.”

Process

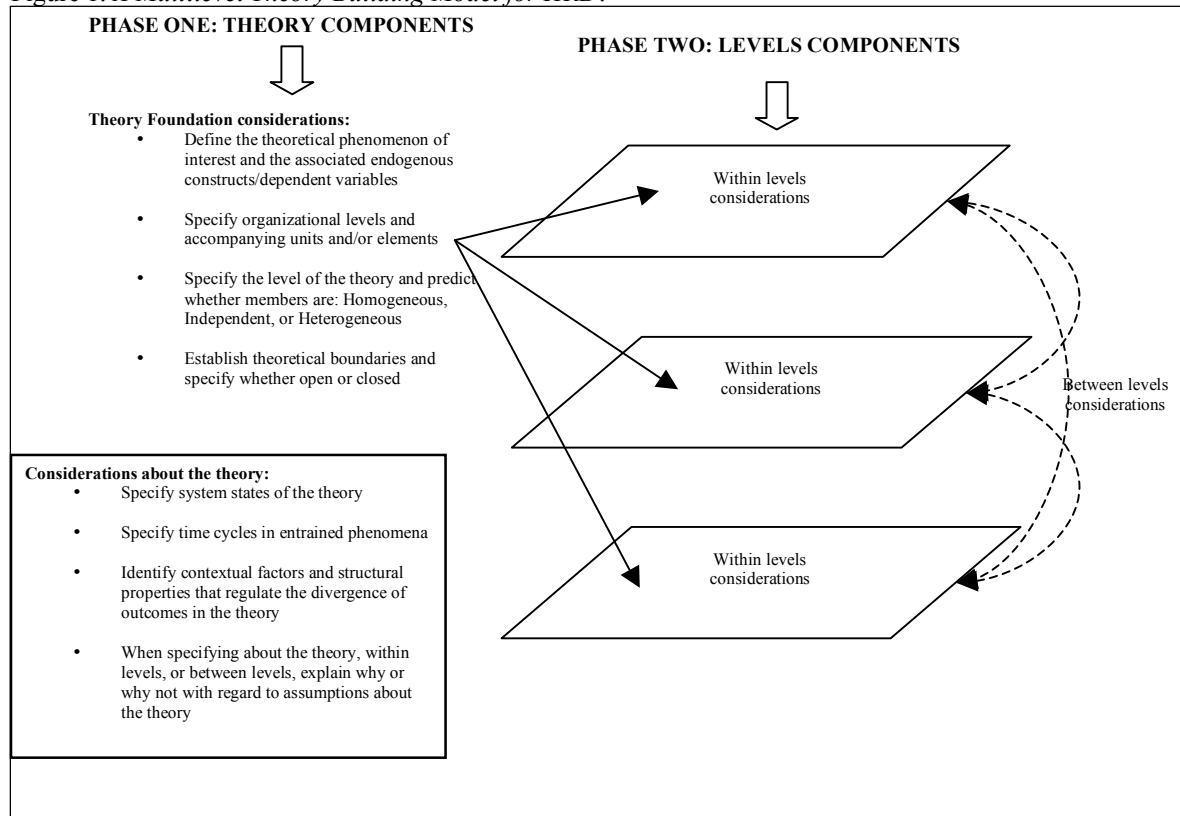
The theory components represent the foundation of the theory (Kozlowski & Klein, 2000) and the first aspect of the theory to be determined in the improved methodology is the theory’s specific components. The foundation of the theory includes: 1) describing the theoretical phenomenon of interest and the resulting endogenous constructs and/or dependent variables (Kozlowski & Klein); 2) then specifying organizational levels, units, or elements relevant to

theory construction (Kozlowski & Klein; Reynolds Fisher, 2000); 3) specifying the level of the theory by predicting whether members of the organization are homogeneous, independent, or heterogeneous (Klein et al., 1994; Reynolds Fisher); and 4) establishing and/or specifying theoretical boundaries, either open or closed, through logic (Reynolds Fisher).

Beyond the aforementioned foundational issues for the multilevel theory, the next set of considerations address specific aspects of the developing theory within each of the identified levels of the theory, which may include the individual, group, organization, industry, or other relevant levels. Identifying the collective constructs that result from collective action of organizational players at each level of analysis is of utmost importance (Morgeson & Hofmann, 1999). In addition to identifying the collective constructs, Kozlowski and Klein (2000) indicated that the theorist should specify how these constructs emerge through either top-down contextual influences or bottom-up emergent processes. Top-down processes refer to the influence of higher-level factors on lower levels and the effects of these processes generally manifest quickly through either direct or moderating effects (Kozlowski & Klein). Additionally, bottom-up processes refer to lower-level entities emerging to form constructs and generally manifest over longer periods of time through either compilation or composition processes (Kozlowski & Klein). Composition processes result in constructs that are essentially the same as they emerge upward across levels and compilation processes result in constructs that comprise a common domain, but are different as they emerge upward (Kozlowski & Klein). In specifying the emergence of any higher-level constructs, the theorist should begin by specifying the level of the construct's origin, the current level of the construct and the emergence process as described above (Kozlowski & Klein).

Within each level, the theory development process must also specify the function of each identified construct in an effort to integrate functionally similar constructs into networks of constructs (Morgeson & Hofmann, 1999). Identifying the role that the outcome of the construct plays in the overall organization may also provide insight into why that construct persists or fails to persist over time (Morgeson & Hofmann). Additionally, specifying the structure of each construct at each level provides for an accounting of the function of the construct (Morgeson & Hofmann). Within each level, the theorist will find it useful to identify interactions among units, specified in the foundation of the theory. Finally, specifying the level of each construct in the theory will allow the theorist to specify the level of measurement of each construct (Kozlowski & Klein, 2000).

Figure 1. *A Multilevel Theory Building Model for HRD.*



The final piece of the multilevel theory development process relates to aspects of the theory that are interacting. Having established the foundation for the theory and the aspects of the theory within each level, the next area of focus is on what occurs between those levels. Kozlowski and Klein (2000) indicated that the theorist must specify how the constructs and theoretical phenomenon of interest are linked at different levels of the theory. Identifying commonalities of a construct across levels using a functional analysis of the construct may also result in the articulation of the structure of the construct at each level (Morgeson & Hofmann, 1999). In MLTB the researcher also wants to specify the functional relationship among levels and function of the constructs to better understand the interaction between those constructs and levels (Reynolds Fisher, 2000). Finally, sources of variability among levels must be identified by focusing on the level of the theory (Reynolds Fisher).

Specification and Operationalization

As mentioned previously, the theory specification and operationalization is considered separately from the theory development process in the improved MLTB methodology developed for this study. Also based on the work of Kozlowski and Klein (2000), Dubin (1978), and Reynolds Fisher (2000), this aspect of theory development is made up of two processes and is guided by an additional data collection guideline. The first process in theory specification and operationalization is to specify propositions of the theory (Dubin, 1978; Reynolds Fisher). These propositions may be specified to be about one of three of the following things: about values of a single unit of the theory; about continuity of a system state that predicts conjoined values of all units; or about the oscillation of the system from one state to another (Dubin; Reynolds Fisher). Additionally, the theorist must specify whether assessing the construct's structure or function facilitates appropriate operationalization (Morgeson & Hofmann, 1999). The data collection guideline included in theory specification and operationalization provides guidance for collecting individual-level data to inform collective phenomena. This guideline states that individual-level data can be collected in these circumstances as long as the data originates from collective phenomena and frames the questions in collective terms; treats individuals as collective process informants; and focuses on the role of individuals in terms of the collective (Morgeson & Hofmann).

Scope and Limitations

The focus of this study is limited to developing an example multilevel theory of CD using an innovative MLTB process developed as a result of careful analysis and refinement of three existing MLTB processes. The intended result is a parsimonious theoretical contribution to HRD associated with CD and a refined MLTB process that can be utilized by others engaging theory building and, specific to HRD, advance theory building. Although empirical and qualitative testing of the resulting multilevel theory is beyond the scope of this study, the results of the study will include an improved MLTB process and a multilevel theory of CD. In proposing a MLTB agenda for CD in HRD, Upton and Egan (2005) suggested that the differences between levels must be minimized “[which] may prove a daunting task and thus prevent successful development of a multilevel theory of CD” (p. 638). Another limitation addressed by Upton and Egan is “the generalizability of such a theory” due to “the meaning of CD vary(ing) depending on the organization and individual involved” (p. 638). Although contextual issues are a potential factor in the development of CD theories, the issues faced are similar in the development of any theory. Finally, situating this “multilevel theory of CD...[at the] individual within the group level...may prevent [the] organization’s [leaders] from seeing the utility of such a theory,” therefore veiling the relevance of the theory to HRD practice.

Multilevel Theory Development

The multilevel theory building methodology developed for this study describes two primary phases, a theory components phase and a levels components phase. The purpose of specification and operationalization is to ready the resulting theory for measurement, analysis, and refinement (Kozlowski & Klein, 2000; Reynolds Fisher, 2000) which will be left to future research. There are two steps to specification and operationalization: (1) specifying propositions of the theory (Reynolds Fisher, 2000); and (2) in an effort to ensure appropriate operationalization, specifying whether the researcher is assessing the constructs structure or function (Morgeson & Hofmann, 1999). Assessing both structure and function are important, but appropriate operationalization requires the specification of assessment details (Morgeson & Hofmann). Otherwise, focusing on construct function “may result in loss of some descriptive richness that would be gained by considering the construct’s structure” (Morgeson & Hofmann, p 262); and focusing on construct structure “often entails the loss of generalizability across levels” (p. 262). Details about the resulting insight from the two steps to specification and operationalization follow. Specifying propositions of the theory derives directly from the work of Dubin (1978) whose theory building work is widely recognized as aimed toward quantitative measurement and analysis through a positivistic frame. Since measurement, analysis, and

refinement of the multilevel theory of CD is left for future research, given the length limitations of this paper, and since there is a desire to not limit that refinement to only quantitative measures or a positivistic frame, a limited number of proposition examples are provided.

Theoretical propositions can address the following: propositions about values of a single unit of the theory; propositions about the continuity of a system state that predicts conjoined values of all units; or propositions about the oscillation of the system from one state to another (Dubin; Reynolds Fisher, 2000). Furthermore, “propositions represent theoretical assertions in need of research evaluation” (Kozlowski, et al., 2000, p. 161). To aid the future researcher who works to analyze and refine this multilevel theory of CD in the future, an example of each type of proposition is proposed in Table 1

Table 1. *Specified Propositions of a Multilevel Theory of CD*

TYPE OF PROPOSITION	PROPOSITION
About values of a single unit of the theory	The overall retention rate of individuals in an organization is directly related to the level of organizational resources provided for the individual's CD.
About the continuity of a system state that predicts conjoined values of all units	In times of organizational stability (i.e. no downsizing and/or reorganization), employees will maintain a level of job satisfaction and motivation to continue working toward organizational goals.
About the oscillation of the system from one state to another	The priority given to individual and organizational goals accomplished through CD will increase and decrease in times of stability and instability, respectively.

The propositions above are intended to lead to the examination of aspects of the multilevel theory of CD developed, but are not intended to be an exhaustive list of theoretical propositions offered for validation.

Implications

The implications that resulted from this study are described below, including implications for CD and HRD practitioners. First, both CD and HRD scholars seem to be ignoring the interactions of individuals that occur at the group level in the form of dyads, triads, teams, or departments and at the organization level. The endogenous constructs or dependent variables that surfaced from the definitions of CD (Upton et al., 2003) point to both individual and organizational outcomes of CD, in turn calling for shared responsibility for CD. As a result, the multilevel theory of CD developed in this study connects CD and HRD by explaining the relevant collective constructs of CD that emerge in organizations and that influence CD at each level of the organization.

The second implication of this study relates to the advancement of theory building in HRD. In his research on the need for additional theory building research in HRD Torraco (2004) outlined four areas where theory building might be conducted in the field. Of those four areas of theory building research, a multilevel theory of CD addresses the need to research theory building processes and the resulting theory. Furthermore, Garavan et al. (2004) called for HRD to begin to address levels issues in order to more fully address individual, group and organization needs. Further advancement of HRD theory building depends on developing theory that links the micro, meso and macro aspects of an organization (Wright & Boswell, 2002). Previously identified general theory building approaches overlook the widely supported importance of systems level exploration in HRD.

The third set of implications that resulted from the development of a multilevel theory of CD relate to the call for convergence of current CD theories. Although a number of CD scholars (Chen, 1998; Patton & McMahon, 1999; Savickas, 1995; Savickas, 2001; Savickas & Lent, 1994; Sharf, 1997; Zunker, 2002) have answered Osipow's (1990) call for CD theory convergence by working together, there remains a need for continued theory convergence. A multilevel theory of CD has the potential to aid in the convergence of CD theory by addressing three of the four missing links in CD theory as outlined by Osipow: (1) integration of “self- and occupational information into the [career] decisions stream”; (2) identification of “barriers to development...and implementation of desirable [career] choices; and (3) the need to address “what happens to an individual after entry into the work force” (p. 129-130).

The final set of implications of the multilevel theory of CD to HRD and CD practitioners are also important to explain. Practitioners must begin to ask questions such as: “do organizations recognize and identify the organizational and societal outcomes of CD they are working toward?”; “how to individual and organizational interactions impact the outcomes of CD?”; “are the collective constructs identified in this study representative of all of the collective constructs that emerge in their particular organization or are there unique constructs that emerge?”; and, finally, “do individuals recognize the individual outcomes of CD they are working toward?” These questions are vital to improving the HRD and CD practices of organizations to support CD initiatives.

The development of an improved MLTB process resulted in an alternative to the widely accepted and used generic HRD theory building processes thus allowing for the explicit and intentional inclusion of levels and related issues important to future research in our field (Garavan et al., 2004). The development of this MLTB process was

necessary to advance HRD theory building and to provide a means for examining multilevel issues that pervade the discipline.

Future Research

Future research recommendations are aimed at beginning the validation process for the example multilevel theory of CD, and newly developed theories that are the result of the MLTB process outlined above, from both quantitative and qualitative perspectives, to continue to advance theory building efforts in HRD and to examine the role of this multilevel theory of CD in CD theory convergence. It is important that future research to validate the developing multilevel theory of CD not be limited to quantitative validation. Swanson, Watkins and Marsick (1997) stated that "...laboratory methods [i.e. quantitative methods] alone are not much help in producing practical theoretical knowledge about many challenges today because they ignore the significant, complex influence of the organizational context" (p. 91). The process of validating a developing theory is quite daunting to a novice theory builder because the initial thought is to answer all of the potential questions and concerns about the theory. In his statement regarding theory validation Kaplan (1964) helped alleviate that concern though. According to Kaplan, "The problem of validation of a theory is too often discussed in the context of convincing even the most hardened skeptics, as though the problem is that of silencing critics...A theory is validated, not by showing it to be invulnerable to criticism, but by putting it to good use..." (p. 322). By recognizing that theory validation is about putting the theory to use, the theorist can then focus on various approaches to testing the theory in a real world environment.

MLTB is a complex task and simplifying the process into a step-by-step method is unlikely to answer all of the resulting theory building questions that arise from researchers. Instead, future research into MLTB in HRD should involve following MLTB advancements in fields such as industrial and organizational psychology and putting the processes identified and developed in this study to use in examining additional multilevel phenomena. HRD scholars must work collectively to improve upon MLTB processes and the development of cogent multilevel theories. Only then will HRD theory building advance beyond the generic and myopic view of complex issues.

With regard to CD theory convergence future research may involve gathering data to explain how the collective constructs identified in the multilevel theory of CD address the missing links in CD theory as identified by Osipow (1990). Both quantitative and qualitative data can be collected to determine if the collective constructs identified in this study do relate to the missing links as identified in the implications section of this chapter. CD and HRD scholars alike will then be able to determine if a multilevel theory of CD does indeed contribute to the convergence of CD theory. Future studies examining individual CD from a multiple organization experience may add further insight into contemporary CD and aid in theory convergence.

Conclusion

Developing a multilevel theory of CD to strengthen the connection between CD and HRD, advance theory building in HRD, and contribute to the convergence of existing CD theory required an extensive, although unlikely comprehensive, examination of CD, HRD and theory building research. Future research will be aimed at verifying the successful accomplishment of each of these research goals, but regardless, the research conducted in this study clearly shows that CD has both individual and organizational implications as seen in the dependent variables (Egan et al., 2006) and collective constructs identified in the multilevel theory of CD. Furthermore, the improved MLTB methodology developed in this study aims to advance theory building in HRD beyond the generic individual and/or organizational theory building efforts that pervade HRD. Finally, CD theory convergence is aimed at reinvigorating and revitalizing the utility of CD perspectives in individual and organizational. Continued progress on the development of multilevel theories of CD can invigorate both CD and HRD and provide theory that is rigorously constructed and validated in a manner that has both scholarly and practical relevance.

References

- Chen, C. P. (1998). Understanding career development: A convergence of perspectives. *Journal of Vocational Education and Training*, 50(3), 437-461.
- Dubin, R. (1978). *Theory building* (Rev. ed.). New York: Free Press.
- Egan, T. M., Upton, M. G. & Lynham, S. A. (2006). *Career development: Load bearing wall or window dressing?* *Human Resource Development Review*, 5(4), 442-477.
- Garavan, T. N., McGuire, D., & O'Donnell, D. (2004). Exploring human resource development: A levels of analysis

- approach. *Human Resource Development Review*, 3(4), 417-441.
- Jacobs, R. L., & Washington, C. (2003). Employee development and organizational performance: A review of literature and directions for future research. *Human Resource Development International*, 6(3), 343-354.
- Kaplan, A. (1964). *The conduct of inquiry: Methodology for behavioral science*. San Francisco: Chandler.
- Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection, and analysis. *Academy of Management Review*, 19(2), 195-229.
- Klein, K. J. & Kozlowski, S. W. J. (2000). *Multilevel theory, research, and methods in organizations: Foundations, extensions and new directions*. San Francisco: Jossey-Bass.
- Klein, K. J., Tosi, H., & Cannella, A. A. (1999). Multilevel theory building: Benefits, barriers, and new developments. *Academy of Management Review*, 24(2), 243-248.
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein, & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*, (p. 3-90). San Francisco: Jossey-Bass.
- Lynham, S.A. (2000a). *The development of a theory of responsible leadership of performance* (Tech. Rep.). St. Paul, MN: University of Minnesota, Human Resource Development Research Center.
- Lynham, S. A. (2000b). Theory building in the human resource development profession. *Human Resource Development Quarterly*, 11(2), 159-178.
- McGoldrick, J., Stewart, J., & Watson, S. (Eds.) (2002). *Understanding Human Resource Development: A research-based approach*. London: Routledge.
- McLagan, P. A. (1989). Models for HRD practice. *Training & development journal*, September 1989, 49-59.
- McLean, G. N. (1998). HRD: A three legged stool, an octopus, or a centipede? *Human Resource Development International*, 1(4), 375-377.
- Morgeson, F. P., & Hofmann, D. A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, 24(2), 249-265.
- Osipow, S. H. (1990). Convergence in theories of career choice and development: Review and prospect. *Journal of Vocational Behavior*, 36, 122-131.
- Patton, W. & McMahon, M. (1999) *Career development and systems theory: A new relationship*. Pacific Grove, CA: Brooks/Cole.
- Reynolds Fisher, S. L. (2000). *A multilevel theory of organizational performance*. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, OK.
- Savickas, M. L. (1995). Current theoretical issues in vocational psychology: Convergence, divergence, and schism. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of Vocational Psychology: Theory, Research, and Practice* (2nd ed., p. 1-34). Mahwah, NJ: Erlbaum.
- Savickas, M. L. (2001). Envisioning the future of vocational psychology. *Journal of Vocational Behavior*, 59, 167-170.
- Savickas, M. L. & Lent, R. W. (1994). *Convergence in career development theories*. Palo Alto, CA: Consulting Psychologists Press.
- Sharf, R. S. (1997). *Applying career development theory to counseling* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Swanson, B. L., Watkins, K. E., & Marsick, V. J. (1997). Qualitative research methods. In R. A. Swanson & E. F. Holton III (Eds.), *Research handbook: Linking research and practice*, p. 88-113. San Francisco: Berrett-Koehler.
- Swanson, R. A. (2001). Human resource development and its underlying theory. *Human Resource Development International*, 4(3), 299-312.
- Swanson, R. A., & Holton III, E. F. (2001). *Foundations of Human Resource Development*. San Francisco: Berrett-Koehler Publishers, Inc.
- Torraco, R. J. (2004). Challenges and choices for theoretical research in human resource development. *Human Resource Development Quarterly* 15(2), 171-188.
- Upton, M. G. & Egan, T. M. (2005). Career development and multi-level theory building: Linking the individual and the organization. In M. L. Morris & F. A. Nafukho (Eds.), *Proceedings of the Academy of Human Resource Development* (p. 632-639). Estes Park, CO: AHRD.
- Wright, P. M., & Boswell, W. R. (2002). Desegregating HRM: A review and synthesis of micro and macro human resource management research. *Journal of Management*, 28(3): 247-276.
- Zunker, V. G. (2002). *Career counseling: Applied concepts of life planning* (6th ed.). Pacific Grove, CA: Brooks/Cole.