EXPLORING PARADIGMS OF HUMAN RESOURCE DEVELOPMENT

A Dissertation

by

ANDREW CHRISTOPHER HURT

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Approved by:

Co-Chairs of Committee,   Gary N. McLean
                        Susan A. Lynham
Committee Members,       Toby M. Egan
                        Manda H. Rosser
Head of Department,      Fredrick M. Nafukho

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ABSTRACT


Andrew Christopher Hurt, B.S., Purdue University;
M.S., Purdue University

Co-Chairs of Advisory Committee: Dr. Gary N. McLean
Dr. Susan A. Lynham

This study focused on the issue of paradigms in Human Resource Development (HRD). Its purpose was to validate the HRD Cube as a synthesized model of HRD and to explicate some of the extant paradigms of HRD. The study was carried out by examining the text of articles published in Academy of Human Resource Development (AHRD)-sponsored journals.

Purposeful, stratified, and random sampling was used to select 16 articles published in AHRD-sponsored journals. Articles were treated as if they were the representative voice(s) of their author(s). Data units from within each article were identified and coded using two sequential techniques. First, units were axially coded and sorted into one of seven pre-determined categories based on the axioms of theory, research, and practice. Second, units were open coded using the constant comparative method, and themes and sub-themes were developed.

Axial coding results identified a heavy emphasis on practice. The accumulation of units representing research and theory were comparatively smaller. Evidence of shared perspectives was found that emphasized the practice axiom. The accumulation of units emphasized research-practice, followed by theory-practice, and concluded
with theory-research. Data units were also found that described all three axioms concurrently, theory-research-practice.

Open coding results identified representative themes and sub-themes within each of the axiom-based categories of theory, research, and practice. Six themes developed in the theory category, 9 themes and 1 sub-theme developed in the research category, and 6 themes and 10 sub-themes developed in the practice category.

The results provide evidence to support the overall construction of the HRD Cube. Theory, research, and practice perspectives of HRD were represented within the 16 articles used. The results also support the components described on each side of the HRD Cube. On the theory side, people, processes, and outcomes, and informing disciplines of HRD, were identified. Post-positive, interpretive, and critical epistemologies were identified on the research side. Individual, group, organizational, national, and global levels were identified on the practice side.

Given the initial validation and support of the HRD Cube and of the components described within theory, research, and practice sides, within these 16 articles published in AHRD-sponsored journals, at least 18 prospective paradigms of HRD were identified.
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<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT ........................................................................</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS ................................................................</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENTS ................................................................</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES ...........................................................................</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES ............................................................................</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I  INTRODUCTION ........................................................................</td>
<td>1</td>
</tr>
<tr>
<td>Human Resource Development .....................................................</td>
<td>2</td>
</tr>
<tr>
<td>What is HRD? .................................................................................</td>
<td>2</td>
</tr>
<tr>
<td>Paradigms .....................................................................................</td>
<td>15</td>
</tr>
<tr>
<td>Statement of the Problem ..........................................................</td>
<td>19</td>
</tr>
<tr>
<td>Purpose of the Study .................................................................</td>
<td>20</td>
</tr>
<tr>
<td>Research Questions ......................................................................</td>
<td>21</td>
</tr>
<tr>
<td>Delimitations and Limitations .....................................................</td>
<td>22</td>
</tr>
<tr>
<td>Informing Theoretical Framework ................................................</td>
<td>25</td>
</tr>
<tr>
<td>A Perspective from the Author ....................................................</td>
<td>26</td>
</tr>
<tr>
<td>Chapter Summary of Introduction .................................................</td>
<td>29</td>
</tr>
<tr>
<td>II REVIEW OF LITERATURE ..........................................................</td>
<td>31</td>
</tr>
<tr>
<td>Philosophy .....................................................................................</td>
<td>31</td>
</tr>
<tr>
<td>A History of Paradigms ...............................................................</td>
<td>36</td>
</tr>
<tr>
<td>HRD Cube .......................................................................................</td>
<td>60</td>
</tr>
<tr>
<td>Chapter Summary of Review of Literature .....................................</td>
<td>72</td>
</tr>
<tr>
<td>III METHODOLOGY AND METHODS ..................................................</td>
<td>74</td>
</tr>
<tr>
<td>The HRD Cube ...............................................................................</td>
<td>76</td>
</tr>
<tr>
<td>Data Selection .............................................................................</td>
<td>78</td>
</tr>
<tr>
<td>Data Collection ...........................................................................</td>
<td>85</td>
</tr>
<tr>
<td>Data Analysis ..............................................................................</td>
<td>87</td>
</tr>
<tr>
<td>Trustworthiness and Authenticity of the Study ..............................</td>
<td>94</td>
</tr>
<tr>
<td>Chapter Summary of Methodology and Methods ...............................</td>
<td>101</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>RESULTS: ARTICLE DEMOGRAPHICS AND AXIAL CODING</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>IV</td>
<td>Article Description Demographics</td>
</tr>
<tr>
<td></td>
<td>Chapter Summary of Article Demographics and Axial Coding Results</td>
</tr>
<tr>
<td></td>
<td>Presentation of the Results from the Axial Round of Coding</td>
</tr>
<tr>
<td>V</td>
<td>RESULTS: OPEN CODING</td>
</tr>
<tr>
<td></td>
<td>Themes within the Theory Category</td>
</tr>
<tr>
<td></td>
<td>Themes Expressed within the Research Category</td>
</tr>
<tr>
<td></td>
<td>Themes Expressed within the Practice Category</td>
</tr>
<tr>
<td></td>
<td>Confirming Axiom-Based Category Theme Construction: Shared Side Categories</td>
</tr>
<tr>
<td></td>
<td>Chapter Summary of Open Coding Results</td>
</tr>
<tr>
<td>VI</td>
<td>SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td></td>
<td>Conclusions</td>
</tr>
<tr>
<td></td>
<td>Recommendations for Future Research</td>
</tr>
<tr>
<td></td>
<td>Chapter Summary of Discussion, Conclusions, and Recommendations</td>
</tr>
<tr>
<td>REFERENCES</td>
<td></td>
</tr>
<tr>
<td>APPENDIX A</td>
<td></td>
</tr>
<tr>
<td>VITA</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selected Dictionary Definitions of Paradigm</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Selected Definitions of Paradigms and Corresponding Interpretations at the Philosophical Level</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>AHRD-Sponsored Journals Included within a Database</td>
<td>79</td>
</tr>
<tr>
<td>4</td>
<td>16 Randomly Selected Articles Published in AHRD-Sponsored Journals Used for Data Analysis</td>
<td>84</td>
</tr>
<tr>
<td>5</td>
<td>Summary of the 16 Article Demographics</td>
<td>104</td>
</tr>
<tr>
<td>6</td>
<td>Areas of Study Labeled as Informing Disciplines within 16 Articles Published in AHRD-Sponsored Journals</td>
<td>115</td>
</tr>
<tr>
<td>7</td>
<td>Ideas Labeled by Authors as a Theory in the 16 Articles Published in AHRD-Sponsored Journals</td>
<td>119</td>
</tr>
<tr>
<td>8</td>
<td>Summary of Themes and Sub-Themes that were Identified from the Open Coding of Units</td>
<td>165</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Continuum of HRD Definitions</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>The HRD Cube: A Synthesis Framework for Selecting and Integrating Foundational Theory, Research, and Practice in HRD</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>Another Look at the HRD Cube: A Synthesis Framework for Selecting and Integrating Foundational Theory, Research, and Practice in HRD</td>
<td>77</td>
</tr>
<tr>
<td>4</td>
<td>Proportional Venn Diagram of Categories Based on Theory, Research, and Practice Axioms</td>
<td>108</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

This dissertation focuses on Human Resource Development (HRD) and paradigms of HRD. This introductory chapter begins with a brief discussion of what HRD is perceived to be and its public/global presence. Then, a brief discussion of paradigms is presented, followed by the statement of the problem, purpose, and research questions. Presented next are the study’s delimitations and limitations. A discussion of the study’s informing theoretical frame follows. Finally, a series of perspectives about the author that will guide and influence this study and its components is presented.

At the onset of this dissertation, it is important to note that paradigms pervade everything that researchers encounter and aid in directing our own thinking. Because paradigms aid in directing everything we do, it is not possible to be truly paradigm free. Regardless of how open to new ideas or perspectives individuals may try to be, they are, nonetheless, bound within a paradigm. In fact, being open to new ideas and perspectives is a paradigm in itself. Thus, it is important to highlight the fact that all of what is presented or conducted within this dissertation is bound within at least one paradigm; gaining awareness of those paradigms as they relate to Human Resource Development is what this dissertation is trying to accomplish.

This dissertation follows the style of *Human Resource Development Quarterly*. 
Human Resource Development

Human Resource Development (HRD) is an area of theory, research, and practice that is devoted intimately to studying people. In terms of its formal academic study, HRD is comprised of a community of scholars and practitioners from across the world. Formal educational programs of HRD can be found in countries throughout many parts of the world.

The Academy of Human Resource Development (AHRD) is the predominant global professional organization with individual memberships that focus on research. It holds four conferences a year: the Americas, Asia, Europe, and the Middle East/North Africa (MENA). The University Forum for Human Resource Development (UFHRD) is the dominant institutional professional organization for the study of HRD. Combined, these two professional organizations, along with country-specific organizations (e.g., India, Korea, Pakistan) help to define much of the HRD work being conducted across the globe. They facilitate the dissemination of HRD research by hosting these four international conferences per year and sponsoring the publication of four HRD-focused journals: Human Resource Development Quarterly (HRDQ), Human Resource Development International (HRDI), Advances in Developing Human Resources (ADHR), and Human Resource Development Review (HRDR).

What is HRD?

Although a myriad of research and scholarly thought has been focused around the question of What is HRD? there is no single agreement as to the answer to this question. Many scholars and practitioners have endeavored to provide a formal
definition, while others have proposed that HRD is in a state of development and thus choose not to bind HRD by any formal definition. However, one point that nearly every scholar and practitioner can agree upon is that HRD is focused, in some way, on people. The debate is often on the contexts, outcomes, or values of this focus on people.

*How Have Others Defined HRD?*

Many scholars have presented formal definitions of HRD; Weinberger (1998) and Swanson and Holton (2001) provided a summary table and discussion of many of these definitions. However, three perspective definitions seem to articulate the myriad of differences among various authors’ interpretations of HRD.

The first and most bounded of the three definitions presented here is by Swanson (1995): “Human resource development is a process of developing and/or unleashing human expertise through organization development and personnel training and development for the purpose of improving performance” (p. 20). In this definition, several elements of what make it a bounded definition can be seen. For Swanson, HRD is a process. As a process, the activities that encapsulate HRD are defined and require a defined set of procedures. The purpose of HRD is solely to improve performance. For Swanson, the outcome of HRD is one that is centered on performance. Within this definition, HRD can also be seen as having two distinct foci: organization development (OD) and personnel training and development (T&D). Thus, HRD can, through defined processes, accomplish its goal of improved performance through the use of OD and T&D. For Swanson, the essence of HRD is a perspective that is bound by a specific set of outcomes, foci, and procedures.
A contrast to Swanson’s definition is McLean and McLean’s (2001):

Human resource development is any process or activity that, either initially or over the long term, has the potential to develop adults’ work-based knowledge, expertise, productivity and satisfaction, whether for personal or group/team gain, or for the benefit of an organization, community, nation or, ultimately, the whole of humanity. (p. 322)

In their definition of HRD, a much broader, less tightly bounded, perspective is articulated. For McLean and McLean, as with Swanson, HRD is a process. However, they add that HRD is a process or activity. These additional words aid the definition in implying that HRD could be more than just a set of defined and required procedures, as Swanson (1995) implied in his definition. Where Swanson felt the need to define various aspects of HRD (like a performance outcome and T&D and OD foci), McLean and McLean have endeavored to present a more inclusive definition. They arrived at their definition from the study of various international definitions of HRD and, as such, wanted to present a definition that ensured the ability to be internationally used. One of the overarching points that McLean and McLean articulated with their definition is that HRD can be as big or as small, or as focused or as unfocused, as the user of HRD may choose. This point can be seen in several elements of their definition through the use of words that imply a broader context and potential outcomes. For McLean and McLean, the essence of HRD is one of a broad perspective that could be bound by the perspective of the individual user. In this way, the McLean and McLean definition is more inclusive
of the variety of perspectives that are present within HRD, as compared to Swanson’s
definition.

Finally, there is Lee’s (2001) refusal to define HRD. Although not a definition of
HRD in the traditional sense, it is a perspective that represents the diverse nature of
definitions of HRD. Lee defended her refusal to define HRD with four points. First, she
suggested that there is a philosophical rationale for refusing to define HRD. In any
definition, the author must define his or her perspectives philosophically. Her argument
was that, because HRD is an area of theory, research, and practice that defines itself
around no one philosophical perspective, any presented definition (even a working
definition) will undoubtedly be biased toward the philosophical orientation of the author.
Second, Lee refused to define HRD from a theoretical perspective and used the
argument of *being* versus *becoming* to this end. Lee viewed HRD as continually
developing, changing, and adapting. She suggested that HRD is in a perpetual state of
*becoming* or a state in which it is changing. When an author presents a definition, there
is a sense of *being* in that definition. *Being* refers to those elements of the definition that
are known for fact. Lee argued that it would not be possible to present a *becoming*
argument within any definition of HRD because definitions, by their own nature, present
what is known or, in other words, a state of *being*. Third, Lee refused to define HRD
using a professional argument. She identified that many individuals have something to
gain from presenting a definition of HRD. Gains like professional status, recognition
among other scholars, or even a need to support their own research are all reasons for
which Lee purported that authors might be interested in defining HRD. Thus, because
there is the inherent potential for personal/professional gain, a definition may be biased toward this end. Finally, Lee refused to define HRD using a practical reason. She suggested that a good definition must serve all those who use it; however, because HRD is so diverse, it is impractical to create a definition that can encompass all of HRD. Her argument is, in essence, that there is limited value in defining something when that definition can serve only a small subset of the entire population.

It is interesting to note that, by providing the criteria for why HRD should not have a definition, Lee (2001) has effectively provided the HRD community with what should be in a definition. By looking at the inverse of her propositions for why HRD should not be defined, all other components not listed in her refusal should be contained within a definition. Lee’s view of HRD is perhaps one of the most inclusive of various perspectives of any HRD researcher, theorist, or practitioner.

Although only three definitions of HRD have been presented here, they represent much of the diversity of perspectives on defining HRD. Many definitions focus, as Swanson’s (1995) does, around specific arguments as to what HRD is and what it is not. Others take an approach more like that of McLean and McLean (2001), where some aspects of their definition are specific; but, as a whole, their definition is left broad in order to accommodate diverse perspectives and remain as inclusive as possible. And still other definitions exemplify some of the four points that Lee (2001) made in criticism. They focus on a particular philosophical approach, or use a *being* point of view instead of a *becoming* perspective, or present a definition for personal/professional gain, or are impractical because they support only a particular group.
These three perspectives on defining HRD could be seen as lying on a continuum (see Figure 1), with one side representing definitions that define and articulate the specific nature of HRD and the other side presenting HRD as indefinable. As the author of this work, I could define HRD using a myriad of points; however, regardless of how I choose to define HRD, I would still bind this research and subsequent readers within my perspective. Regardless of how I define HRD, or if I define it at all, I would locate this research somewhere on that continuum. Given that this research is focused on the idea of paradigms and that paradigms pervade everything we encounter, I should ensure that my definition of HRD is as inclusive as possible. Inclusivity is important in a definition in order to account for the myriad of possible perspectives of HRD. Thus, I will not present any formal definition of HRD other than to state simply that HRD is an area of theory, research, and practice that intimately deals with people. By not providing a formal definition of HRD, I am acknowledging that there is a myriad of potential definitions of HRD; and, in so doing, I am by default accepting Lee’s (2001) definition of (or refusal to define) HRD as this perspective is the most inclusive of all the presented definitions.
The Historical Foci of HRD

Throughout the history of HRD, there have been several foundational debates and models that have helped to move HRD into its current state. As described above, the conversation and debates centered on how HRD should be defined have made significant contributions to this conversation. Other debates have centered on what the outcomes and models of HRD are.

Learning versus Performance

An often debated topic in some of the early published HRD history (pre-2000) was the outcome(s) of HRD. The debate often focused on questions centered on learning (Barrie & Pace, 1998; Watkins & Marsick, 1995) or performance (Swanson, 1995) in individuals or within organizations. Although proponents of each side still exist, both sides generally agree that learning and performance are not mutually exclusive; each has its own place within an individual’s and organization’s development (Swanson & Holton, 2001). In many ways, this debate between learning and performance is the same as that behind the debate regarding the definitions of HRD. Learning is seen as
something that has future value, whereas performance is seen as something whose value can be immediately gauged. As with the definitions of HRD debate, there is a similar sense in the learning vs. performance debate; should the world of HRD be defined for immediate use or presented in a manner that allows for its future understanding?

**Models of HRD**

Several models exist that depict the nature of HRD. In many cases, these models continue the debate regarding how HRD should be defined. However, there are three key models that are particularly frequently referenced within the HRD literature and one emerging model that depicts the historical and emerging nature of HRD. In some cases (as with the HR Wheel—see discussion below), components of these models have been so completely absorbed by scholars and practitioners of HRD that elements of them are nearly assumed to be fact.

*HR Wheel*

The HR Wheel originated from a competency study conducted by the American Society of Training and Development (ASTD) in 1981 (McLagan & Bedrick, 1983). In an effort to define more clearly the field of training, ASTD initiated a multi-phase study that was charged with attempting to identify, define, and describe the competencies and nature of training in the early 1980s. A product of that study was nine functional areas that described the nature of the field of training. Oriented in a circular fashion, these nine areas created the HR Wheel (training and development, organization development, organization/job design, human resource planning, selection and staffing, personnel
research and information systems, compensation/benefits, employee assistance, and union/labor relations).

Following the initial development of the HR Wheel, McLagan (1989; McLagan & Suhadolnik, 1989) later proposed a model for HRD practice. McLagan proposed changes for the 1990s and beyond. She proposed a slightly redesigned model of the HR Wheel (see illustration in McLagan, 1989, p. 53). In this new form, the HR Wheel took on two additional functional areas and was further divided into areas exclusive to Human Resource Management (HRM), HRD, and shared by both. The areas exclusive to HRM are HR research and information systems, union/labor relations, employee assistance, and compensation/benefits. The areas exclusive to HRD are training and development, organization development, and career development. Finally, shared by HRM and HRD are organization/job design, human resource planning, performance management systems, and selection and staffing. These final four areas are shared because they relate closely to both HRM and HRD.

The relevance of the HR Wheel to HRD is paramount. Since McLagan’s (1989) proposition of a model of HRD practice, the HR Wheel has been used as a way of bounding HRD within three exclusive functional areas. HRD is clearly focused on development. This focus is evidenced by the last word in the title. Similarly, the HR Wheel has three functional areas that have the word development imbedded in their titles: training and development (T&D), organization development (OD), and career development (CD). Thus, since the 1980s, many HRD academics and practitioners have overtly associated T&D, OD, and CD with HRD. The relevance of the HR Wheel is that,
for many, it bounds study within HRD. By bounding the focus of HRD to these three areas, HRD research, training, and practice have a more explicit set of delimitations from within which to operate.

HRD Theory Stool

The HRD theory stool is Swanson’s (1999; Swanson & Holton, 2001) interpretation of the major underlying theories of HRD and how they interact with each other to inform HRD as an area of research and practice (see illustration in Swanson, 1999, p. 12). The HRD theory stool has three legs: (a) psychology, (b) systems, and (c) economics. These three legs are what Swanson called the theoretical domains of HRD. They represent the three areas that most inform and define study within HRD (see Torraco, 1999). The three legs of the stool are connected to the seat, which has inscribed on the top the three domains of performance: (a) individual, (b) process, and (c) organization. The domains of performance are what HRD theory (seat of the stool), utilizing the three theoretical foundations, strive to inform. The stool is situated on top of an ethical rug. Swanson described this rug as a filter by which all HRD theories (theoretical foundations) are separated from context (domains of performance).

HRD as an Octopus or a Centipede

In a response to Swanson’s three-legged stool model of HRD, McLean (1998) proposed the analogy that HRD is more akin to that of an octopus or perhaps even a centipede than it is to a three-legged stool. McLean suggested that HRD has as its foundation more than the three fields that Swanson presented (psychology, systems, and economics). He would add additional fields, such as anthropology, speech
communications, and sociology, among many other cores. Additionally, McLean suggested that there might be other fields that have influenced HRD that are perhaps less obvious, such as philosophy, sports, music, literature, technology, and evaluation. This debate between McLean and Swanson on models of HRD is the same fundamental argument that each has regarding how the other has defined HRD. For Swanson (1995), HRD needs a clear definition, sense of purpose, and historical foundations. For McLean (1998), HRD must assume a perspective that allows it to grow, adapt, and become whatever it will and needs to become.

_HRD Cube_

The HRD Cube is a developing model of HRD that was created by Lynham (2007, 2008) (Figure 2).
Figure 2. The HRD Cube: A Synthesis Framework for Selecting and Integrating Foundational Theory, Research, and Practice in HRD

Source: Lynham, (2007, 2008). (This figure is additionally presented as Appendix A and will subsequently be referred to as such.)

The HRD Cube (see Figure 2, as well as Appendix A) is comprised of three sides; each side has as its focus a particular aspect of theory, research, or practice.
perspectives in HRD. The Cube depicts the integration of these theory, research, and practice perspectives. On the x-axis, the Cube defines the informing theoretical foundations of HRD (Lynham, 2007). Lynham presented economics, psychology, anthropology, sociology, systems, political science, and adult education as possible foundations. Additionally, she included an other category that represents other possible fields/disciplines/areas of study from which theory contributing to HRD might have developed. The z-axis focuses on the research perspectives of HRD. Lynham entitled this side, modes of knowledge and inquiry, as this side identifies the metaphysical positioning of HRD inquiry. Within this side, she presented positivism, post-positivism, social constructivism, critical, and participatory as possible metaphysical positions (Lincoln & Lynham, 2007). Additionally, on the z-axis, she added indigenous and other as a possible category in order to emphasize that there may be other potential metaphysical perspectives. The y-axis focuses on the practice perspectives of HRD. Within this axis, the target audiences or outcomes are identified. Lynham presented individual, group, process, organization, family, community, national, regional, and global as possible practice perspectives of HRD (Lynham & Cunningham, 2006). The Cube uses a series of dashed lines that represent its capacity to expand for unidentified or as of yet unknown areas of theory, research, or practice. Additionally, the dashed line represents the openness of the Cube and the interdependence of the 3 sides.

Furthermore, Lynham bounds the Cube within the context of social problems and conditions, indicating that the interacting choices regarding modes of inquiry (the z-axis), informing theoretical foundations (the x-axis), and domains of outcome and
performance (the z-axis) should be directed by the HRD related phenomenon/problem concerned. The HRD Cube was the primary organizer for the research presented in this dissertation.

The HRD Cube is perhaps the first model in HRD that depicts the relationship among theory, research, and practice perspectives. Lynham’s (2008) propositions regarding the HRD Cube may help to lead HRD as an area of theory, research, and practice toward a clearer understanding of how knowledge is constructed within HRD and provide an idea of which areas dominate the construction of new knowledge. As with many of the prior described models, the HRD Cube relies on several of the foundational definitions and debates that have been presented within the HRD literature. Within my paradigm, one of the strengths of the HRD Cube is that it is designed to allow for adaptation, such that, when new knowledge or understanding is created/obtained, the Cube can expand or contract to accommodate these new perspectives.

Paradigms

Modes of thought, ways of being, and the glasses we wear while interpreting the world around us are all analogies of paradigms. Although the word, paradigm, has been in existence since the year 1483 (Paradigm, 2010c), the term gained much of its popularity and recognized status with the work of Kuhn (1996) in the early 1960s. In his seminal text, Kuhn outlined his vision of the meaning of the term scientific revolutions or fundamental changes in the way in which a scientific field understands and accumulates knowledge. Although there have been numerous critiques of Kuhn’s work (Hoyningen-Huene, 1993; Kincaid, 1996), and several authors have noted the various
ways in which he defined a paradigm (Eckberg & Hill, 1979; Guba, 1990; Guba & Lincoln, 1981; Lincoln & Guba, 1985; Masterman, 1970), the essence of Kuhn’s (1996) work defined a paradigm as the fundamental criteria used during a period of time that defines the way a scientific community interprets its reality. Kuhn’s notions of a paradigm and scientific revolutions dig deeply into the way an individual or a community of scholars views the world and how those views shape and dominate what makes for reality and knowledge in those communities. The essence of a Kuhnian defined paradigm is steeped in philosophy.

**Philosophy and Paradigms**

Philosophical modes of thought are used to interpret and uncover the world. Within these modes of thought are varying hierarchical levels. At the top of the hierarchy, there are the ontological interpretations of the world. Ontology is the study of reality, and of truth (Schwandt, 2001). Often the term ontology is used in lieu of the term metaphysics to represent this same understanding of truth; however, “some philosophers define ontology as a branch of the metaphysics” (p. 157). The second philosophical level is known as epistemology. Epistemologies are how we identify what makes for knowledge in a given reality. Epistemologies guide the discovery of knowledge by presenting the overarching perspectives that can be used for such discovery. The third and fourth levels, respectively, are known as methodology and methods. Methodology is the specific approach that a researcher might use. Methodologies define the “assumptions, principles, and procedures in a particular approach to inquiry” (Schwandt, 2001, p. 161). Methods are the specific details regarding procedures used in the inquiry
to generate and analyze research data. Fifth, axiologies are philosophical perspectives that can cut through or inform all of the preceding levels. An axiology helps to define the way that we act or the rules that govern our interpretation of the world. Finally, there are teleologies, which articulate the ultimate philosophical outcome or desired end result of the research.

Several HRD scholars have presented similar views on ontologies, epistemologies, and axiologies. McGoldrick, Stewart, and Watson (2004) said that an ontology is “how we see our world,” and epistemology is “how we think about our world,” and axiologies are “the values that determine how we should and actually act in research and practice” (p. 14). Ruona and Lynham (2004) presented similar perspectives; ontology as “being,” epistemology as “knowing,” and axiology as “acting” (p. 153).

**Defining Paradigms?**

The definition of paradigm reflects its Greek origins as recorded by Latin scholars in the late 3rd century (Paradigm, 2010c). Para- means a pattern or example, and the essence of the suffix –digm meaning to show (Paradigm, 2010b). Perhaps the simplest definition of paradigm is as a pattern or model, an example, or a typical instance (Paradigm, 2009a, 2010a, 2010b, 2010c, 2010d). In rhetoric, the word paradigm is used “as a figure of speech in which a comparison is made by resemblance” (Paradigm, 2010c). Finally, the definition of paradigm that is most applicable to this study is as a set of beliefs that pervade a field of study (see Table 1 following).
Table 1. Selected Dictionary Definitions of Paradigm

<table>
<thead>
<tr>
<th>Dictionary</th>
<th>Paradigm Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Heritage Dictionary (Paradigm, 2009a)</td>
<td>A set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline.</td>
</tr>
<tr>
<td>Encarta Dictionary (Paradigm, 2009b)</td>
<td>In the philosophy of science, a generally accepted model of how ideas relate to one another, forming a conceptual framework within which scientific research is carried out.</td>
</tr>
<tr>
<td>Oxford English Dictionary (Paradigm, 2010c)</td>
<td>A conceptual or methodological model underlying the theories and practices of a scientific discipline at a particular time; (hence) a generally accepted world view.</td>
</tr>
<tr>
<td>WordNet (Paradigm, 2010d)</td>
<td>The generally accepted perspective of a particular discipline at a given time.</td>
</tr>
</tbody>
</table>

These selected definitions all focus on the idea that paradigms are particular views that are used by academic disciplines to represent the way their world is perceived and how knowledge within a particular discipline is constructed and accumulated. The definitions also describe paradigms existing at a particular time, suggesting that paradigms are transient. The idea of paradigms being something more than just an example, a pattern, or a grammatical/linguistic tool appears to have been first developed through the work of Kuhn (1996). The American Heritage Dictionary noted that the meaning of paradigm has perhaps undergone yet a further metamorphosis since the ideas presented by Thomas Kuhn. A series of usage reports regarding the word paradigm, reported that a more simplified or nonscientific meaning of the word is “the prevailing view of things” (Paradigm, 2009a; also, see Marris, 2008).
Statement of the Problem

As stated earlier in this chapter, HRD is an area of theory, research, and practice that is devoted to studying people. This focus on people is perhaps one of the few points that nearly every scholar or practitioner of HRD could agree upon. Like many other areas of academic study, the HRD literature and AHRD conferences are rife with vigorous discussions, debates, and controversies. Some of these debates have been briefly discussed in this chapter. Further, there are numerous other debates within HRD. The foundational theories of HRD provide one example (Swanson & Holton, 2001; Weinberger, 1998). Classifying HRD as a field, or discipline, or profession is another (Bing, Kehrha, & Short, 2003; Kuchinke, 2001b). In more recent times, there has been a debate regarding the relevance and importance of the National HRD (NHRD) movement (see Lynham & Cunningham, 2004, 2006; McLean, 2007; McLean, Lynham, Azevedo, Lawrence, & Nafukho, 2008; McLean, Osman-Gani, & Cho, 2004; Swanson, 2007; Wang & Swanson, 2008). Although all of these debates have focused on different topics, central to all of them is the issue of perspective. Fundamentally, what distinguishes each is a different view of what HRD is, has been, and, perhaps, will become. This difference in perspectives of HRD has, consequently, led to many of the vigorous discussions, debates, and even controversies seen throughout the history of the HRD literature and has played a key role in directing inquiry and what makes for good theory, research, and practice in HRD.

Paradigms are ways of viewing the world; they are “the prevailing view of things” (Paradigm, 2009a). Paradigms are the embodiment of those ideas and beliefs,
those perspectives that an individual or an entire field of study holds central to their understanding of the world (Guba, 1990; Guba & Lincoln, 1981, 1994; Lincoln & Guba, 1985). Kuhn (1996) suggested that paradigms are those central tenets that an entire academic field holds to be true. However, Kuhn’s (2000) work, by his own admission, was focused on the physical sciences and not on the social sciences. Guba and Lincoln (1994), two social science researchers, supported the idea that paradigms are individually constructed views of reality. They defined a paradigm “as the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (p. 105). Thus, it is through the use of paradigms that individuals and academic fields define the guiding principles that they use to understand a topic and practice within a field.

If paradigms are the prevailing view of things and HRD is struggling to understand the multiple perspectives of various topics within its literature, then it could be argued that HRD is unclear about its paradigms or that it has multiple paradigms. Thus, the problem is that there is an uncertain understanding of the various paradigms that are represented within HRD as an integrated area of theory, research, and practice. As evidence to this uncertain understanding, debates within HRD often focus on and around the various perspectives, or paradigms, of groups of authors.

**Purpose of the Study**

The purpose of this study was twofold. The first purpose was to begin validating the HRD Cube as a synthesizing model of HRD. The second purpose was to explicate some of the extant paradigms within HRD. In accomplishing these purposes, this
dissertation may lend aid to many of the current debates within HRD. It may also aid HRD in helping to identify how it has developed, its current state, and its potential for future directions. Validating the HRD Cube and explicating paradigms of HRD may also help scholars and practitioners of HRD to understand better the role that paradigms have played in the historical development of HRD. Further, it may provide a stepping stone for further research on potential paradigms of HRD that are not identified within this study.

However, this study may not do any of those items identified above. But the outcomes or value of such an endeavor will not be known until the HRD community has had an opportunity to view its results. The only value that can immediately be attributed to this study is a deeper understanding of HRD.

**Research Questions**

In order to provide some answers to its problem and fulfill its purposes, this study was guided by the following research questions:

1. What evidence of theory, research, and practice perspectives of HRD exists within the Academy of HRD journals?
2. How does this evidence support, or not, the hypothesized construction of the HRD Cube?
3. What (if any) changes need to be made to the HRD Cube to increase its trustworthiness and utility as a synthesized model of theory, research, and practice in HRD?
4. Given an understanding of the theory, research, and practice perspectives of HRD and the adaptation/confirmation of the HRD Cube, what can be postulated and described about the predominant paradigms of HRD and how can this discovery be used to inform further development of inquiry and practice in HRD?

**Delimitations and Limitations**

This section identifies the delimitations and limitations of the study. There are three delimitations that define the boundaries within which this study was limited. The resulting limitations focus on the restrictions of this study. In this study there are five significant limitations.

**Delimitations**

There are three significant delimitations that were set in order to bound the study and manage its scope. The first delimitation is that nearly all of the research conducted for this study and almost all of the literature searched was bound within the social sciences. The social sciences are “the study of society and of individual relationships in and to society, [and generally includes the fields of] sociology, psychology, anthropology, economics, political science, and history” (Soukhanov & Ellis, 1994, p. 1103). This bounding certainly does not mean that there are not valid contributions from fields in the physical sciences, which is defined as “any science… that investigate the nature and properties of energy and nonliving matter” (Soukhanov & Ellis, 1994, p. 887), including chemistry, physics, or astronomy; or from fields in the humanities, which is defined as “those subjects…that are concerned with human beings and their
culture” (Soukhanov & Ellis, 1994, p. 596), such as philosophy, literature, and fine arts; but this study required a smaller subset of the academic world. Furthermore, this study focused primarily on HRD. Given that HRD is an area of applied study that draws its primary knowledge base from other disciplines in the social sciences, it seemed reasonable to bind this study within the social sciences knowledge base.

The second delimitation was that this study looked at only the published works of HRD authors. HRD is an area of theory, research, and practice that has many different names. Although this dissertation uses the label of HRD to define this type of work in applied settings, HRD work could easily be conducted under a different label. Swanson and Holton (2001) noted that HRD in practical settings is often referred to in different terms and that many practitioners do HRD as a subset of their jobs. Thus, it becomes a difficult endeavor to identify what paradigms of HRD exist when there is no clear representation of who those individuals are. To combat this dilemma, only the articles published within the four AHRD-sponsored journals (HRDQ, HRDI, ADHR, and HRDR) were used as part of this dissertation’s analysis. It was assumed that through the peer-review process of each of these journals that published articles consisted of HRD relevant content.

The third delimitation was that of the literature published within the four AHRD-sponsored journals, only those publications from the years 2002, 2004, 2006, and 2008 were used for analysis. HRD manuscripts are published in many different publication venues (Dooley, 2002; Sleezer & Sleezer, 1998). The vast number of HRD publication venues were simply too great to attempt to capture; thus, this dissertation was delimited
to focus on only the four AHRD-sponsored journals. A more detailed explanation and justification for this delimitation is provided in Chapter III.

**Limitations**

Given the delimitations of the overall study, a number of limitations ensued. First was the limitation of the knowledge available in the social sciences regarding paradigms. As Lodahl and Gordon (1972) suggested, fields within the social sciences have underdeveloped paradigms as compared to fields within the physical sciences. Although dated, their results indicated that there was likely to be a lack of significant understanding in terms of paradigms in the social sciences.

Second, this study was limited in its ability to transfer results to fields/areas of study other than HRD. Some results may have applicability to other areas of study; however, given that the data used in this dissertation come solely from HRD publications, results are confined to impact only HRD. Additionally, the results of this study are reflective of the perspectives of those individual authors who have published one of the purposefully and randomly selected manuscripts used in the analysis (see Chapter III for more detail). HRD as an area of study is diverse.

Third, there was no direct contact with any of the authors of manuscripts used in this analysis regarding their interpretation of perspectives. For this study, only the published works of authors were used. This is a limiting point because, without contact with authors, there was no possibility for those authors to clarify their opinions and perspectives. Further research on this topic will undoubtedly seek the individual
comments and perspectives of various authors; however, doing so at this point in our understanding of paradigms in HRD was beyond the scope of this study.

Fourth, this study was limited in that it used only the English language as its primary source for obtaining relevant knowledge. Although all of the manuscripts used in the analysis were published in English, there certainly are other cultures and languages that have published HRD literature.

Fifth, this study was limited by the way in which authors described an idea or concept relating to theory, research, and practice within the articles used in this analysis. An author must overtly state or declare a concept to be representing theory, research, or practice for it to be captured in this analysis. If an author(s) implied that the concept was representing theory, research, or practice, then that concept will not have been captured in this analysis.

**Informing Theoretical Framework**

This study used as its primary informing theoretical framework a model developed by Lynham (2007, 2008) called the HRD Cube (see Figure 2 and Appendix A). The use of this model provided the basic typology used to inform and initiate the analysis of HRD paradigms embedded in the informing literature. Further, this model provided the informing/meta-paradigm for this study. As discussed earlier, no idea or research can be paradigm free. It is impossible to conduct any type of work (research or any other) without having a perspective or paradigm from which to inform the study of such work; thus, the HRD Cube is what guided the overarching framework for conducting this research. The rationale for this selection lies in the adaptability of the
HRD Cube. Because the HRD Cube was designed to expand or contract as new ideas are created/identified, this research was able to accommodate these new ideas as data were collected.

**A Perspective from the Author**

All individuals are bound by a set of informing predispositions toward one or more particular ideas. These predispositions are not inherently good or bad; however, they will influence the way that a topic is studied and the way that ideas are interpreted. As the author of this study, I have a set of predispositions that have influenced this research. Thus, in order for the consumers of this research to more fully understand my predispositions regarding HRD, philosophies, and the HRD Cube, I must provide some related background. This presentation should allow consumers to draw their own conclusions about the influence of my predispositions on this research.

*The Author’s Perspective: HRD*

My perspective of HRD has been influenced significantly from my formal education and through my personal relationships with several scholars in HRD. My formal education in HRD took place at Texas A&M University, a United States-based HRD graduate program located within a College of Education. Through this formal education, I have encountered many HRD scholars. Most notably, the works of McLagan, Swanson, McLean, and Lynham stand as foundational and influential authors of HRD. The HRD graduate program at Texas A&M is structured around McLagan’s (1989) HR Wheel; thus, the three HRD-related areas of study (OD, T&D, and CD) that she identified have guided my understanding of the primary areas of HRD theory,
research, and practice. Swanson’s writings and specifically his three-legged stool model were frequently read and discussed pieces of HRD literature. Along those same lines, McLean’s writings were often presented as an alternate perspective of HRD (specifically to those of Swanson). Although I do not necessarily agree with all of these authors’ ideas, I must acknowledge that they have influenced my understanding of HRD and its areas of study.

My personal relationships with several HRD scholars have also played a role in how I understand HRD and the formation of any predispositions toward this research. Perhaps the two most influential scholars are my co-chairs for this dissertation, Gary McLean and Susan Lynham. McLean’s (2007) perspectives of HRD have been well-articulated throughout the HRD literature. His perspective is one that views HRD as an open and developing area of study. McLean believes that, through candid discourse and exploration, HRD can grow. For McLean, it is not about finding the answers to HRD, but about opening up HRD to all of its potential. Lynham (2000) is probably most noted as an HRD theorist. Her perspective of HRD is one of understanding. For Lynham, HRD is best understood when we as researchers and practitioners of HRD can understand how all of HRD’s components fit together. Lynham’s perspective is one that requires a deep, rich understanding of a topic.

The Author’s Perspective: Guiding Philosophies

As this study digs deeply into the idea of paradigms, I would be negligent not to offer a candid positioning of my own ontological beliefs. As a researcher, I am most comfortable with the post-positivist epistemology. Gioia and Pitre (1990) would call this
my home paradigm, as this is where I am most at ease. I often see the world as being
objective and believe that there is significant value in systematically studying a topic. I
see the world as having a set of answers; my job as a researcher is to help uncover or
identify what those answers are. In my life, I have too often seen situations where
individual beliefs and emotions have had altogether too much influence on a topic. I
believe that a researcher must remain objective, so as not to unduly influence research
results. Yet, I also believe, as Peshkin (1993) suggested, that it is the research
question(s) that should drive the selection of methodology and not the beliefs or
perspectives of the author.

The Author’s Perspective: The HRD Cube

The HRD Cube is currently under development and refinement, and, as such, all
of the axes of the Cube are being evaluated for clarity of purpose and understanding (S.
A. Lynham, personal communication, September 18, 2008). As stated earlier, one of the
purposes of this research was to evaluate the HRD Cube as it is currently described. This
study’s results should aid the process of clarifying and formalizing the HRD Cube as a
synthesized model of HRD’s foundational theory, research, and practice components.
Due to the lack of formal writing or prior testing of the HRD Cube, it is important to
describe how I view and understand the Cube as this perspective will influence its use
within this study.

I see the Cube simultaneously as: (a) a theoretical model that describes the
dominant foundations/outcomes/modes of inquiry in HRD and (b) a tool that could be
used to identify the positionality and concomitant level of detail regarding nearly any
published HRD manuscript. As a theoretical model, the Cube encapsulates much of what the HRD literature has suggested are the foundations of HRD. As a tool, it could be used to sort manuscripts into corresponding smaller cubes that would best define the manuscript’s informing theoretical foundations, anticipated outcomes, and metaphysical positioning.

The HRD Cube is itself a paradigm of HRD as it defines a perspective of HRD. The HRD Cube is designed to expand (or shrink) as various perspectives of HRD theory, research, and practice are developed or identified; thus, it is not as limiting as some of the more definitively presented views of HRD (i.e., Swanson’s three-legged stool). However, the HRD Cube is limiting in that it defines a way in which HRD could be viewed. Some scholars (e.g., Monica Lee) might find that the entire notion of trying to compartmentalize HRD into a cube (regardless of that cube’s flexibility) to be faulty in that HRD as an area of theory, research, and practice is simply too big and too diverse to be so neatly and cleanly described. Lee (2001) might argue that, because of HRD’s diverse perspectives, defining it in any form only serves to limit HRD. By using the HRD Cube as my informing theoretical frame, I am knowingly conforming to its predisposed perspectives of HRD.

**Chapter Summary of Introduction**

Throughout this chapter a discussion about the historical influences of HRD has ensued. Many scholars and practitioners have tried to define, model, describe, and otherwise detail this field/discipline/area of study called HRD. These discussions have
lead to vigorous debates within the HRD literature. Fundamentally, these debates revolve around an issue of perspective.

This chapter also took a brief look at the idea of paradigms and some of their various definitions. Paradigms represent a way of viewing and interpreting the world. The chapter argued that perhaps the reason for many of the debates exhibited in the HRD literature could be attributed to the unclear understanding of paradigms within HRD. The following chapter will delve deeper into many of the topics and provide a more detailed account of the relevant literature on paradigms and of the HRD Cube.
CHAPTER II
REVIEW OF LITERATURE

In this chapter a review of the literature pertaining to the study of paradigms is presented. This chapter is divided into three major sections. The first section describes the role of philosophy within the study of paradigms. It also presents three epistemologies that are frequently used within HRD as modes of understanding the ontological or metaphysical world. Next, this chapter presents a history of paradigms. The history of the paradigm research section has been divided into five sequential stages, which begin with the work of Thomas Kuhn and lead through to the early 21st century. Finally, this chapter presents a detailed description of the HRD Cube. As this research used the HRD Cube as its informing theoretical frame, information regarding how the Cube is constructed and what each side entails is presented.

Philosophy

Philosophy is defined as “the love, study, or pursuit of wisdom, truth, or knowledge” (Philosophy, 2010). Although the history of philosophy is not a topic that this dissertation delves into, it is important to recognize that philosophy and the acquisition of wisdom, truth, or knowledge is an integral component of studying the idea of paradigms. The hierarchical levels of philosophy, as described in Chapter I, are discussed in greater detail below.

Epistemologies

Within HRD there are four epistemologies that are widely used in much of the literature: positivism (the world is objective and answerable), post-positivism (the world
is objective and can be estimated), interpretive (the world is subjective or constructed), and critical (the world revolves around the ideas of power and oppression). In this section, a brief history of these three dominant epistemologies is presented. These descriptions are referenced frequently throughout this document.

**Positivism and Post-Positivism**

Positivism is concerned with one objective reality. “The term positivist comes from the French philosopher Comte who used positivism to represent a particular view of knowledge in the natural sciences” (Merriam, 1991, p. 44). The basic assumption of positivism is that, through testing, observation, and logic, we can identify aspects of this one objective reality. Although the term positivism is often used in research today, in fact, the appropriate term should be post-positivistic research or logical empiricism (Schwandt, 2001). Positivism assumed that the answer to questions about the nature of reality could be identified (Guba & Lincoln, 2005). Then, with the rise of industrialization in the mid to late nineteenth century, positivism gave way to post-positivism. Post-positivism takes a more realistic (by most modern standards) approach in that it assumes that answers about the nature of the one true reality can likely never be identified. In post-positivistic research, these answers are estimates, given a set level of confidence, about what the nature of that one reality is likely to be (Guba & Lincoln, 2005).

The key aspect that separates positivism from all other epistemologies is a concern with being objective (Guba & Lincoln, 2005). In positivistic research, great lengths are taken to ensure that the researcher is in no way influencing the results of the
study. Thus, positivism is focused on controlling all aspects of the phenomena in question except those aspects that the researcher wishes to study. Then, through a process of deduction, the positivistic researcher can uncover the truth regarding the phenomena in question. A final key aspect of positivism is that, once results have been obtained, they are often generalized to a set population. This notion of generalizability of results is unique to the positivistic epistemology.

   Positivism is typically considered to be dominant among the three philosophical epistemologies (Swanson, 2005b). This dominance comes as a result of many factors. First, much of the field of HRD’s knowledge base has come from other disciplines. Swanson and Holton (2001) cited psychology, systems, and economics as the three predominant disciplines, all of which rely heavily on the positivistic epistemology. Thus, since its inception, the field of HRD has had a tendency to lean toward the positivistic epistemology because that is from where HRD’s knowledge base comes. Second, as Merriam (1991) suggested, the Western educational systems tend to train researchers in mostly the positivistic epistemology. She noted that society puts a heavy emphasis on the measurement of things. With a near complete training in positivistic philosophies and the reinforcement of those philosophies from society, it does not take long to find evidence for why there is a dominant positivist trend and perspective in the HRD literature.

Interpretive

   The interpretive epistemology assumes a subjective view of the world (Guba & Lincoln, 2005). Within interpretivism, the world is seen as constructed by the individual.
Thus, unlike positivism, where there is one reality, in interpretivism there are an infinite number of realities, each being defined by an individual. Interpretivist research is charged with the understanding, identification of patterns in, and the sense making of those individual realities (Schwandt, 2001).

In this research epistemology, there is no notion of generalizability, reliability, or objectivity. Results of interpretive studies relate only to the individual or group from which the study was conducted. Reliability, which is a hallmark of positivistic research and means the ability of the study to describe accurately what is happening, is replaced in interpretivist research with trustworthiness. Trustworthiness is the ability of the research and researcher to provide and present a truthful account of what they heard (Merriam, 1991). Tied to trustworthiness is the subjectivity of the research. In order to establish a truthful account of what is happening, the researcher must present themselves as a potential foundation influence to the study. From a positivistic perspective, these notions are insurmountable and difficult to grasp; yet, from an interpretivist perspective, they are embraced.

Within interpretivism, there are several specific streams of research. Three of those streams include: (a) ethnography, (b) phenomenology, and (c) social constructivism. An ethnographic study is focused on the society and culture. Within ethnography, the focus is on uncovering the basic beliefs, values, and attitudes (Merriam, 1998). Phenomenology, as Dooley and Lynham (2003) suggested, is an “artistic science of inquiry, an art and process that pursues meaning, that questions the way we experience the world, that helps us come to know and understand the world in
which we live as human beings” (p. 229). What can make phenomenology difficult to understand is that much of what defines phenomenology is that it is both a school of thought and a tool that can be used in a study (Merriam, 1998). Finally, social constructivism is a stream of interpretivist research that focuses on how the subjective interpretation of the objective world is constructed (Guba & Lincoln, 2005; Lincoln & Guba, 1985; Swanson, 2005b).

**Critical Science**

Critical science developed out of the Frankfurt School in the 1920s and is a critique of capitalism. In recent times, Jurgen Habermas is a frequently cited author and ardent supporter of the critical paradigm (Merriam, 1991). The critical paradigm is a blending of critical theory and post-modern perspectives (Swanson, 2005b). The critical paradigm can take many forms. One form of critical science is critical race and gender studies. In this form, the fundamental tenet of critical science is emancipation (Bierema, 2002). Capitalism is viewed as a dominating force that has subjugated individuals. Thus, critical science is focused on discovering and emancipating individuals who are or have been subjugated and dominated by capitalistic perspectives (Callahan, 2007; Kincheloe, 1999). A second form of critical science focuses on critical action. In this form, critical science is utilized by both post-positive and interpretive researchers to uncover power struggles. Regardless of the form that critical science takes, its essence is power: who has it and who does not. As Giroux (1982) suggested, “the Frankfurt School’s research…focused instead on the issues of how subjectivity was constituted and how the spheres of culture and everyday life represented a new terrain of domination” (p. 11).
Critical science is often presented in opposition to both positivistic and interpretivist epistemologies. Critical science views positivism as too strict in that, when objectivity is assumed (a fundamental tenet of positivism), “facts become separated from values” (Giroux, 1982, p. 15). Thus, critical scientists see the world through their own lenses, which is informed through observation, not assumed unobservable facts. Additionally, positivistic research is seen as too closely aligned with capitalistic tendencies and, thus, is not able to take a subjective stance or provide a critique (Giroux, 1982). Critical science is often in opposition to interpretivist epistemologies, as well, although not nearly as much as to positivistic epistemologies. Critical science and interpretivism share a notion in that they both believe the world to be subjective in nature; however, the way researchers from each paradigm obtain knowledge is fundamentally different (Burrell & Morgan, 1979). As has been suggested, interpretivism focuses on searching the intersubjective world and the social constructions of reality; however, the critical perspective is one of exploring contradictions. Critical science often uses structural or historical analysis of events to identify contradictions and expose incidents of exploitation (Swanson, 2005a). Within HRD, it has been suggested (Callahan, 2007; O’Donnell, 2007) that the answer to dilemmas, particularly focused on global problems in the field, will emerge from a critical theory perspective.

A History of Paradigms

The historical developments regarding the idea of paradigms and their interpretation within the social sciences can be divided into five distinct categories. Each
can be situated within a series of years beginning in the early 1960s and leading to the first decade of the 21st century. The five categories (in sequential order) can be described as: (a) creation of a modern understanding of paradigms, (b) refinement of paradigm understanding, (c) the paradigm wars, (d) multi- and/or meta- paradigms, and (e) the popularity of paradigms. Each of these five events is described in the subsequent section with an articulation regarding their influence on our current understanding as to the nature of paradigms.

Creation of a Modern Understanding of Paradigms (1960s)

As was briefly described in Chapter I, the word, paradigm, has been in existence since the year 1483 when Caxton first used the word (Paradigm, 2010c). The word has several meanings, of which, the most relevant to this dissertation is as a set of beliefs that pervade a field of study: a world view.

The essence of this first of five categories regarding the historical developments of the ideas surrounding paradigms focuses on how we have come to understand the word from a modern perspective. Although this first category is dominated by literature founded within the physical sciences, within the social sciences we have used these ideas as a foundation for the way we understand paradigms today.

The work of Thomas Kuhn stands as the foundation to our modern understanding of paradigms. Kuhn (1996) wrote about his ideas regarding paradigms in his book, The Structure of Scientific Revolutions. Within this relatively short, but conceptually complex text, Kuhn outlined several pertinent ideas that continue to influence the way that paradigms are understood today.
**Kuhnian Paradigms**

Kuhn (1996) hypothesized that, within any discipline, there are periods of time that can be marked by a specific way of interpreting and understanding knowledge. He entitled this way of understanding a paradigm. In order to defend his thesis, Kuhn used the history of science to mark periods of time that focused on one specific way of interpreting knowledge. In his text, Kuhn provided numerous examples of these periods of time. One such example that he provided comes from the study of physics.

The world’s understanding of the laws of physics was foundationally defined by the work of Sir Isaac Newton in the late 17th century. Among other scholarly endeavors, Newton was (and still is) regarded as a revolutionary thinker in the field of physics. Newton’s ideas were regarded as so revolutionary that they changed the way that all other physicists understood their field. For Kuhn, Newton’s ideas fundamentally shaped the field of physics and, thus, represent a paradigm in that they defined a way of thinking and acquiring knowledge for an entire community of individuals.

**Normal Science**

Tied to the notion of paradigms is an idea that Kuhn defined as normal science. Normal science is simply the standard progression of scientific activity. Kuhn (1996) suggested that nearly every idea is a result of this standard progression of activity. Within any scientific discipline, the way that knowledge is created hinges on the development and refinement of an idea. Ideas are first hypothesized, then tested, then further refined and tested, and, from that refinement, new ideas or concepts are created.
This process, this progression, does not represent a new way of understanding, but just
the acquisition of new knowledge that is typical of any area of study.

Kuhn (1996) noted that normal science existed within all areas of scientific study
and that nearly everything that is published or hypothesized can be attributed to the idea
of normal science. However, on rare occasions, an idea will be generated that will
fundamentally change the way that knowledge is acquired; this new idea could be called
a paradigm shift.

**Paradigm Shift**

Kuhn (1996) suggested that, within any paradigm, a perspective of interpreting
the world will continue to pervade a field until such time as it is no longer capable of
providing specific answers to the scientific community’s questions. At such time, a new
paradigm of understanding will emerge. The emergence of a new paradigm of
understanding will enable researchers to answer those questions that were unattainable
as a result of existing within the old way of thinking. Kuhn called this change in
paradigms a paradigm shift.

As an example of a paradigm shift, Kuhn (1996) noted the differences between
Newton’s and Albert Einstein’s perspectives of physics. Kuhn suggested that, within the
physics community, the way that physicists acquired knowledge was derived from the
work of Sir Isaac Newton. From the late 17th century through the early 20th century,
Newton’s ideas dominated all of the physics community. Any knowledge that was
created during that 100+ year timeframe was simply a result of normal science or the
typical progression of a scientific community. However, in the early 20th century, there
were problems with the way that physicists interpreted what we know today to be core ideas of physics. Most notably, prior to the early 20th century, physicists considered the ideas regarding mass, energy, and time to be completely separate entities. Then, in the early 20th century, Albert Einstein entered the picture and presented his theory of general relativity, in which he suggested that energy is equal to mass times the speed of light (time) squared. Einstein’s theory mathematically proved that mass, energy, and time are undeniably linked. In so doing, Einstein fundamentally changed the way that physicists interpreted knowledge within their field. Thus, within the physics community, a paradigm shift occurred, and the community relinquished its understanding that mass, energy, and time were separate ideas (Newton’s Paradigm) and began to embrace the idea that all three were linked (Einstein’s Paradigm). Hence, Einstein’s theory of general relativity became a new paradigm of physics.

**Kuhn’s Legacy**

Thomas Kuhn (1996) is perhaps the greatest contributor to our understanding of paradigms because he was the one who first described them and attempted to articulate their meaning to a scientific field. There are numerous critiques of Kuhn’s work, of which many will be noted in a subsequent section of this chapter. What is difficult to articulate is the impact of Kuhn’s ideas. Nearly every subsequently cited author within this document relied on Kuhn to found their understanding of paradigms. Most of these authors began their discussion of paradigms by citing Kuhn. Many have attempted to develop Kuhn’s notions further, while others have rejected his ideas completely. It is
important to understand that Kuhn’s legacy has informed, and will continue to inform, those individuals who choose to study and refine further the idea of paradigms.

**Refinement of Paradigm Understanding (1970s)**

In the 1970s, we began to see growth within the social science literature regarding the notion of paradigms. Social scientists were beginning to try to understand their relationship to and the existence of paradigms within their respective fields. The field of sociology stands out as an area that was heavily focused on understanding paradigms; two manuscripts dominate cited literature from this time period. The first was an article written by Lodahl and Gordan (1972) in which they investigated the level of paradigm development within several academic fields in both the social and physical sciences. The second was a book written by Burrell and Morgan (1979) in which they presented four paradigms of the social sciences. Collectively, these two manuscripts began to show how the social sciences (and specifically sociology) developed their understanding of paradigms.

**Understanding an Academic Field’s Level of Paradigm Development**

In 1972, Lodahl and Gordon published an article in the *American Sociologist Review Journal* in which they described a study that they conducted regarding the level of paradigm development within various academic fields. Based on Kuhn’s writings, they suggested that paradigms encompass all of “the accepted theory and findings of the field, but as the preferred methodologies, the tacit understanding over those areas considered important to study” (p. 57). This idea that a field’s paradigm(s) is (are) constructed not only from consensus of theory, but also from consensus of methodology
and general clarity in understanding, led Lodahl and Gordon to the conclusion that there
may be indicators within a scientific field that would lead to understanding how clearly
that field understands its own paradigm(s). Their basic hypothesis was that the level of
predictability within a scientific field will indicate how well constructed the paradigm(s)
are within that field. Fields with clearly developed paradigms will exhibit a high level of
predictability because there is greater consensus within the field over theory,
methodology, and tacit understanding. Fields with a low level of paradigm development
will exhibit less predictability because there is not as clear an understanding of common
typey, methodology, and tacit understanding.

Lodahl and Gordon (1972) tested their basic hypothesis by looking at teaching
and research activities within various academic departments across several different
fields of study. In 1968, they surveyed faculty members from 80 different universities
and four different academic fields: physics, chemistry, sociology, and political science.
They developed a survey that asked respondents to rate the level of consensus regarding
several teaching and research activities, including time spent advising graduate students,
use of teaching assistants, use of research assistants, willingness to advise graduate
students, and willingness of elite scientists to advise graduate students. Their overall
results, although mixed within each question type, identified physics to be the most
predictable, followed by chemistry, then political science, with sociology being the least
predictable.
Lodahl and Gordon’s Legacy

Although Lodahl and Gordon’s (1972) study is extremely dated by any modern standard, it serves as an example of the developing understanding of paradigms within the social sciences. Kuhn (1996) may have developed this idea of paradigms, but what he failed to provide were the details regarding what paradigms exactly are. Kuhn’s text is more of a paradigm manifesto than it is a description of how we actually identify a paradigm. What Lodahl and Gordon did was to suggest that perhaps paradigm identification is possible. In essence, their study suggested that paradigms are too difficult to identify on their own, but the impact of those paradigms as evidenced by the predictability of a field could be ascertained. Lodahl and Gordon’s manuscript is frequently cited in the paradigm literature throughout the late 1970s, 1980s, and early 1990s; however, its popularity in terms of citations diminished from the mid-1990s.

Burrell and Morgan’s Approach

At the end of the 1970s, a foundational text in sociology was published by Burrell and Morgan (1979). Their text, entitled *Sociological Paradigms and Organizational Analysis*, presented a four paradigm approach to knowledge contained within the social sciences. Burrell and Morgan postulated that within the social sciences exist two continua: subjective-objective and radical change-regulation. Every theory or way of acquiring knowledge contained within the social sciences will situate somewhere on each of these two continua. If each continuum is present side-by-side, a two-by-two matrix is formed. The four cells of this matrix, thus, represent each of the four possible paradigms within the social sciences.
Burrell and Morgan’s (1979) four paradigms are often cited, not only in HRD, but in the more broadly defined social sciences, as examples of paradigms, and much of their terminology exists today within the HRD literature. The four paradigms they identified are functionalist, interpretivist, radical humanist, and radical structuralist. The functionalist paradigm represents an objective view of reality and has a desire to regulate organizational life. The functionalist paradigm is identical in nearly every aspect to the positivist epistemology. The interpretivist paradigm views reality from a subjective stance and also has a desire to regulate organizational life. The interpretivist paradigm as described by Burrell and Morgan is identical to the interpretivist epistemology. The radical humanist paradigm views reality as subjective but has a desire to change organizational life. The critical epistemology limns with this paradigm. Burrell and Morgan situate critical theory within this paradigm, as its focus is on radical change (emancipation) and views reality as subjective in nature. Finally, the radical structuralist paradigm approaches reality from an objective standpoint and looks at organizational life from a radical change perspective. The focus is on unmasking domination and emancipation, as evidenced by its positioning on the radical change end of the continuum. However, unlike the radical humanism paradigm, the radical structuralist paradigm is concerned more with the social world (hence its positioning in an objective reality) and the dominant structures of the social world. Instead of focusing on the individual, radical structuralism focuses on the domination of class structures. Radical structuralists are committed to “structural conflict, modes of domination, contradiction, and deprivation” (Burrell & Morgan, 1979, p. 34) within an objective world. This last
dimension closely relates to the critical epistemology; however, what distinguishes it from the radical humanist paradigm is a focus on structural components in the social world.

**Burrell and Morgan’s Legacy**

Perhaps the quintessential accomplishment of Burrell and Morgan’s (1979) text is to articulate, within a single document, the conception of multiple paradigms and to define what constitutes the basic views of those paradigms. Many of the ideas contained within their book have been written on and discussed by others and at earlier dates (i.e., functionalist/positivist, interpretivist, and critical), but it was Burrell and Morgan (1979) who began to put all of these ideas together. They appear to be the first to suggest that there is a relationship (the two continua) between different ways of understanding knowledge. By defining this relationship on a subjective-objective continuum and a radical change-regulation continuum, they began to describe the essential views of each paradigm. This description appears to be a blending of the epistemological and teleological perspectives of each. Further, at the end of their book, they suggested that it is perhaps possible to research problems from multiple perspectives. Prior to their text, social science researchers tended to fall into a single paradigm of work. After their text was published a plethora of research and scholarship was produced which focused on the incommensurability of paradigms (Gage, 1989; Jackson & Carter, 1993; Willmott, 1993), the debate between paradigms (Guba, 1990; Lincoln, 1990; Phillips, 1990; Popkewitz, 1990), and the notion of multi- or meta- paradigms (Gioia & Pitre, 1990; Lewis & Keleman, 2002).
The Paradigm Wars (Late 1980s and Early 1990s)

The 1980s and early 1990s saw a dramatic increase in articles that discussed and debated the idea of paradigms. From Burrell and Morgan’s (1979) text, two streams of paradigm-oriented discussion emerged. The first focused on a debate regarding the incommensurability of paradigms and the emergence of alternative paradigms. The second continued Burrell and Morgan’s final argument that, because each of the four paradigms shares a common side of each continuum, there exists the potential for multi-paradigm research. This section focuses on the first divergent stream: paradigm incommensurability and the emergence of alternative paradigms. The next section will focus on the ideas regarding multi- and/or meta-paradigms.

Paradigm Incommensurability

Burrell and Morgan’s (1979) text did much to shake the philosophical grounding of many scholars within the fields of both sociology and management. Willmott (1993) noted that Burrell and Morgan’s text “struck a timely blow against functionalism by boosting the credibility and confidence of those inclined to question its truths” (p. 683). Because Burrell and Morgan situated their four paradigms on two intersecting continua, an often suggested criticism is that these continua are too constrictive (Jackson & Carter, 1993; Willmott, 1993). The argument was that specifically the subjective-objective continuum does not allow for any variation or deviation within an idea and that it is simply not possible to classify all social theory along these subjective-objective lines. Fundamentally, this debate centered on the idea of paradigm incommensurability (Gage, 1989). One side of the debate (which was supported by Burrell and Morgan) is that
paradigms, and theories within those paradigms, are classifiable within these two continua. The other side of the debate (supported by Willmott) is that it is not possible to classify paradigms within such a simplistic set of continua. This entire paradigm incommensurability debate led Jackson and Carter (1993) to label these events the *paradigm wars*. They suggested that *war* is a good analogy because the objective in any war is for one side to win and the other to lose. It has been suggested that the ensuing debate did much to “sharpen researchers’ skills at epistemological repartee” (Denison, 1996, p. 620).

**Paradigm Dialogue**

The emergence of alternative paradigms is in actuality the title of a conference held in 1989 sponsored by Phi Delta Kappa International and Indiana University. The details of the conference are outlined in the book, *The Paradigm Dialog*, edited by Guba (1990). The conference was not so much a response to Burrell and Morgan’s work as the paradigm wars debate was but, rather, a discussion among many scholars who were frustrated with the dominance of positivism as a philosophical epistemology.

The conference focused on identifying alternatives and thus rivals to positivism. The conference began with the presentation of three keynote speakers, each renowned for their ardent beliefs regarding their preferred paradigm. Phillips (1990) presented his arguments for positivism, Popkewitz (1990) presented his perspective and arguments for critical theory, and Lincoln (1990) argued for the emergence of a constructivist paradigm (constructivism is a branch of the interpretive epistemology as described in the first section of this chapter). Following the keynote addresses, the conference was divided
into eight discussion sessions over a day and a half. Conference attendees debated and discussed various topics ranging from theoretical discussion to practical application through the research methodologies regarding each of the three paradigms presented.

The outcome of this conference served in many ways as Burrell and Morgan’s (1979) text did, to articulate further the idea of different paradigms within the social sciences (Gage, 1989). Further, it served as a way to discuss more formally the emerging ideas of critical inquiry and constructivism as alternate paradigms of research. For the critical and constructivist researchers and theorists in attendance, the conference served as an outlet in which they could make their respective perspectives be known to a broader community that had historically favored more positivistic approaches.

*Multi- and Meta-Paradigms (1990s)*

One outcome of Burrell and Morgan’s (1979) text was to spur the paradigm wars or paradigm incommensurability debate. The second stream that Burrell and Morgan’s text encouraged was a perspective that considered the idea of multiple paradigms. As Kuhn (1996) described them, paradigms inform the way that an entire community of scholars approaches the acquisition and understanding of knowledge. However, Kuhn’s (2000) ideas were targeted at only the physical sciences, and by his own admission they might not be applicable to the social sciences. Further, Guba and Lincoln (2005), two ardent supporters of the incommensurability of paradigms, noted regarding the paradigm literature of the late 1990s that “indeed, the various paradigms are beginning to interbreed such that two theorists previously thought to be in irreconcilable conflict may now appear…to be informing one another’s arguments” (p. 192).
With the publication of Burrell and Morgan’s (1979) text, scholars in the social sciences began to consider the idea that perhaps the social sciences were comprised of not one single paradigm (as Kuhn’s notions would indicate), but perhaps multiple paradigms. In defining their four paradigms, Burrell and Morgan argued that any social theory could be sorted based on its perspective of regulation to radical change and objectivity to subjectivity. The sorting of these theories would situate them within a single paradigm. However, sorting social theory also implies that we have criteria by which to gauge a theory’s relative position within each continuum. On occasion, a theory might situate exactly in the middle of one or both continua, thus creating a situation in which there are perhaps two (or more) paradigms that best inform the acquisition and interpretation of knowledge within that single theory. Skrtic (1990) noted that “the multiple paradigm state in the social sciences means that Kuhnian paradigm shifts such as those in the physical sciences are conceptually impossible, because there is simply no dominant paradigm to overthrow” (p. 127). If no dominant paradigm exists, then there are perhaps multiple paradigms that could be used to inform the development and understanding of a single theory. In the early 1990s, this idea that Burrell and Morgan’s matrix could accommodate multiple paradigms became the foundational argument of the multi- and meta-paradigm proponents.

**Multi-Paradigms**

The previously discussed paradigms, as presented by Burrell and Morgan (1979), approach the idea of identifying truth from four different views. These four views provide the foundation of the argument that there are commonalities among paradigms
Each paradigm is unique in that each paradigm describes society and reality in its own way; however, as Lewis and Keleman (2002) suggested, these descriptions are too narrowly focused. If broader insights into a phenomenon are to be gleaned, then a multiple paradigm approach must be used. In order to establish a basic understanding of the notion of multiple paradigms, consider the following excerpt regarding metaphors of organizations.

Consider the descriptive metaphors of organizations derived from different paradigms. Organizations are machines, organisms, brains, theaters, interpretation systems, political systems, psychic prisons, instruments of domination, and so on. Organizations can easily be conceived as all these things simultaneously. The simultaneous conception implies that these disparate views can exist together without necessarily assuming that the adoption of one set of views precludes others, or that all of them must somehow be integrated. One cannot declare an alternative-paradigm view correct and another incorrect in any absolute sense. A view becomes prominent, not because of its advocates’ abilities to refute other views, but because of the compelling nature of their arguments and/or their presentations. (Gioia & Pitre, 1990, p. 598)

Kuchinke (2001a) suggested that metaphors can be used to examine paradigms because they describe in more accessible terms what is happening within each perspective and often describe the blending of ideas. In the 1990s and early 2000s the idea of blending paradigms was a growing trend in organizational studies (Lewis & Grimes, 1999; Lewis & Kelemen, 2002). The process of blending paradigms began with
identifying similarities between paradigms. As Burrell and Morgan (1979) suggested, there are readily apparent similarities from paradigm to paradigm. In fact, the entire basis for Burrell and Morgan’s text was founded on these similarities. For example, the interpretivist and the functionalist paradigms, as discussed above, differ in their subjective-objective continuum, yet they share a belief that society needs to be regulated. Similarly, each of the four paradigms shares one of its continuum dimensions with another paradigm. Thus, it is through these similarities that a discussion of blending paradigms can ensue.

Gioia and Pitre (1990) suggested that there is a grey area between each of the juxtaposed paradigms. They used Burrell and Morgan’s 2 by 2 matrix to explain the position of the paradigms but suggested that the borders of each quadrant need to encompass an area of similarity that they title the transition zone. In their article, Gioia and Pitre used research on the theory of structuration (a theory describing how human actions are related to the structure of society) to show how there is similarity between the paradigms. They postulated that the two transition zones between the subjective-objective continuum are the most difficult to identify and alternately that the two transition zones between the radical change-regulation continuum are “less problematic” (p. 592). These transition zones can be used to explain similarities between any two of the four paradigms; but, in order to integrate all four paradigms simultaneously, a meta-paradigm perspective, described next, must be used.
Meta-Paradigms

A meta-paradigm assumes that there is an overarching paradigm from within which other paradigms exist. In essence, the idea of a meta-paradigm encourages a hierarchical approach to paradigm construction. Identifying a meta-paradigm involves the researcher: first, evaluating the phenomenon through the lens of each of the paradigms and then, second, identifying similarities from each view. Gioia and Pitre (1990) suggested that the biggest problem with this approach is that, although researchers might try to interpret a single phenomenon from multiple paradigms, they will always be most comfortable in and biased toward their home paradigm.

Researchers who embrace the concept of a meta-paradigm call the process for identifying similarities between all four perspectives metatriangulation (Gioia & Pitre, 1990; Lewis & Grimes, 1999). Metatriangulation is essentially the same process of triangulation as Denzin (1978) presented, except that the researcher conducts it at a paradigmatic level. Triangulation involves looking at a phenomenon from three or more perspectives. By using multiple perspectives, a researcher can triangulate the cause, or problem, or explanation, of the phenomena in question. Metatriangulation involves three phases: (a) groundwork, (b) data analysis, and (c) theory building (Lewis & Grimes, 1999).

In the groundwork phase, the researcher first defines the phenomenon of interest. Then, the researcher reviews the literature on the phenomenon. During the literature review, the researcher must look at each piece of literature from a paradigmatic lens, identifying the author’s home paradigm and the paradigm in and for which the article
was written. The researcher must then collect meta-theoretical samples, which are data derived regarding the phenomenon from each of the four paradigms. The second phase of meta-triangulation involves analyzing the data collected from the groundwork phase. This phase involves the researcher looking at and then coding each piece of data collected from the perspective of each of the four paradigms. Finally, the third phase of meta-triangulation is building theory from all the data that has been analyzed and from all the perspectives. This process is rigorous and requires the researcher to “transcend paradigm dualisms and to think paradoxically: to consider conflicting views simultaneously” (Lewis & Grimes, 1999, p. 683).

**The Dangers of Multi- and Meta-Paradigms**

Multi- and meta-paradigmatic inquiries are not without their limitations. As Lewis and Grimes (1999) suggested, viewing multiple paradigms should be done only on topics that are extremely large and have had research conducted on them from each of the individual paradigms. The process of meta-triangulation requires that the researcher investigate previous research from each perspective; if sufficient research has not already been conducted, then this poses a problem when trying to apply the meta-triangulation technique because not enough data will exist to gauge accurately each of the multiple perspectives.

Additionally, the topic must already be positioned in the transition zone(s) of the four Burrell and Morgan paradigms. The concept of a meta-paradigm builds its assumptions on the inherent similarities among paradigms (Gioia & Pitre, 1990). If the topic or phenomenon in question is not already on the cusp of a transition zone, then it
will never be accepted in a multi- or meta-paradigmatic way. Further, if the topic or phenomenon is firmly entrenched in any one of the four Burrell and Morgan paradigms, then it can never be viewed from multiple perspectives as the biases around that topic will also be entrenched in its home paradigm.

Finally, several authors (Gioia & Pitre, 1990; Lewis & Grimes, 1999; Lewis & Kelemen, 2002) have warned of the potential dangers to researchers who engage in multi-paradigmatic inquiry. Every researcher has his or her home paradigm, and engaging in multi-paradigmatic inquiry involves leaving this comfort zone and exploring new theoretical views. This process can often change the way that the researcher views the world and potentially affect the way they interpret their lives. Although this is not necessarily a limitation of multi-paradigmatic inquiry, it can be unnerving and potentially devastating to a researcher who is comfortable in his or her home paradigm. Having viewed a phenomenon through a different lens and thus having changed as a result of this new view, the researcher may find he or she has no home paradigm to which to return.

*The Popularity of Paradigms (Late 1980s until Today)*

In the late 1980s, the idea of paradigms became a growing trend, not only within academic circles but within practice arenas as well. Perhaps one of the reasons for this growth is a result of the popularity of the word itself. Kuhn’s ideas regarding paradigms are very appealing to many up-and-coming and developed scholars. As Lee (2001) noted in her refusal to define HRD, within any definition there are always those who strive to define an idea because it promotes their perspective and provides that individual with
personal or professional gain. Similarly, the idea of creating a paradigm or identifying a paradigm shift was, and still is, an attractive notion for scholars and practitioners alike. Put simply, the vast majority of scholars would love to be the paradigm pioneers (Fogler & LeBlanc, 2008) of their respective fields; however, the unfortunate reality is that most scholars are inevitably going to spend their entire lives and careers working within the bounds of normal science. Thus, beginning in the late 1980s, there was an influx of ideas that began to receive the label of paradigm.

Another potential reason for these divergent views of paradigms can be attributed to the notion of language. As humans, we have an inherent need to classify and categorize (Bohm, 1980). When we as humans lack understanding, we categorize the unknown in order to create a semblance of understanding. Thus, the language that we assign to a series of ideas or rules or even guiding principles becomes the embodiment of those ideas. Although we may not completely understand all of the ideas that comprise a paradigm, we nonetheless classify these notions under the term.

One effect of this growth in popularity of the word, paradigm, is an increase in the number of ideas that have received the label of paradigm. Gokturk (2005) described this idea as a watering down of the definition and ideas contained in a paradigm over many social and scientific disciplines. Further, the American Heritage Dictionary noted that the meaning of paradigm has perhaps undergone yet a further metamorphosis since the ideas presented by Thomas Kuhn. A series of usage reports reported that a more simplified or nonscientific meaning of paradigm is “the prevailing view of things”
(Paradigm, 2009a). This changed meaning was also supported in a recent issue of the journal, *Nature* (Marris, 2008).

**Metamorphosis of Definitions**

When Kuhn described his ideas regarding a paradigm, the essences of his ideas were philosophically grounded and focused at the epistemological level. For Kuhn, a paradigm was a mode of thought that an entire scientific community could stand by in terms of its interpretation about the nature of reality. Although Kuhn popularized the word, paradigm, there have been dramatic interpretations and adaptations of the term. The modern day interpretation of the word has changed from that suggested by Kuhn. The word paradigm has become imbedded in the lexicon of modern business language.

These changes in definition are often attributed to Kuhn’s own lack of clarity when defining the term (Gokturk, 2005; Guba, 1990; Hoyningen-Huene, 1993; Masterman, 1970). As Masterman (1970) identified, Kuhn presented over 20 different definitions of the word paradigm in his text. From these differing definitions, Masterman identified three different senses of the word paradigm. First, Kuhn used the word as if it were positioned at the metaphysical level, as a total world view. Second, Kuhn used the word, paradigm, in a sociologically defined sense. In this use, a paradigm is a set of habits that can be used in place of formally defined rules as a way of finding solutions to problems. Finally, Masterman described Kuhn’s narrowest use of the term as a construct. In this sense, a paradigm “refers to specific tools, instruments, and procedures for producing and collecting data” (Guba, 1990, p. 126).
Given Kuhn’s miss-directions in defining the term paradigm, it would stand to reason that other scholars might also have differing opinions as to how to define the word. Some selected paradigm definitions that show the difference in various authors’ interpretations of the philosophical level in which paradigms are constructed is presented in Table 2. Note the differences in both philosophical level and the field from which the definition was taken.

**Table 2. Selected Definitions of Paradigms and Corresponding Interpretations at the Philosophical Level**

<table>
<thead>
<tr>
<th>Author</th>
<th>Paradigm Definition</th>
<th>Author Focus</th>
<th>Philosophical Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ansoff (1987, p. 502)</td>
<td>A paradigm is a ‘scientific umbrella’ which at once unifies and reconciles several preceding theories which have appeared to be contradictory.</td>
<td>Strategic Behavior</td>
<td>All</td>
</tr>
<tr>
<td>Barker (1992, p. 32)</td>
<td>A set of rules and regulations (written or unwritten) that does two things: (1) it establishes or defines boundaries; and (2) it tells you how to behave inside the boundaries in order to be successful.</td>
<td>Management Consultant</td>
<td>Epistemology</td>
</tr>
<tr>
<td>Burrell &amp; Morgan (1979, p. 23)</td>
<td>Very basic meta-theoretical assumptions which underwrite the frame of reference, mode of theorizing and modus operandi of the social theorists who operate within them.</td>
<td>Organizational Behavior</td>
<td>Epistemology</td>
</tr>
</tbody>
</table>
Table 2. (Continued)

<table>
<thead>
<tr>
<th>Author</th>
<th>Paradigm Definition</th>
<th>Author Focus</th>
<th>Philosophical Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covey (1990, p. 23)</td>
<td>A model, theory, perception, assumption, or frame of reference. In the more general sense, it’s the way we see the world - not in terms of our visual sense of sight, but in terms of perceiving, understanding, and interpreting.</td>
<td>Leadership &amp; Change Consultant</td>
<td>All</td>
</tr>
<tr>
<td>Hunt (2004, p. 23)</td>
<td>The commonly held perspectives of leadership academicians and practitioners concerning their ontological, epistemological, and methodological beliefs.</td>
<td>Leadership</td>
<td>All</td>
</tr>
<tr>
<td>Swanson &amp; Holton (2001, p. 127)</td>
<td>Paradigms represent fundamentally different views of human resource development, including its goals and aims, values, and guidelines for practice.</td>
<td>Human Resource Development</td>
<td>Epistemology</td>
</tr>
<tr>
<td>Weick (1995, p. 120)</td>
<td>Sets of recurrent and quasi-standard illustrations that show how theories of action are applied conceptually, observationally, and instrumentally to representative organizational problems.</td>
<td>Organization Sensemaking</td>
<td>Methodology</td>
</tr>
</tbody>
</table>

The philosophical level aids in determining the questions to ask regarding the topic and the overall approach to the nature of reality. As Masterman (1970) identified (and as supported in Table 2), there is disagreement as to at which of the philosophical levels paradigms are constructed. Three distinct uses of paradigms can be seen; the first use of paradigm is, as Kuhn suggested, as epistemologies that inform our understanding of reality. The second use is as methodologies; paradigms are seen as methodologies that
are used to help determine specific research methods. The third use is at all of the philosophical levels (i.e. at the meta-physical level); meaning that the definition could be interpreted as existing at an epistemological, methodological, method, axiological, or a teleological level. These paradigm definitions are left either vague, for the user to interpret, or general, for users to apply as they like. This contention in definitions demonstrates that at least one of the following is true: (a) the notion of paradigms has changed since Kuhn first interpreted them, or (b) that Kuhn was wrong regarding his philosophical positioning of paradigms, or (c) the authors of the above definitions were wrong regarding their philosophical positioning of paradigms. Regardless of the way that we have arrived at this contention, currently the most pressing question is: What are paradigms today? As Table 2 indicates, there seem to be contextual or disciplinary components to the interpretation of paradigms. Hence, in an attempt to discover what a paradigm is, the question at hand becomes, what is a paradigm today and what does it mean to a specific area of research? The meanings that are associated with paradigms by a field of research are essential components to understanding what a paradigm is because differing fields may interpret paradigms in their own unique manner.

Further, Table 2 presents only selected definitions of paradigms that have at their core a philosophically oriented perspective. As has been noted earlier, there are also going to be those definitions that have nothing to do with philosophy but, rather, are derived from a need by their authors to create personal or professional gain. These definitions may not contribute to the philosophical understanding of a paradigm but may,
instead, consider a paradigm only in a non-scientific sense of the word, “the prevailing view of things” (Paradigm, 2009a).

**HRD Cube**

A brief overview of the HRD Cube was provided in Chapter I; in this section, a more in-depth discussion of the Cube and its various components is provided. This discussion expands upon what was presented in Chapter I and should aid in understanding the components (sides and categories) of the Cube and my interpretation of it.

The HRD Cube is a developing model of HRD that was proposed by Lynham (2007, 2008). The HRD Cube is, simultaneously, both a theoretical model of HRD and a typological sort mechanism for ideas within HRD. As a theoretical model, the HRD Cube defines much of the theory, research, and practice components that have been presented within the HRD literature. As a typological sort mechanism, the HRD Cube could be used to sort ideas contained within HRD based on their founding or informing theory, research, and practice perspective(s). The HRD Cube has as its foundation three sides: one representing theory, one representing research, and one representing practice. Within each side of the Cube are a series of categories. When categories (from each side) of the Cube intersect, a smaller cube, representing a particular perspective, is described. As the model has been drawn (see Appendix A), there are three theory categories, six research categories, and nine practice categories. Thus, a total of 162 smaller cubes form the larger HRD Cube, with each smaller cube representing a different perspective of HRD.
The HRD Cube is surrounded by a dashed line. This line represents the context or nature of the phenomenon/problem under investigation. Problem and its context inform the choice of theory, research, and practice perspective. Thus, Lynham suggested that it is the context that drives the selection of focus areas within each respective side of the HRD Cube.

The HRD Cube is a developing model. The model is drawn using a series of dashed lines. These lines represent the model’s ability to add (or remove) categories from within each side of the Cube. This flexibility is one of the reasons why this model was used as this study’s informing theoretical frame. As the history of paradigms section above described, the study of paradigms has been less than exact. There are numerous opinions of what a paradigm is and how a paradigm exists. The use of the HRD Cube as an informing theoretical frame allowed this study to begin the initial investigation of the paradigms of HRD and to provide the initial testing of this newly developed theoretical model.

Although individual scholars’ opinions differ as to the understanding of paradigms, taken as a whole, it can be seen that paradigms have components of all three sides of the HRD Cube. Paradigms have informing theoretical grounds and in some cases are theories themselves; thus, they contribute knowledge to the theory side of the Cube. Paradigms are often grounded in philosophical or metaphysical levels; thus, they contribute knowledge to the research side of the Cube. Finally, paradigms often have an outcome or performance focus that informs the practice side of the Cube. Taken
together, each of those 162 smaller cubes within the HRD Cube represents a potential paradigm of HRD.

The following section provides additional detail on each side of the HRD Cube and descriptions of each corresponding category. The components of the Cube will be used later in this document to inform the methodology and subsequent research that was conducted. It will likely aid the reader to consult Appendix A that provides a full page visual depiction of the HRD Cube. Appendix A also provides a full citation list of key resources used by Lynham to inform and synthesize the Cube.

**Informing Theoretical Foundations (x-Axis)**

The x-axis, entitled *Informing Theoretical Foundations*, is representative of the theory components contained in the HRD Cube. “Theory is a coherent description, explanation, and representation of observed or experienced phenomena” (Lynham, 2000, p. 161). Theories are used to uncover and discover these experienced phenomena. In the HRD Cube, Lynham has suggested that the theories used in HRD can further be divided into three focus areas: (a) theories focused on people, (b) theories focused on processes, and (c) theories focused on outcomes/performance.

These three focus areas are an expansion of Swanson and Holton’s (2009) psychology, systems, and economic theoretical foundations (personal communication, Susan Lynham, 03/28/10). As described above, the context is a critical component of the Cube. The context informs the theory selection, and whatever theory is selected must then span the foundations of people-processes-performance. This spanning ensures that
an integrated approach to the theoretical investigation of HRD phenomena/problems/issues is achieved.

**People**

The people category on the HRD Cube’s theory side (x-axis) encompasses theories that deal with understanding the way that people work. The behavior of individuals, the way people interact with each other, and how people respond are all classical examples of what theories focused on people might try and answer. Behaviorism is one classic example of a theory focused on people (Swanson & Holton, 2001).

**Process**

The process category on the HRD Cube’s theory side (x-axis) encompasses theories that deal with understanding some form of procedure or series of actions. Also, as the idea of systems is often seen as being a series of actions, theories centered on systems thinking are contained within this category. A classic example of a process theory is Von Bertalanffy’s (1951) general systems theory.

**Outcomes**

The outcomes category on the HRD Cube’s theory side (x-axis) encompasses theories that deal with understanding the value of something, the result, or perhaps the prospect. These are theories that have as their focus identifying the end result of a phenomenon. Human capital theory, first developed by Economists Theodore Schultz, Jacob Mincer, and Gary Becker, is a good example of a theory focused on outcomes (Swanson & Holton, 2001).
Foundational Fields/Disciplines of HRD

In addition to the categories of people, processes, and outcomes, Lynham further suggested that, because HRD is multidisciplinary, each of these theories will come from those disciplines that comprise the foundations of HRD. The disciplinary foundations of HRD have been a highly debated topic within the HRD literature and at the Academy of Human Resource Development (AHRD) conferences (Chalofsky, 2004; McGuire & Cseh, 2006).

Swanson (1995) and Swanson and Holton (2001) positioned economics, psychology, and systems theory as the hallmark of the founding fields of HRD. Kuchinke (2001b) argued that anthropology, economics, political science, psychology, and sociology are the fields that have influenced HRD the most. McLean (1998) took perhaps the broadest perspective. He suggested that HRD is foundationally comprised of, but not limited to, anthropology, economics, psychology, organization development, sociology, and speech communications.

Furthermore, there have been several authors who have attempted to trace the developmental origins of HRD and have concluded that it has a varying set of origins. Two of the earliest definitions of HRD were provided by Harbison and Myers (1964) and Nadler (1970) (as cited by Swanson & Holton, 2009). DeSimone, Werner, and Harris (2002) concluded that HRD’s origin can be traced to training and early vocational education programs. Alagaraja and Dooley (2003) focused on the non-western origins of HRD and posited that HRD is diverse enough to trace its history back to a pre-human era of nearly five million BC, when apes were building the first tools. McLagan (1989) has
been well cited in the HRD literature as having defined the essential components of HRD from an American Society of Training and Development study (ASTD). She suggested that HRD is comprised of three areas of research and practice: (a) training and development, (b) organization development, and (c) career development.

Given the diversity of the various opinions regarding the founding disciplines/origins of HRD, there will undoubtedly be debate regarding any model that chooses formally to state the foundational disciplines of HRD. As can be seen on the theory side of the Cube (x-axis), Lynham has presented economics, psychology, anthropology, sociology, systems, political science, and adult education as examples of potential theoretical foundations. Lynham has additionally provided an other category that is an acknowledgment that there is the potential for additional foundational disciplines beyond those that have been provided.

*Modes of Knowledge and Inquiry (Metaphysical Position) (z-Axis)*

The research side of the HRD Cube (z-axis), entitled *Modes of Knowledge and Inquiry*, includes those philosophical perspectives that contribute to research. Lynham noted that this side of the Cube could be alternately entitled the metaphysical position as it defines the ontological, epistemological, methodological, axiological, teleological and methods approaches that authors use to answer their research questions. Philosophical levels of research have been described in an earlier section of this chapter (see Philosophy section). Within this side, Lynham presented six categories: (a) positivism, (b) post-positivism, (c) social constructivism, (d) critical, (e) participatory, and (f) indigenous, and other.
**Positivism**

In positivism, there is one knowable reality, and, through diligent research, we can understand that one reality (Schwandt, 2001). The key to understanding positivism is in its perception of the world. The world is seen as being completely objective, and questions within that objective world have but one correct answer.

**Post-Positivism**

At the end of the 19th century, positivism gave way to post-positivism. In post-positivism, the world is still seen as being objective and answerable; however, it is no longer assumed that there is one correct answer (Guba & Lincoln, 2005). Multiple correct answers to research questions are seen as being perfectly valid. Additionally, the idea of being able to estimate the correct answer arose. The thought that perhaps we cannot ever describe the exact answer, but rather can estimate that answer, pervades research within this philosophical perspective. By modern day standards, post-positivism is seem as being a toned-down version of positivism because of this assumption that answers to research questions are not necessarily exact. In fact, when reading modern literature on the ideas of positivism and post-positivism, it can often be confusing as the current trend is not to distinguish between these two. In a modern manuscript, when an author uses positivism, they more than likely mean post-positivism.

**Social Constructivism**

Social constructivism is a stem of interpretivistic research that focuses on how the subjective interpretation of the objective world is constructed (Lincoln & Guba, 1985; Swanson, 2005b). In social constructivism, individuals are viewed as having
unique perspectives of the world. The world is seen as objective in nature, similar to that of post-positivism; however, the manner in which individuals construct their own reality within that objective world is what social constructivism seeks to capture.

**Critical**

Critical or critical theory is an epistemology that deals intimately with all aspects of power and oppression (Merriam, 1991). A critical epistemology can be thought of as being the hinge on a gate between post-positivism and interpretivism. On one side of the gate is post-positivism and its objective view of reality; on the other side of the gate is interpretivism and its subjective view of reality. Because a critical epistemology is the hinge on the gate, it can thus swing from one side to the other. Critical studies can be conducted using more traditional interpretivist methodologies or using more traditional post-positivistic methodologies; but, regardless of its chosen methodology, critical studies always look at emancipation in some form (Bierema, 2002; Callahan, 2007; Kincheloe, 1999).

**Participatory**

The participatory perspective of research is informed in many ways by the interpretivistic epistemology. In participatory research, individuals are viewed as having created their reality by taking part in their mutual and shared experiences, which could include the way they think (as derived by their imagination) and the actions that they take within these realities (Towers & Chen, 2008).
**Indigenous**

Indigenous research is representative of those groups whose perspectives do not conform to traditional western philosophies. Examples of these might include aboriginal tribes or other groups that have been underrepresented (or never represented). In a recent discussion panel conducted at Texas A&M University (Lincoln & Thompson, 2009), Lincoln stated that it was her belief that one future direction of qualitative research would be to explore the perspectives of indigenous peoples in a manner that respects their non-western perspectives.

**Other**

Additionally, Lynham provided an *other* category. This category would include any additional philosophical and methodological perspectives that have not already been articulated. Some examples of these might include a: (a) mixed methods approach, (b) multi-paradigm approach, or (c) meta-paradigm approach.

*Domains of Outcome and Performance (y-Axis)*

The practice side of the HRD Cube (y-axis), entitled *Domains of Outcome and Performance*, focuses on the desired outcome of the research in question. It has been suggested by several scholars (Holton, 1999; Storberg-Walker, 2006; Torraco, 2002) that HRD is an applied area of study. As an applied area of study, there is an implication that the knowledge produced will be relevant to a particular set of individuals, groups, or organizations. This side of the HRD Cube attempts to capture this applied notion by identifying at what level the application of knowledge is most suited. There are nine
categories within the practice side of the HRD Cube: individual, group, process, organization, family, community, national, regional, and global.

**Individual**

The individual category is representative of practice perspectives that seek to enhance the performance of a person. Perspectives of this type might focus on identifying an individual’s identity or personality. These perspectives strive to enable individuals to improve and/or enhance their individual contributions within their own respective circles or roles (Morris & Madsen, 2007; Sharabi, 2008; Swanson & Holton, 2009).

**Group**

The group’s category looks at practice perspectives that are targeted specifically at groups or teams. Ideas like team development, work group cohesion, and team communication are examples of outcomes that are contained within this category. This perspective strives to improve and strengthen those bonds that individuals have with their affiliated groups or teams (London, & Sessa, 2006; Luft, 1984; Noe, 2008).

**Process**

A process is a series of actions that are taken in order to complete some task (Cummings & Worley, 2005; McLean, 2006; Wang, Korte, & Sun, 2008). The process category looks at how we can improve the outcome or performance of these series of actions.
**Organization**

The organization category looks at practice perspectives that are targeted at improving the outcome or performance of an entire organization (Cummings & Worley, 2005; McLean, 2006; Morris & Madsen, 2007). Organizations are just large groups with a common or shared purpose. The organization category focuses on the improvement of these large groups.

**Family**

A family is also a group, but it is a group in which an individual has a more permanent or lasting relationship. This category might look at improving the functioning of a family (i.e., mother, father, siblings, children). Perhaps the most distinguishing characteristic of the family category, as compared to the group category, is the lifelong relationship that an individual will have with other members. Members of work groups often change quite frequently, whereas family members will change minimally throughout life. The family category also often provides a building block for the community category (Duxbury, Lyons, & Higgins, 2007; Lynham & Cunningham, 2006; Morris & Madsen, 2007).

**Community**

Community represents those ideas that are aimed at improving the, often geographic, area in which people live (Lee, 2007; Lynham & Cunningham, 2006; McLean, 2006; Morris & Madsen, 2007). Community-targeted improvements look at improving local business in a specific town and, the interaction of multiple organizations
within the context of a town, or series of towns, or perhaps a county, or even a state. The community category is often a building block for the society category.

National

The national category looks at practice perspectives from a country (McLean, 2006). This category looks at how to improve the performance of an entire nation. This category may be of particular importance to developing nations (although developed nations would also likely benefit) who may wish to improve their HRD-related competencies (see Bartlett & Rodgers, 2004; Lynham & Cunningham, 2004, 2006; McLean, 2007; McLean, Osman-Gani, & Cho, 2004; McLean, Lynham, Azevedo, Lawrence, & Nafukho, 2008).

Regional

In the regional category a group of nations that share common borders are targeted for improvement in performance or perhaps to promote/encourage positive outcomes between nations in conflict. Regions might benefit from topics in this category because of: (a) size, (b) resources, (c) political differences, (d) religious differences, or (e) all of the above (Bartlett & Rodgers, 2004; McLean, 2006).

Global

The global category within the practice side of the HRD Cube represents those ideas that are targeted at improving the outcome or performance of the world as a whole (Marquardt, 2005; McLean, 2006; Paprock, Yumol, & Atienza, 2006). Prime examples of topics that might be included in this category are efforts to combat disease and infection. Worldwide efforts to combat malaria, the AIDS epidemic, and the avian bird
flu are potential examples of global, practice category topics. Addressing the concerns about global warming is another example.

**Chapter Summary of Review of Literature**

In this chapter several important concepts were presented and a historical overview of much of the relevant literature was provided. The chapter began with a brief history and explanation of four philosophically oriented epistemologies. These four epistemologies provide the foundation for much of the discussion regarding paradigms. They are themselves, often labeled as being paradigms of understanding.

The chapter provided a brief account of the historical development of the word paradigm; from Thomas Kuhn’s initial analysis to a modern understanding and interpretation of the word. This historical account relayed the importance of the notion of paradigms within the social sciences and described how the etymology of the word has evolved. The historical account also details the use of multiple paradigms.

The final section of this chapter described the HRD Cube. The Cube, as a new developing model of HRD, is a paradigm of HRD as it integrates various theory, research, and practice perspectives of HRD. Specific details regarding each side of the Cube were provided.

This chapter serves this document in several ways. It provided a detailed account of the relevant literature pertaining to the study of paradigms in HRD. This chapter also serves as a reference point for much of the information regarding paradigms that is discussed in all of the following chapters. It also provided a description of each side and relevant categories on the HRD Cube. The following chapter (Chapter III) will use many
of the concepts presented here to provide a description of the research study that was conducted for this dissertation about paradigms in HRD.
CHAPTER III

METHODOLOGY AND METHODS

In order to begin the process of validating the HRD Cube as a synthesizing model of HRD and suggest some of the predominant paradigms of HRD--the overall purposes of this entire research project--and to address each of the study’s research questions, decisions regarding a suitable methodology and corresponding methods needed to be made. Fundamentally, this entire study is about taking what has been presented within a delimited range of HRD literature that was used in this research and comparing it to the hypothesized constructs of the HRD Cube. By making this comparison, this research can aid in validating the construction and utility of the HRD Cube and provide recommendations for how it might be adapted and improved to reflect better the published perspectives of HRD as an area of applied theory, research, and practice.

In locating this research methodologically, this study was guided by four research questions:

1. What evidence of theory, research, and practice perspectives of HRD exists within the Academy of HRD journals?
2. How does this evidence support, or not, the hypothesized construction of the HRD Cube?
3. What (if any) changes need to be made to the HRD Cube to increase its trustworthiness and utility as a synthesized model of theory, research, and practice in HRD?
4. Given an understanding of the theory, research, and practice perspectives of HRD and the adaptation/confirmation of the HRD Cube, what can be postulated and described about the predominant paradigms of HRD and how can this discovery be used to inform further development of inquiry and practice in HRD?

These four research questions served as a starting point for describing the methodology that was utilized. The research questions were emergent and sequential, meaning that the research questions could not be refined until each proceeding one had been explored and addressed. This chapter focuses on those methods and processes that were used in addressing the first research question. The next three questions are addressed in the following chapters because they require the interpretation of data that were acquired from the first research question.

The research methods that are described here take a naturalistic approach. The naturalistic approach “stems from the interaction between the inquirer and the data sources [humans]” (Lincoln & Guba, 1985, p. 332). Utilizing the naturalistic approach allows for the identification of the constructions of the sources (HRD authors) and then analyzing these constructions for common themes and similarity in perspectives. This approach was selected because it allowed this study to be as open and holistic as possible given the constraints of the study.

The following sections detail the methods used to conduct this research. This research finds at its center the HRD Cube; thus, a brief overview of how the HRD Cube was used in this study is provided. The second section describes how data were selected.
The next section discusses how the data were collected. Then, there is a section on data analysis. Finally, the chapter concludes with a section on trustworthiness and authenticity of the study.

**The HRD Cube**

As I have described in both Chapters I and II, Lynham’s (2007, 2008) recently developed model (for details see Figure 3, as well as Chapter II, pp. 57-69, and Appendix A)—the HRD Cube—was originally constructed as a learning tool that proposes HRD as constructed of three interacting domains of understanding: theory, research, and practice. As a learning tool, the Cube provides a guide for investigating and locating these domains within HRD. Thus, it is simultaneously a theoretical model of HRD and a typological sort mechanism for ideas within HRD, and functions as a heuristic for investigating and locating HRD theory, research, and practice.
As a conceptually derived model of HRD, the HRD Cube has not yet been formally tested. One purpose of this research was to begin to provide evidence to
confirm and expand upon the utility and description of the HRD Cube. To accomplish this, a series of HRD articles was analyzed and evaluated for ideas pertaining to each of the three axes of the HRD Cube (theory, research, practice). The ideas were then coded and clustered into themes, and these clusters were then compared to the current construction of the HRD Cube. This comparison, ultimately, led to the development of recommendations (outlined in Chapter VI) for the HRD Cube based on the results of this analysis.

**Data Selection**

In this analysis, data were selected from 16 published HRD articles. The details of how those articles were selected and data were collected are detailed in the following paragraphs. For this analysis, the printed articles were treated as a representation of the authors’ ideas and beliefs regarding HRD and of the article’s topic. Traditionally, interviews are used as a means of gathering the constructed views of individuals (Lincoln & Guba, 1985; Merriam 1989). However, resource limitations prevented author interviews. Instead, the articles selected were treated as the representative voices of their authors. The texts of articles were analyzed to identify authors perspectives. These points will be made more explicit in the following paragraphs; however, it is important to understand them at the onset of this section. Thus, the participants in this research study were published HRD articles. The process of selecting these articles began by creating a database.
Article Selection

A database was created containing a list of all published articles that have appeared in the four Academy of Human Resource Development (AHRD)-sponsored journals (see Table 3) within the time frame described below. Journal articles were publicly accessible from several different journal article databases, including Educational Resources Information Center (ERIC), Academic Search Premier, ProQuest, and others.

Table 3. AHRD-Sponsored Journals Included within a Database

<table>
<thead>
<tr>
<th>Journal Title</th>
<th>Years</th>
<th>Volumes</th>
<th>Total # of Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advances in Developing Human Resources (ADHR)</td>
<td>2002, 2004, 2006, 2008</td>
<td>4, 6, 8, 10</td>
<td>162</td>
</tr>
</tbody>
</table>

Articles were downloaded and saved onto the author’s computer. Two computer software programs were used to aid in the article selection process. The core text of each article was saved in a Portable Document Format (.pdf) created by the Adobe Acrobat software. Each file contained only the article’s text. An optical character recognition
program embedded in the Adobe Acrobat software was used to identify the text of any article that did not, prior to downloading, have searchable text fields (searchable text fields are how most software programs identify shapes as letters, thus allowing a user to select and copy text from one program to another). Files were then grouped into local folders (i.e., specific journal, volume, and issue folders). Further, the basic reference information of each article, plus keywords and abstract, were entered into a Microsoft Excel spreadsheet to allow for quick searching of an article’s basic information.

The articles used in this dissertation went through three phases of selection. First, they were purposefully selected. Second, articles were stratified. Third, articles were randomly selected (see the description of each step below).

Articles were purposefully delimited to only AHRD-sponsored publications. These included four journals: Human Resource Development Quarterly (HRDQ), Human Resource Development International (HRDI), Advances in Developing Human Resources (ADHR), and Human Resource Development Review (HRDR). These four AHRD-sponsored journals were selected because they are the most readily identifiable published representation of the perspectives of scholars and practitioners in HRD as an area of theory, research, and practice. Although there is evidence to argue that HRD scholars and practitioners publish frequently outside of these selected journals (Dooley, 2002; Sleezer & Sleezer, 1998), for this dissertation a smaller subset of potential articles was needed. Thus, only those articles published in AHRD-sponsored journals were used as potential candidates for inclusion in this study and related analysis.
The articles selected were stratified. Articles were selected from even numbered years, 2002 through 2008. The use of the years 2002 through 2008 was implemented because these years allow for a balanced number of perspectives from each of the four journals. To ensure that as much of the diverse writing and perspectives in HRD as possible were captured, the inaugural year of the newest AHRD-sponsored journal, *HRDR*, was used as the basis for beginning the selection process, 2002. Further, the ending year of the articles used, 2008, was selected because, at the time of conducting this research, the next full year’s worth of journal issues had not yet been published. The use of even numbered years was implemented so that a longer time horizon of articles could be viewed. This allowed for a more in-depth historical look at the perspectives of HRD authors.

Finally, 16 articles were randomly selected, one from each journal within each of the identified even numbered years. Thus, four articles each were selected, one from each year, 2002, 2004, 2006, and 2008. Random selection allowed for any personal bias in article selection to be minimized. The number of articles was selected based on resource and time limitations. Analyzing more than 16 articles would not have been feasible given the time constraints of this research. The randomization process is explained in more detail below.

**Random Selection and Replacement of Articles**

All articles within a given journal and within a single, evenly numbered year were assigned a sequential number, one number for each published article. Any article published in the selected journal was considered a published article, including: editorials,
refereed articles, and non-refereed articles, including book reviews. In a given year, published articles were listed in the same order in which they were published. The list began with the first issue and article of the year and ended with the last issue and article published in that same year. No preferential treatment was given to any specific issue number or article position within a given journal issue other than the order in which the article was presented by the publisher; thus, all published articles had an equal chance of being selected. A random number generator was then used to generate a single number that fell within the bounds of the sequential list. The number that was generated identified one article to be included in this research. This random selection process was then repeated for each of the four journals and within each evenly numbered year, until a total of 16 articles had been identified.

Certain articles were purposefully removed from the selection process, specifically, book review articles, even though they were originally left in the pool. This was done because a book review is not representative of either the original author’s or the reviewer’s first voice. They were thus excluded for the purposes of this study. However, all other article types were included in the random selection process because they are all representative of the voice(s) of an HRD author(s). Research articles and editorial articles were included. Research articles represent current research endeavors being pursued by HRD scholars. Editorials often represent the state of current research or a desired hope of their author(s) for the journal issue and for HRD. Thus, both of these types of articles were considered to be representative of an author’s voice(s) and were included in the selection process. Before selection took place, the decision was
made that works authored by my co-advisors and committee members (Sue Lynham, Gary McLean, Toby Egan, and Manda Rosser) would be eligible to be selected in this process.

During the random selection process, replacement of the randomly selected articles also occurred to ensure a wide breadth of article authors’ voices. During the random selection process, no author was repeated. As an example, if the first randomly selected article was written by Gary McLean, then no additional articles written by Gary McLean were included in the analysis. If the random selection process selected a second article written by Gary McLean, then that article was removed from the list and reselection occurred. No distinction was made regarding published author order. If an author was listed as one of the authors of the article, then that individual was assumed to have equally contributed to the ideas contained in the article.

Utilizing the article selection process described above, 16 purposively stratified and randomly selected articles were identified for analysis. These articles represent much of the diversity in perspectives in HRD and are displayed in Table 4 following.
<table>
<thead>
<tr>
<th>Article Letter</th>
<th>Reference</th>
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Table 4. (Continued)

<table>
<thead>
<tr>
<th>Article Letter</th>
<th>Reference</th>
</tr>
</thead>
</table>

**Data Collection**

Data collection in this analysis consisted of identifying units from all ideas contained within the articles listed in Table 4 (Lincoln & Guba, 1985). Each article was first read for understanding. Notes were made, when appropriate, in the margins of each article as deemed helpful. Notes took several forms but generally consisted of in-the-moment thoughts or ideas that were generated. Additionally, note forms consisted of informational comments, spelled-out acronyms, and repeated notions; all were used for clarity of understanding later in the analysis.

Each article was then read a second time during which all coherent ideas contained within the article were highlighted with a Magic Marker™ as individual data units. A unit was a unique coherent concept that was either presented or cited by the
article’s author(s) (Lincoln & Guba, 1985). Units primarily consisted of declarative statements (often a single sentence) regarding the article’s topic. They represented a coherent idea because they addressed something specific regarding the research or topic. Findings, results, procedures, suggestions, and implications were all words that often suggested the articulation of a coherent idea. Specifically, any idea that articulated any side or component of the HRD Cube was captured. Ideas presented by authors that described a belief of the author were also collected.

The criteria used to determine what constituted a unit were drawn from Lincoln and Guba’s (1985) work. First, a unit of data must be “heuristic… aimed at some understanding or some action that the inquirer needs to have or to take” (p. 345). Second, the unit of data had to elaborate enough information such that it could fully describe the articulated or cited idea of the article’s author(s) regardless of the presence of the surrounding text. As described by Lincoln and Guba (1985), a unit is “the smallest piece of information about something that can stand by itself…” (p. 345). In some instances, these units were as short as a few words or a sentence, and, in other instances, the units were as long as a paragraph. Additional notes and comments were made about selected units when helpful in order to capture ideas as they were generated.

The next phase in identifying data units involved rechecking each identified unit and placing that unit in a Microsoft Excel spreadsheet. This phase aided in ensuring that the units had been identified correctly. This phase was executed by comparing the marked copy of the article with an unmarked digital copy of the article. Each identified unit was further examined for completeness and to ensure that it encapsulated the
entirety of the idea presented by the author(s) (as per Guba & Lincoln’s, 1985 description of what constitutes data units). If the unit articulated the entirety of the idea, then it was digitally copied from the article to the spreadsheet. If the unit did not articulate the idea fully, then it was reassessed, and additional surrounding text from the article was included within the selected unit before transferring the text to the spreadsheet. All margin notes were also transferred to the spreadsheet in a separate column associated with the datum unit. Finally, the page number from which each unit was found was entered. This final step was conducted in order to create a clear data trail and aid in establishing trustworthiness (described in a subsequent section). Once all units had been identified, analysis of the data followed.

**Data Analysis**

Data units that were identified during the data collection process were coded in two ways. Coding is the process that is used to organize the data collected (Merriam, 1998). Coding is used for ease of retrieval of data. Each unit went through two forms of coding. Each of these coding forms was selected to achieve either a confirmatory or exploratory analysis. First, each unit went through an axial coding process (coding based on predetermined categories) in order to confirm the construction of the HRD Cube. Each unit was sorted into one of seven representative categories (described below) based on an axiom of theory, research, and practice. Second, units within each of the seven categories were open coded (coding with no pre-determined categories) to identify representative themes within the categories. This analysis was conducted to explore the
themes that best represent theory, research, and practice. Each of these two types of coding and the process used for both are described below.

Axial Coding

After collecting all data units, units underwent an axial coding process. “An axiom may be defined as the set of undemonstrated (and undemonstratable) ’basic beliefs’ accepted by convention or established by practice as the building blocks of some conceptual or theoretical structure or system” (Lincoln & Guba, 1985, p. 33). Thus, axial coding focused on the coding of units based on the three axioms of theory, research, and practice. Throughout this dissertation, I have argued that HRD is an area of theory, research, and practice. Further, in order to address the first research question, What evidence of theory, research, and practice perspectives of HRD exists within the Academy of HRD journals?, each unit needed to be evaluated on these three axioms. Thus, the axial coding of units was conducted in order to support the axioms of the HRD Cube.

This axial coding process relied on a predetermined typology that was generated from the HRD Cube. The typology was used initially to sort the units into representative categories. Seven categories were used. The first three are based on the axioms of the HRD Cube, namely, 1) theory, 2) research, and 3) practice. The next four categories were based on the interaction of the three axioms, namely, 4) theory-research, 5) theory-practice, 6) research-practice, and 7) theory-research-practice. Each is described in the subsequent paragraphs.
In order to identify the appropriate category of the typology in which to place selected units, a definition for each axiom was used (presented below). For each unit, the unit was read and a question asked, *to which typological category does the unit best conform?* If the unit did conform to one of the axiom definitions, then it was placed in that corresponding category based on the three axiom definitions. If the unit conformed to two or three of the axiom definitions simultaneously, then it was placed in one of the four categories based on the interaction of axiom definitions. This process continued until all units had been classified in one of the seven categories.

**Theory Category**

The theory category of the typology was defined as any “coherent description, explanation, and representation of observed or experienced phenomena” (Lynham, 2000, p. 161). This definition captures many theory building theorists’ perspectives. Each unit was read and the question was asked, *Does this unit describe/provide a coherent description, explanation, or representation of an observed or experienced phenomenon?* If the unit corresponded with any component of this definition, then it was classified as being relevant, and thus conforming, to the theory category.

**Research Category**

The research category of the typology was defined as any description or part of an orderly investigative process for the purpose of creating new knowledge or confirming or replicating prior knowledge. The first segment of this definition, “an orderly investigative process for the purpose of creating new knowledge” (Swanson, 2005a, p. 4) was used to establish the basic or core purpose of the research. The ending
part of the definition was added to include additional areas of research. Many definitions of research exist (see Russ-Eft, 2004 for a brief review), and selecting one definition did not seem appropriate given the diversity that can often be found in definitions of research. Thus, a hybrid definition based on the work of several authors was created.

In identifying research category units, each unit was read and the question was asked, *Does this unit provide any description of an orderly investigative process for the purpose of creating new knowledge and/or confirming or replicating prior knowledge?* If the unit corresponded with any component of this definition, then it was classified as being relevant, and thus conforming, to the research category.

**Practice Category**

The practice category of the typology was defined as the activities, outcomes, or results (often presented in real-world terms) that are either suggested or implied of any idea, process, or phenomenon. This working definition was developed because a clear definition of practice in HRD could not be found in the extant literature.

The notion of practice itself is rarely defined, yet, intuitively, we all have a sense of what practice entails. Practice could be the replication of an idea or a process such that learning or improvement in performance occurs. Practice is the general term that is applied to the application of an idea, theory, or research; as an example, “action research is a methodology of practice” (Ruona & Lynham, 2004). In HRD, the word practice is often used to denote where HRD is encountered; “the field is viewed by most as applied and focused on practical problems in organizational life at various levels of analysis”
(Kuchinke, 2008, p. 109). Thus, the definition that I developed tried to articulate many of the variations of the word practice.

In identifying practice category units, each unit was read and the question was asked, *Does this unit describe the activities, outcomes, or results (often presented in real-world terms) that are either suggested or implied of any idea, process, or phenomenon?* If the unit corresponded with any component of this definition, then it was classified as being relevant, and thus conforming, to the practice category.

**Theory-Research, Theory-Practice, Research-Practice, and Theory-Research-Practice Categories**

These four categories represent the interaction of two or more axioms. Units within any of these categories represent ideas that articulated one or more of the definitions of theory, research, and practice. Units were sorted into one of these four categories if they conformed to two or more of the definitions above. If, when asked, *Does this unit describe...?*, about any of the three definitions above, the answer was more than one definition, then the unit was placed in an appropriate category based on which of the two definitions it shared. If the unit shared all three definitions, then it was placed in the theory-research-practice category.

**Open Coding**

Once the data units had been sorted into the seven categories, each category in the typology underwent an open coding analysis, meaning that no pre-identified themes were used to sort and cluster the data (Lincoln & Guba, 1985; Merriam, 1998). Rather, the data were allowed to group naturally. Naturally occurring groups were created based
on similarity of ideas. The clusters of data units, now called a theme, were labeled based on the theme’s similarities. The open coding of units was an exploratory analysis of themes and sub-themes within the axiom-based categories of theory, research, and practice.

In order to create the common themes in each category during this open coding process, a constant comparative method (Lincoln & Guba, 1985) was used. The constant comparative method involves comparing each data unit to all other data units within the category. In doing so, all common themes develop around similarity of units.

The method used followed the basic process that was outlined by Lincoln and Guba (1985). The process below describes how themes within each category were established:

Step 1. Data units were initially recorded electronically on a Microsoft Excel spreadsheet. At the onset of the coding process, units were printed onto individual index cards. Although several computer software programs are available and could have been used to aid in the data management and analysis process, a more conventional index card method was used as it provided a clearer picture of how the units best clustered. Each identified unit was printed on a 3x5 index card, one unit per card, and each card was labeled with information on where the unit was obtained. This entire process ensured that each unit was clearly labeled, and a clear trail of where that unit was obtained could be readily identified.

Step 2. A single data card (unit) was read. Then, a second data card was read and compared with the first. If they were alike, then they were placed in a single pile. If they
were not alike, then a second pile was created. This process continued until all units within a category had been sorted into piles.

Step 3. Each pile was then examined for common features, and rules were developed that encapsulated the essence of that pile. A rule was an idea that described the rationale for a card’s inclusion in that pile. Rules for each developing theme were written on a card and placed near each pile to denote what that pile represented. As an example, if a series of data cards all described training, then a rule card might be created to indicate an emphasis on training. A record was then made of each pile, with its rule and the cards that were contained in it.

Step 4. After a lapse of one day’s time, so that memory of their earlier categorization would diminish, all data cards were removed from piles and reassembled into a single stack, while the rule cards remained. Each data card was then reexamined. The data card was read and the idea presented was noted. Then the data card was assigned to one of the available rule card piles. This step did not rely solely on my intuition to sort the cards as in step one; but, rather, on the defined rules that were created in step three.

Step 5. Any data cards that could not be sorted into any of the defined rule cards (from step 3) were collected and examined for similarity. If a similarity was found, then a new rule card was created. If no similarity was found, the cards were retained for later review.
Step 6. Finally, each category and subsequent themes were reviewed to ensure that nothing had been overlooked. Particular care was given to cards that were distributed in Step 4 to a different pile than in Step 2 to ensure correct assignment.

Step 7. Themes were then given a name which best represented those data cards and rules of that theme. The results of the open coding of data units (Chapter V), describes the themes that emerged from each of the three axioms. Additionally, Chapter VI provides interpretations of all themes within each of the three axioms.

Trustworthiness and Authenticity of the Study

In any naturalistic inquiry, it is of utmost importance to describe the trustworthiness and the authenticity of the methods used to carry out the study. Trustworthiness focuses on establishing that the way the data were collected and analyzed is of value to the consumer of the research (Lincoln & Guba, 1985). Authenticity is the criteria that judge the processes and the outcomes of the inquiry (Guba & Lincoln, 2005).

It is also important to note, especially in regards to the trustworthiness of the research, that the researcher in a naturalistic methodology is the instrument of inquiry (Guba & Lincoln, 1981). “He is at one and the same time instrument administrator, data collector, data analyst, and data interpreter” (p. 128). Thus, given the importance of the researcher, it becomes paramount to present a candid account of how I have been truthful with this research.
Trustworthiness

Trustworthiness in interpretive/naturalistic research ensures that the data collected and the process by which the data were analyzed is truthful and accurate (Lincoln & Guba, 1985). Further, it encourages these essential values in both the research and the inquirer. Lincoln and Guba (1985) identified four criteria that could be used to aid researchers in encouraging trust in their work: credibility, transferability, dependability, and confirmability. The following paragraphs describe each of these criteria and elaborate some of the steps I have taken within each.

Credibility

Credibility establishes that the multiple constructions of the original stakeholders are represented given their original “constructions” and the “reconstructions” of their ideas (Lincoln & Guba, 1985, p. 296). To ensure credibility in this work, I utilized three techniques: prolonged engagement, multiple sources, and a reflective journal.

In terms of prolonged engagement, I have been researching this topic of paradigms and HRD for nearly five years. Although this time frame is small compared with others who have spent their careers studying paradigms, this engagement period has aided me in understanding some of the perspectives of HRD and its paradigms. Understanding the perspectives of others is critical to this research. Throughout this time, I have read and discussed this topic with numerous individuals, both within HRD and in other areas of study. I have written on the topic of paradigms and attended and presented at both the North American and European AHRD conferences (Hurt, 2009; Hurt & Callahan, 2007; Lynham, Lincoln, Hurt, & McLean, 2010). All of the knowledge
that I have gained through discussions, reading, presentations, and other academic endeavors has enabled me to understand more fully what HRD is and what perspectives exist.

Multiple perspectives and articles were used. In this research, 16 independent and distinct articles were used to arrive at the results and conclusions. No individual author’s work was repeated, and all articles came from different years in different journals with no overlap. The use of multiple articles, and the means by which they were identified and selected, should confirm that the data obtained are uniquely the voices of HRD authors.

Finally, throughout this research, I kept a reflective journal regarding all procedures used. According to Lincoln and Guba (1985), a reflective journal can be a useful source for discovering ideas and helping the inquirer maintain and thus report a truthful account of what happened within the research. To this end I maintained a journal that focused on several different areas, including methodological changes and interpretations, process adaptations, paradigm ideas, and frustrations/challenges with this kind of work. The journal aided in maintaining a record of methodological changes that were made, ideas that developed, and reflection on this topic of paradigms.

Transferability

Lincoln and Guba (1985) suggested that the best way to encourage the transferability of results is through the use of rich, thick description. Thick description “means that the complete, literal description of the incident or entity being investigated” (Merriam, 1998, p. 30) is provided. By presenting a data unit in its literal form (as
spoken or written by the original author), readers of this study can see exactly how the idea was presented and make their own interpretations of the unit’s idea. In Chapters IV and V, there are numerous instances where the word-for-word descriptions of the data units have been provided. These units have been purposefully presented as they should aid the reader in understanding the perspectives of HRD contained within the 16 selected articles. Readers of this work are encouraged to make their own interpretations of this research and compare it to my own.

Additionally, the way the 16 articles were purposively identified, stratified, and randomly selected should encourage the transferability of the results to the timeframe from when they were chosen. Because all articles used in this analysis were selected between the years 2002-2008, the results should be representative of the conversations that were occurring in HRD during that timeframe.

**Dependability**

To ensure that the data obtained in this research were dependable, meaning that they could be trusted to account for all of the perspectives contained within an article (Lincoln & Guba, 1985), a pilot test article and audit were used to check the process of data collection and analysis, as was described earlier.

A test article was selected from the *HRDQ* journal from 2000. This year was outside of the data range used for this dissertations analysis; thus, no overlap of data could occur. The test article underwent the process noted in the prior section, and the results and processes were audited by the dissertation co-chairs; the audit of the data unitization process aided in ensuring that all of the coherent units had been captured.
Confirmability

In addition to the use of a reflective journal, an audit trail was used to ensure that the data were confirmable. Confirmability is a trustworthiness criterion that is used to check the process of the research (Lincoln & Guba, 1985). The technique utilized was an audit trail. Developing an audit trail began with creating a clear, identifiable way of organizing the data and ended with a summarized process for how the entire data set was constructed. By developing a clear audit trail, the reader can clearly see how and where the data were collected and analyzed. Further, because each of the articles used within the research is publicly available, the reader may confirm these units by reviewing the full text articles.

In order to maintain a clear understanding of where all of the data units were obtained, specific guidelines were created so that the data trail of each unit could be readily identified at any point in the analysis. Each of the 16 articles was assigned a sequential letter (A though P), in order to identify clearly its unique contribution. Then, each unit within each article was assigned a sequential number. Finally, the page number from which each unit was captured was identified with a hyphen (-) followed by the page number. As an example, the label, B23-115, indicates that this unit was the 23rd captured from article B on page 115.

Authenticity

Authenticity of this work is the degree to which I, as the investigator, have adhered to the tenets of the methodology used. Guba and Lincoln’s (2005; Lincoln, 1990; Lincoln & Guba, 1986) authentication criteria were used to help illuminate how I
have adhered to the naturalistic approach. They describe five criteria for evaluating the authenticity of research: fairness, educative authenticity, ontological authenticity, catalytic authenticity, and tactical authenticity.

**Fairness**

Fairness addresses the equal distribution of ideas and perspectives presented in the research (Guba & Lincoln, 2005; Rodwell, 1998). In this research the views of many scholars have been presented with equality. This equality in presentation should aid in ensuring that no one perspective dominates this research rather that all perspectives have an equal chance of their view being understood by those who read this document.

**Educative Authenticity**

The educative authenticity criterion focuses on making others aware of alternate ideas. Educative authenticity is defined as “the increased awareness and appreciation (although not necessarily the acceptance) of the constructions of other stakeholders” (Lincoln, 1990, p. 72). Throughout this work I have provided the perspectives of many different people. These perspectives are representative of some of the perspectives held by many in HRD. Although I cannot provide a detailed account of every perspective in HRD, I have tried to make clear many of the alternate views and dialectic relationships that exist within much of the HRD literature.

**Ontological Authenticity**

The ontological authenticity criterion is defined as “the heightened awareness of one’s own constructions and assumptions, manifest and unspoken” (Lincoln, 1990, p. 72). Throughout this document I have described my personal perspectives and influences...
in HRD. In Chapter I, I present those factors and perspectives that have influenced me as a research. Among those influences are my educational background, the views of my co-chairs, and the way I perceive the HRD Cube. Additionally, in Chapter VI I describe many of the conclusions that I have arrived at regarding this research and the study of paradigms.

**Catalytic Authenticity**

The catalytic authenticity criterion is defined as “a criterion that is judged by the prompt to action generated by inquiry efforts” (Lincoln, 1990, p. 72). This research begins the validation process of the HRD Cube. As a developing model of HRD, the HRD Cube has the ability to aid in understanding HRD in a clearer and more precise way. This research aids these ends by encouraging this deeper understanding of HRD and provides a framework for further refinement/validation of the HRD Cube.

**Tactical Authenticity**

The tactical authenticity criterion is defined as, “The ability to take action, to engage the political arena on behalf of oneself or one’s referent stakeholder or participant group” (Lincoln, 1990, p. 72). Tactical authenticity is focused on how the inquirer advocates change or redistributes power for the stakeholders (Rodwell, 1998). In Chapter VI, I provide recommendations for changes to the HRD Cube given the results of this research. These comments, should they be utilized to adapt the Cube, will aid in making the HRD Cube clearer in understanding and more representative and accessible for all who might utilize it.
Chapter Summary of Methodology and Methods

Throughout this chapter, a detailed account of the study’s methodology and methods was described. The chapter opened with a presentation of the four research questions that guided this study. These questions (specifically question one) lead to the selection of the methods described herein. The methods utilized took a naturalistic approach to uncover the representative voices and perspectives of selected HRD authors. The chapter then focused on the HRD Cube, which is intimately tied to this research. The Cube provides many of the basic assumptions (axioms of theory, research, and practice) that were used later in the chapter. This research is conducted using a document analysis method of 16 AHRD-sponsored journal articles. Articles were used as if they were the representative voice(s) of their authors. Articles were selected first, purposefully from within four HRD journals, Then, articles were stratified between even numbered years 2002-2008. Then articles were randomly selected from within each of the four years and four journals, one article from each journal in each year. In total 16 articles within AHRD-sponsored journals were selected for use in the study. Next, data was collected from within those 16 selected articles. Data units were identified within each article Data units were then coded using two different sequential techniques. First, data units went through an axial coding process. In this process, units were sorted into one of seven pre-determined categories based on the axioms of theory, research, and practice. Axial coding was conducted to support the axioms of the HRD Cube. Second, once units had been sorted into predetermined categories, each of the three axiom-based categories was open coded. In the open coding process, units were compared to each
other using the constant comparative method and themes were allowed to develop based on similarity of ideas described within each unit. Open coding was conducted to explore themes and sub-themes within each axiom-based category. Finally, this chapter concluded with a discussion of the trustworthiness and authenticity of the study. Trustworthiness aids this research in providing a truthful account of what occurred herein. Authenticity aids in showing how this research adhered to those methodological standards set forth by the naturalistic perspective. The next chapter (Chapter IV) will present the demographics of the 16 selected articles and the results from the axial coding of data units.
CHAPTER IV

RESULTS: ARTICLE DEMOGRAPHICS AND AXIAL CODING

The results of this analysis have been divided into two chapters. This chapter addresses the results that pertain to the overall demographics of the 16 articles published in AHRD-sponsored journals and the results of the axial round of coding. This chapter is divided into two parts. The first part discusses the article demographics. The second part provides a presentation of the results that were obtained from the axial coding of the units.

Article Description Demographics

The first part of the chapter presents an overview of the demographics of the 16 articles published in AHRD-sponsored journals that were used in this analysis. This section is intended to help readers understand the kind of articles used and present overall commentary about the articles. This process should aid those who are unfamiliar with the articles selected for use in this analysis.

To summarize the process of capturing the article demographic information, I first read the 16 articles used in this study for understanding. Then, I developed a summary table of descriptions about each article (see Table 5). Within each article, several characteristics were identified, including the article’s topic, type, epistemology, and method (if empirical). The characteristics shown in Table 5 were selected because they aid in the overall interpretation of the article and help to show the variation that was achieved as a result of the purposeful, stratified, and random sampling method that was
used. A brief description of each characteristic ensues, thereby serving to make explicit the demographics of the data used to inform this study and their analysis.

Table 5. Summary of the 16 Article Demographics

<table>
<thead>
<tr>
<th>Article Letter</th>
<th>Article Topic</th>
<th>Article Type</th>
<th>Article Epistemology</th>
<th>Article Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Humor and HRD</td>
<td>Editorial</td>
<td>Interpretive</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>HRM in Poland</td>
<td>Research-Empirical</td>
<td>Interpretive</td>
<td>Longitudinal Interviews</td>
</tr>
<tr>
<td>C</td>
<td>Workforce Development</td>
<td>Conceptual</td>
<td>Critical</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Feminism</td>
<td>Conceptual</td>
<td>Critical</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Flextime and Women</td>
<td>Research-Empirical</td>
<td>Positive/Post-Positive</td>
<td>Scenarios, Factor Analysis</td>
</tr>
<tr>
<td>F</td>
<td>T&amp;D in South Africa</td>
<td>Research-Empirical</td>
<td>Interpretive</td>
<td>Interviews</td>
</tr>
<tr>
<td>G</td>
<td>Holistic Learning</td>
<td>Conceptual</td>
<td>Interpretive</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Employee Burnout</td>
<td>Research-Empirical</td>
<td>Positive/Post-Positive</td>
<td>Meta-Analysis</td>
</tr>
<tr>
<td>I</td>
<td>Challenging HRD</td>
<td>Editorial</td>
<td>Interpretive</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>NHRD</td>
<td>Research-Empirical</td>
<td>Interpretive</td>
<td>Interviews</td>
</tr>
<tr>
<td>K</td>
<td>ADDIE</td>
<td>Literature Review</td>
<td>Positive/Post-Positive</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>Group Feedback</td>
<td>Conceptual</td>
<td>Positive/Post-Positive</td>
<td></td>
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Table 5. (Continued)

<table>
<thead>
<tr>
<th>Article Letter</th>
<th>Article</th>
<th>Article Letter</th>
<th>Article Letter</th>
<th>Article Letter</th>
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</thead>
<tbody>
<tr>
<td>M</td>
<td>Organizational Subculture</td>
<td>Research-Empirical</td>
<td>Positive/Post-Positive</td>
<td>Surveys, Structural Equation Modeling</td>
</tr>
<tr>
<td>N</td>
<td>Personal Values in Decision-making</td>
<td>Research-Empirical</td>
<td>Positive/Post-Positive</td>
<td>Survey, Factor Analysis</td>
</tr>
<tr>
<td>O</td>
<td>Communities of Practice (CoP) and Theory Building</td>
<td>Research-Empirical</td>
<td>Interpretive</td>
<td>Text Analysis</td>
</tr>
<tr>
<td>P</td>
<td>NHRD</td>
<td>Conceptual</td>
<td>Positive/Post-Positive</td>
<td></td>
</tr>
</tbody>
</table>

Article topics were diverse. Some articles focused on specific activities, such as flexible work schedules and training and development. Other articles advocated the use or adoption of ideas or concepts, such as humor, feminism, and holistic learning. There were also several articles that focused on national and international topics. Two articles focused on the specific countries of South Africa and Poland. Additionally, two articles addressed the emerging idea of National Human Resource Development (NHRD).

Of the 16 articles used, there were four distinct types of articles (editorials, literature reviews, research-empirical, and conceptual). There were two editorials. Editorials, in these AHRD-sponsored journals, were written by either the editor or a guest editor and described some desire or hope of the author for the journal issue. One literature review article was included in this analysis. The literature review focused on describing the literature regarding the development and adaptation of the ADDIE
Eight research-empirical articles were included. These articles were identified as research-empirical because they focused on studying a specific topic using some form of empirical investigation. Finally, five articles were of the conceptual type. These articles studied a specific topic but did not provide an empirical investigation of that topic. Rather, they presented discussions of conceptual arguments/justification of the work.

The *epistemology* of each article was identified. As articulated in Chapter II, epistemology is the philosophical perspective used to uncover knowledge (Burrell & Morgan, 1979; Schwandt, 2001). The three types of epistemologies reflected in the articles were interpretive, post-positive, and critical. Seven articles were identified as being interpretive because they addressed the subjective nature of their topic, focused on the personal experiences of individuals, and related to individual beliefs/perspectives (Lincoln & Guba, 1985; Merriam, 1998). Seven articles were identified as being positive/post-positive because they focused on explaining objectively the nature of their topic (Swanson & Holton, 2001). Finally, two articles were of a critical epistemology; focusing on issues of power, oppression, or equality in a subjective world (Burrell & Morgan, 1979; Giroux, 1982, O'Donnell, 2007).

If the article was of a research-empirical type, the *methods* utilized were identified and named. Methods were the techniques that the article authors used to collect and interpret data. Four interpretive articles were identified and used interviews and text analysis methods (Lincoln & Guba, 1985; Merriam, 1998). An additional four positive/post-positive articles were identified and used methods such as surveys, meta-
analysis, factor analysis, and structural equation modeling (Swanson & Holton, 2001). Taken as a whole, the demographics of these 16 articles show variation in the representative sample. The next part of the analysis focused on those results obtained through the axial coding process.

**Presentation of the Results from the Axial Round of Coding**

After I read each of the 16 articles for understanding, I divided each article into data units based on the process outlined in Chapter III and described by Lincoln and Guba (1985). Data units were coded around the axiom-based categories of theory, research, and practice. Further, if a unit exhibited elements of multiple categories (i.e., theory and practice), it was coded into one of the four shared sides categories (theory-research, theory-practice, research-practice, or theory-research-practice). This round of data coding was conducted to support the axioms of the HRD Cube, namely, theory, research, and practice. Chapter III provides explanatory details of the steps utilized to accomplish this coding.

After identifying all of the data units contained within these articles, it became evident that their authors did not equally describe the categories of theory, research, and practice. In terms of data accumulation (the number of like data units), there were many more data units that focused on the practice category than that of either the research or the theory categories. Figure 4 depicts this overlap and imbalance among these three categories of theory, research, and practice. Within Figure 4, each of the three categories is drawn based on the accumulation of data units. Thus, the circles that represent each
category are approximately proportional to the number of units identified within a category relative to all other categories.

**Figure 4. Proportional Venn Diagram of Categories Based on Theory, Research, and Practice Axioms**

As this was not a quantitative study, and the relative impact or value of data units was not identified or calculated, I caution the reader not to over-extend the interpretation of the relative size of any component of Figure 4. However, the diagram provides a visual sense/depiction of how the data units clustered, relatively, in terms of the three axioms.
In total, 1,085 units were identified. As illustrated in Figure 4, there were many more data units describing practice than there were of theory or research. Practice had 508 units, research had 169 units, and theory had 130 units. The overlap between the three categories showed an approximately equal number of theory-practice (T-P) data units (97 units) and research-practice (R-P) data units (121 units). The shared sides of theory-research (T-R) had few data units (39 units) as compared to the other two shared sides. The overlap of all three categories, theory-research-practice (T-R-P), had very few data units (21 total units). All of the unitized data were coded into one of the three axiom-based categories (T, R, P), or one of the four shared sides (T-R, T-P, R-P, T-R-P).

The notion that each side of the HRD Cube exists as a Venn diagram is one of the founding concepts of the HRD Cube. As described in Chapter III, the HRD Cube was built utilizing the three axioms of theory, research, and practice. The HRD Cube could not exist as a cube if it did not share commonality among its sides; thus, the idea of the HRD Cube presented as a Venn diagram is not novel (Lynham, 2000, 2002; Swanson & Holton, 2001). What makes this diagram distinct is the relative size of each category (represented as circles in the Figure 4 diagram). The size of each category is based on the accumulation of data units identified. Based only on these 16 articles, HRD appears to place more emphasis on the practice category. This emphasis is either singularly focused on practice or is jointly shared between practice-theory and practice-research. If the number of data units is an indication as to the relative importance of these categories, then the practice category was clearly the most important. Again, I caution the reader not to over-extend the interpretation of the results beyond the purpose,
intent, and scope of this analysis. The importance of an individual unit was not the focus of this analysis. Thus, in this analysis, it is not possible to ascertain the value of a unit; however, if a category is important to an area of study, then it might logically be expected to be discussed frequently, and the practice category was the most frequently discussed category.

The research and theory categories had a smaller number of units than the practice category. The number of units in the research category is perhaps smaller than might be expected. All articles utilized herein were obtained from research oriented journals, meaning that the target of all four journals is to expand on research within HRD. Given the focus of these journals, I would have expected to see a large number of research related data units. Although research category units were found, there were not as many as were found in the practice category. This may indicate that HRD is in need of tying its ideas to research. Or if the ideas are tied to research, then HRD may need to articulate better those research endeavors within its publications.

The vision of the AHRD is to “lead Human Resource Development through research” (Academy of Human Resource Development, 2009a). Further, one of the missions of the AHRD is ‘to foster research-practice linkages’ (Academy of Human Resource Development, 2009a). Given that all collected data units were obtained through the AHRD-sponsored publications, a greater emphasis on the research category would logically be expected. Of the four shared sides categories the research-practice category had the largest accumulation of units. This result would appear to lend aid to the mission of the AHRD.
In units collected from these articles, the theory category was the smallest in regards to the number of data units. The results might indicate that HRD is not as articulate regarding theory as it is in either research or practice. Several authors in HRD (Lynham, 2002; McGoldrick, Stewart, & Watson, 2004; Swanson, 2001) have called for HRD to be more theoretically oriented and driven and these results may lend aid to those authors’ arguments.

Chapter Summary of Article Demographics and Axial Coding Results

This chapter presented the results pertaining to the article demographics and the axial round of coding. The article demographics section described the variation that was achieved through this analysis of 16 articles published in AHRD-sponsored journals. The axial coding results, described the accumulation of data units in terms of the three axiom-based categories of theory, research, and practice and the four shared sides categories of theory-research, theory-practice, research-practice, and theory-research-practice. This overlap was depicted in a proportional Venn diagram (Figure 4) and showed that there were more data units represented in the practice category than any other axiom or categories of shared sides. The next chapter (Chapter V) presents the results pertaining to the open (and second) round of coding.
CHAPTER V

RESULTS: OPEN CODING

This chapter presents and describes the results from the open coding of data units collected. Open coding was used as an exploratory analysis of themes and sub-themes within axiom-based categories. The themes and sub-themes that developed are presented. Additionally, this chapter describes the categories of the four shared sides (theory-research, theory-practice, research-practice, and theory-research-practice) and how they were used to aid in supporting the construction of themes within the axiom-based categories.

On several occasions, this chapter utilizes direct quotes to aid the reader in understanding the authors’ perspectives and provide evidence for the results. Each of these direct quotes has been indented to help identify the authors’ perspective and their unique voice. Utilizing the direct quotes aids this research in presenting an honest account of what was said and should allow for a clearer interpretation of its findings (Lincoln & Guba, 1985).

The axial coding process sorted units into one of seven pre-determined categories: (a) theory, (b) research, (c) practice, (d) theory-research, (e) theory-practice, (f) research-practice, or (g) theory-research-practice. The units within these seven categories were then analyzed using open coding and the constant comparative method (Lincoln & Guba, 1985, Merriam, 1998). This method enabled the identification of themes within each category. Themes were therefore created based on similarity of ideas and concepts represented by each of the units. Additionally, sub-themes were created if
there was further similarity of units within a theme. A description of each resulting
category, theme, and sub-theme (if applicable) within each of the axiom-based
categories is presented below.

**Themes within the Theory Category**

The *theory* category consisted of data units that articulated some aspect of theory.
Theory was defined as “any coherent description, explanation, and representation of
observed or experienced phenomena” (Lynham, 2000, p. 161). Units within this category
often described a specific theory that was being used or explored within the article.
Within this category, the open coding of the data units clustered around six themes: (a)
*Description of HRD Foundations*, (b) *Description of Specific Theories*, (c) *Systems as a
Discipline/Systems as Theory*, (d) *Theory Building in HRD*, (e) *Context Specific
Descriptions of Specific Theories*, and (f) *Description of the Need, Value, or Purpose of
Theory*; each of which is described below.

**Theme 1: Description of HRD Foundations**

The *Description of HRD Foundations* theme describes foundations of HRD
articulated by authors. Authors often described what they believed to be the foundational
components and disciplinary influences of HRD. Article P described HRD as having two
distinct core components:

[HRD has core components] … “a process or activity,” (Wang & Swanson, 2008,
p. 84) [Unit# P33-84]

[HRD has core components] … “adult” focused (Wang & Swanson, 2008, p. 84)
[Unit# P34-84]
For the article P authors, HRD was viewed as a process or activity specifically focused on adults. These notions have been articulated by Swanson, the second author (see Swanson & Holton, 2001), and have clearly been influenced by his opinion of what HRD should view as its core components. These authors additionally noted that HRD has a series of foundations that aid in and inform its understanding of theory.

“economics is considered one of the major foundations of HRD” (Wang & Swanson, 2008, p. 81) [Unit# P15-81]

“another foundation of HRD—systems theory” (Wang & Swanson, 2008, p. 101) [Unit# P132-101]

In addition to describing some of the foundations and core components of HRD, several authors identified the disciplines from which a theory or an idea had been drawn.

“Humor theory resides in disparate disciplines, such as psychology, sociology, communication studies, education, and allied health.” (Roth, 2002, p. 352) [Unit# A11-352]

These disciplines seemed to aid in HRD’s understanding of its own theory base and provide a historical record of the disciplines used. An example from article K identifies several of these disciplines:

“Concepts used in creating and revising the ADDIE process have been drawn from the disciplines of system engineering, behavioral and cognitive psychology, instructional technology, and performance improvement.” (Allen, 2006, p. 432) [Unit# K10-432]
In the early phases of this analysis it became apparent that several informing disciplines were identified by HRD article authors. Throughout the reading of articles, unitizing of data, and coding of data, I captured and created a summary list of all the areas of study that were labeled as a discipline by article authors (see Table 6). This disciplinary list aids in illuminating this first theme within the Theory category, Description of HRD Foundations.

Table 6. Areas of Study Labeled as Informing Disciplines within 16 Articles Published in AHRD-Sponsored Journals

<table>
<thead>
<tr>
<th>Informing ‘Discipline’ Labels</th>
<th>Articles Labeling an Area of Study as an Informing Discipline*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health</td>
<td>A</td>
</tr>
<tr>
<td>Anthropology</td>
<td>x</td>
</tr>
<tr>
<td>Communication</td>
<td>x</td>
</tr>
<tr>
<td>Community Development</td>
<td>x</td>
</tr>
<tr>
<td>Economics</td>
<td>x</td>
</tr>
<tr>
<td>Education (Adult and K-12)</td>
<td>x</td>
</tr>
<tr>
<td>History</td>
<td>x</td>
</tr>
<tr>
<td>Human Resource Development</td>
<td>x</td>
</tr>
<tr>
<td>Ideology</td>
<td>x</td>
</tr>
<tr>
<td>Instructional Technology</td>
<td>x</td>
</tr>
<tr>
<td>Management</td>
<td>x</td>
</tr>
<tr>
<td>Performance Improvement</td>
<td>x</td>
</tr>
<tr>
<td>Politics</td>
<td>x</td>
</tr>
<tr>
<td>Psychology (Behavioral, Cognitive)</td>
<td>x</td>
</tr>
<tr>
<td>Sociology</td>
<td>x</td>
</tr>
<tr>
<td>Systems Engineering</td>
<td>x</td>
</tr>
</tbody>
</table>

*Only articles that labeled these areas of study as a discipline were included in this list.
Table 6 describes what authors of articles interpret the notion of a discipline to be. The table further indicates this notion of a discipline from their specific research interest and the contextual topic that they are studying. The topic, therefore, provides the focal point for an author’s interpretation of informing disciplinary base(s). Logically, if an author were investigating a topic that crossed disciplinary lines, then it might also have several informing disciplinary bases. The article A unit, mentioned above, provides a good example of this cross-disciplinary foundation. The topic is humor theory, and, according to the author, humor theory is researched within several disciplines. The author is advocating that humor theory be utilized and researched more within HRD; thus, because of the cross-disciplinary nature of humor theory, it suggests the use of several disciplinary foundations.

The essence of the Description of HRD Foundations theme focused on ideas pertaining to the core components and foundations of HRD. Authors described several core components of HRD. Authors also described different informing disciplines from which they gained their knowledge. There was limited evidence, within these articles, to suggest specific informing disciplines of HRD; rather, that HRD has many diverse informing disciplines.
*Theme 2: Description of Specific Theories*

The second theme that emerged within the *Theory* category was a series of units that provided a *Description of Specific Theories*. These units described many ideas that were specifically labeled as a theory.

“A classic theory of creating critical mass is Rosenstein-Rodan’s (1943) ‘big push’ theory.” (Wang & Swanson, 2008, p. 88) [Unit# P55-88]

Given the definition of a theory, that was used to identify all units within this category, many of the theories that were described by authors provided a brief description of what that theory tries to accomplish, as demonstrated by this unit from Article G:

“Social learning (cognitive) theory posits that people learn by observing others in certain social settings.” (Yang, 2004, p. 252) [Unit# G39-252]

In some articles, theories were presented as singular statements, and, in others significant details were provided that elaborated on how the theory(s) were used in the study (termed a theory-in-use). Several articles provide detailed descriptions of a particular theory-in-use:
“...holistic learning theory provides a helpful framework to examine the existing learning theories. It suggests that learning occurs as dynamic interactions among cognition, motivation, and social contexts.” (Yang, 2004, p. 258) [Unit# G50-258]

Similar to the first theme in this category, ideas that were labeled as a theory by authors varied in how they were used. Multiple theories were clearly used by authors; however, the detail of description provided for these theories varied greatly.

During early review of the articles, it became evident that specific theories were clearly important in the authors’ articles. This fact was not surprising as most published studies require authors to describe the informing theoretical frame. An idea or concept that was labeled as a theory were captured and are summarized in Table 7.
<table>
<thead>
<tr>
<th>Ideas Labeled as a Theory</th>
<th>Articles Labeling at Least One Theory*</th>
</tr>
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<tbody>
<tr>
<td>Adult Learning Theory</td>
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<tr>
<td>Andragogy</td>
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<tr>
<td>Behavioral Learning Theory</td>
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<tr>
<td>Big Push Theory</td>
<td></td>
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<tr>
<td>Change Theory</td>
<td></td>
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<tr>
<td>Chaos Theory</td>
<td></td>
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<tr>
<td>Cognitive Learning Theory</td>
<td></td>
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<tr>
<td>Complexity Theory</td>
<td></td>
</tr>
<tr>
<td>Critical Pedagogy</td>
<td></td>
</tr>
<tr>
<td>Critical Reflective Learning Theory</td>
<td></td>
</tr>
<tr>
<td>Critical Theory</td>
<td></td>
</tr>
<tr>
<td>Dual Labor Market Theory</td>
<td></td>
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<tr>
<td>Feminist Theory</td>
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<tr>
<td>Group Development Theory</td>
<td></td>
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<tr>
<td>Holistic Learning Theory</td>
<td></td>
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<tr>
<td>Human Capital Theory</td>
<td></td>
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<tr>
<td>Humor Theory</td>
<td></td>
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<tr>
<td>Learning Theory</td>
<td></td>
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<tr>
<td>Performance Theory</td>
<td></td>
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<tr>
<td>Self-Directed Learning Theory</td>
<td></td>
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<tr>
<td>Situated Learning Theory</td>
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<tr>
<td>Social Learning Theory</td>
<td></td>
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<tr>
<td>Social Theory</td>
<td></td>
</tr>
<tr>
<td>Socialization Theory</td>
<td></td>
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<tr>
<td>Systems Theory</td>
<td></td>
</tr>
<tr>
<td>Transactional Leadership Theory</td>
<td></td>
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<tr>
<td>Transformational Leadership Theory</td>
<td></td>
</tr>
<tr>
<td>Transformational Learning Theory</td>
<td></td>
</tr>
</tbody>
</table>

* It should be noted that to be included in Table 7 the author had to label the idea as a theory.
The table provides a relatively detailed list of ideas that authors labeled as a theory and there are several points to note in the interpretation of this table.

One interpretation of what authors’ identified/constructed as informing theories is that they are really not necessarily specific theories; rather, they are more generic names/identifiers given to a series/set of theories. For instance, to my knowledge there is no specific theory named *learning theory*. Rather, there are many different learning theories that all focus on how people learn (Merriam & Caffarella, 1999). Several theories presented in Table 7 illustrate this point, for example, cognitive learning, self-directed learning, situated learning, and social learning, are all theories specific to how people learn and could all be logically grouped within a category of theories about how people learn. Others examples include performance theory and adult learning theory.

Several additional theories identified in Table 7 could be grouped within a category, but no category name/identifier was presented. Two strong examples include a series of economic theories and leadership theories. The labeled theories of big push, dual labor market, and human capital could all be situated within a category of economic theories (Wang & Swanson, 2008). Similarly, transactional and transformational leadership could all be positioned under a category of leadership theories (Northouse, 2004).

Some of the theories identified as such in Table 7 could be debated. For instance, it has been argued that *andragogy* (Knowles, 1968) is not a theory of adult learning but rather a series of assumptions about how adults learn (Merriam & Caffarella, 1999). Additionally, socialization is not necessarily a theory but rather a process by which
people become integrated with and accustomed to the rules, regulations, and culture of an organization (Fisher, 1986).

Although Table 7 presents all theories that were specifically labeled as such by article authors, it is clear that there are many discrepancies with how authors describe ‘a theory’. The idea that individual theories could be grouped within a hierarchy of theory was not expressed in the articles, yet clear evidence of such hierarchies is present. This varied labeling of the construct of theories (specific and/or categories) could lead to confusion within HRD as to what theories relate to a specific topic. Further, it makes navigating and understanding specific theories difficult as it is sometimes unclear if an author is discussing a specific theory or a category/set of theories.

To summarize, the essence of the Description of Specific Theories theme consisted of units that described specific theories used by authors to inform their studies. Authors labeled several different ideas as a theory, but it was unclear if some of those labels apply to a specific theory or a category/set of theories. This distinction was difficult to navigate and could ultimately cause confusion with understanding what and how theories are used by HRD.

Theme 3: Systems as a Discipline/Systems as a Theory

The third theme within the Theory category titled, Systems as a Discipline/Systems as a Theory, suggested that the construct of systems take the form of both an informing discipline and an informing theory of HRD. As an informing discipline, systems provide HRD with core components that are used to understand and make sense of knowledge. As an informing theory, systems represent a specific theory
that could be utilized to explain phenomena. An extract from article O helps to illuminate this duality of use:

“The term systems theory has been used in HRD literature, but from the perspective of this article, that label is incorrect. More often, the phrases systems thinking or systems perspective are used, which are more accurate.” (Storberg-Walker, 2008, p. 559) [Unit# O53-559]

The article O example describes systems as an informing disciplinary area of HRD. As an informing discipline, ideas contained within the construct of systems are used to aid HRD in understanding and interpreting its knowledge. The unit O example above also suggests that systems theory is an incorrect label for considering the construct of systems as a discipline. As article O further noted:

“In the systems view, the world is understood through processes of input, output, and feedback loops.” (Storberg-Walker, 2008, p. 559) [Unit# O50-559]

This second unit from article O clearly describes the perspective of a system when viewed as an informing discipline; however, it does not exactly describe systems theory. If there are two different notions of systems, one as a discipline and one as a theory, it appears that there is confusion as to what is represented by this duality of ideas. There do not appear to be clear standards for the naming of ideas and concepts with a systems focus. As evidence of this confusion, consider these two opposing perspectives. The first perspective is from article K:

“All ADDIE activities take place within and are dependent on the system functions” (Allen, 2006, p. 438) [Unit# K57-438]
This unit from article K describes the ADDIE process as relying on systems. Because the unit is describing how the process takes place, it would seem to be describing systems as a theory because theories describe observed or experienced phenomena (Lynham, 2000). Now consider an opposing perspective from article P:

“HRD as a field has explicitly identified systems theory as its foundation (Swanson, 2001) but has not applied it in exploring the new idea of NHRD.” (Wang & Swanson, 2008, p. 101) [Unit# P134-101]

In the example from article P, systems theory is identified and described as a foundation of HRD. These two examples indicate a difference in the language used and could potentially point to problems with the way that HRD labels and uses the term systems.

Similar problems exist with other topics studied within HRD and the language used to describe them. Take, for example the word critical. To be critical of a topic could mean that a person is not approving of it. However, when used as an evaluation method, critical evaluation of a topic would involve a rigorous analysis. Then, when the word theory is added to the word critical, an entirely new meaning and interpretation is created. Critical theory is focused on identifying and emancipating those individuals or groups that are being subjugated (O'Donnell, 2007).

The interpretation of systems and systems theory could be construed in the same manner as the above example of critical and critical theory. Systems, represented as a discipline, describe the ideas that encapsulate a holistic or systematic way of viewing the
world. Systems theory, on the other hand, is a specific way of understanding observed or experienced phenomena.

The essence of the *Systems as a Discipline/Systems as a Theory* theme within the *Theory* category describes the dual use of the term *systems*--as a way of thinking and as a specific theory. Systems thinking could be described as the disciplinary influence. Systems theory seems to describe a specific theory focused on the explication of the notion of systems. Further, these ideas about systems aid in illustrating the point made in the previous category regarding groups of theories. Systems could additionally be described as a series of theories all focused on understanding the systemic nature of a phenomenon.

*Theme 4: Theory Building in HRD*

The fourth theme that emerged within the *Theory* category was that of *Theory Building in HRD*. A number of authors described their research as aiding in the development of new theory:

“The current study also makes a contribution to HRD theory building regarding motivation to transfer an organizational subculture and supports the notion that multilevel considerations (Garavan, McGuire, & O’Donnell, 2004) are essential for future HRD theory building.” (Egan, 2008, p. 316) [Unit# M122-316]

This *Theory Building in HRD* theme emerged as an element of the *Theory* category and as an area of research within HRD. As the example unit above indicates, theory building is an area of research that might be aided by the ideas contained within an article.
There was limited discussion of how to conduct theory building within the units that were identified within this theme. As no one specific article utilized in this analysis specifically focused on theory building, a detailed discussion of how this is accomplished cannot be provided; however, units within this theme clearly saw theory building as an area of HRD.

Theory building could be thought of as an additional avenue for researchers who cannot or do not want to use a developed theory. If no coherent description of a phenomenon exists, then scholars could build their own. There have been several articles (Holton & Lowe, 2007; Marsick, 1990; Storberg-Walker, 2003; Storberg-Walker & Chermack, 2007) written within the HRD literature that described the process of theory building, including an entire issue of the journal, *Advances in Developing Human Resources* (see 2002, 4(3)) that was dedicated to this topic (Lynham, 2002). This area is clearly important to HRD as is evidenced by the emergence of a theme within this analysis; however, the impact of this area on HRD is currently unknown. Authors of units in this theme often described theory building in a passing manner, as if the relevance of this area of research in HRD was not one that they considered to be the most important for their work. A publishing requirement of all HRD journals is for authors to provide discussion on how their research contributes to HRD. Although theory building might not be the focus of any of the 16 articles used in this analysis, the results of those articles may be relevant to the broader area of research on theory building in HRD.
Theme 5: Context Specific Descriptions of Specific Theory

The fifth theme in the Theory category provides the Context Specific Descriptions of Specific Theory. Within the articles, authors often described a theory or theories (as noted in Table 7). Data units in this theme were diverse and the context of the article often played a role in how the author described the specific theory. Context was used as a way of situating the theory within the article’s topic. In addition, there were vast differences in the details provided about a specific theory. Authors occasionally provided an explanation, history, detailed description, or examples of the theory highlighted and used to inform their work. Or, authors might have provided only a passing reference to a specific theory.

For example, articles D and I both described feminist theory. Article D discussed feminist theory from within a social equality context and suggested that HRD would be well served to focus more of its research endeavors within the guidelines of a feminist framework. The article provided many details on what distinguishes feminist theory and how it is often conducted. Article I also address feminist theory; however, this article suggested only that feminist theory might prove useful to HRD.

The diversity of theories identified, the context specific nature of a theory’s use, and the vast differences between how much detail was provided by authors in regards to a specific theory, makes attempting to articulate all the ideas contained in this theme well beyond the scope of this analysis. The essence of the Context Specific Descriptions of Specific Theory theme is that the context of an article is used to provide the descriptions of the specific theories identified.
If theory is, as Lynham (2000) suggested, “any coherent description, explanation, and representation of observed or experienced phenomena” (p. 121), then, based on the methodology used in this analysis, all data units that provide these descriptions were captured. Many of those units have been sorted into other themes within this category; however, these units do not clearly identify with any other theme and have as their commonality only a focus on the context of the article. Thus, this theme represents all of those units that provide the *Context Specific Descriptions of Specific Theory*.

**Theme 6: Describing the Need, Value, or Purpose of Theory**

The final, and sixth, theme in the *Theory* category was comprised of data units that described the need, value, or purpose of theory. Authors occasionally described the need, value, or purpose of theory in general terms, as opposed to focusing on one specific theory. Describing the need for HRD theory is a unit from article I:

“HRD professionals should have a broad understanding of the conceptual foundations of HRD.” (Hatcher, 2006, p. 2) [Unit# I5-2]

The words *conceptual foundations* in this unit are taken to mean all of those informing theories and core understanding of HRD. In describing the value of theory, article P used the analogy of a forest:

“The power of theory should be in its ability to explain and describe the ‘forest’ while considering the diversity of each individual ‘tree.’” (Wang & Swanson, 2008, p. 101) [Unit# P138-101]

A purpose of theory within an academic and professional field is offered by article G:
“The whole point of theory—any theory in all kinds of academic and
professional fields—is to offer an adequate explanation of social or natural
phenomenon in an explicit way.” (Yang, 2004, p. 260) [Unit# G55-260]

By articulating the need, value, or purpose of theory, authors described the value
of their chosen theory to HRD, to the reader, and to the topic under study. I viewed this
theme as mediating all of the prior themes within this category because it articulates why
all of this understanding is important for both the author’s chosen area of interest and
HRD. As the examples above indicate, units in this theme did not describe one specific
theory but, rather, the need, value, or purpose of theory in general terms. Units in this
theme could be described as answering the question, why is theory important to HRD?
Many authors have called for HRD to be more theory driven (McGoldrick, Stewart, &
Watson, 2001; Ruona, 2000), and I see this theme as aiding that call to action.

In summary, within the Theory category, six different themes were identified.
The category begins with a general description of the informing foundations and ends
with the context specific description of theory. Mediating all of the themes are the need,
value, and purpose of theory. Presented, next, are those themes that developed in the
Research category.

Themes Expressed within the Research Category

The Research category consists of data units that articulated some aspect of
research that was defined as an orderly investigative process for the purpose of creating
new knowledge or confirming or replicating prior knowledge (Russ-Eft, 2004; Swanson,
2005b). The data units in this category describe the particular approach to research or a
research philosophy of the author. Within this category, the open coding of data units clustered around nine themes: (a) The Need for Multiple Perspectives of HRD Research, (b) Understanding and Investigating Social Phenomena, (c) A Functional/Post-Positive Worldview, (d) Critical, (e) Describing Methodology within Research, (f) Describing Specific Methods within Research, (g) Context Specific Discussions of Research Results, (h) Recommendations, Cautions, or Deficiencies of Research, and (i) Responsibilities of Research and Researchers; each of which is described below.

Theme 1: The Need for Multiple Perspectives of HRD Research

The Need for Multiple Perspectives of HRD Research theme was comprised of units that articulated the need for multiple research perspectives. These multiple perspectives were described as being necessary when the phenomenon under investigation is complex, as described in a unit from article G:

“Viewing one phenomenon from different perspectives is necessary when such a phenomenon is complex and unstable across situations.” (Yang, 2004, p. 241) [Unit# G2-241]

The necessity of viewing a research topic from multiple perspectives gave rise to the idea that not all research perspectives are similar or even comparable. A humorous comment made in article A provides a sense of this difference in perspectives:

“As for research, various paradigms may be used to view the world. At the very least we may say that quantitative researchers (quantnoids) and qualitative researchers (schmoozers) appear to be from different planets.” (Roth, 2002, p. 352) [Unit# A8-352]
Although this unit from article A is presented in a humorous manner, it highlights that there are different perspectives for interpreting and conducting research. Authors had specific perspectives that they used to view their research. Their specific perspective was used to identify a series of rules or guidelines for interpreting research:

“The CoP view brings with it specific assumptions, questions, and heuristics to try to make sense of the empirical world.” (Storberg-Walker, 2008, p. 559)

In the article O example, the CoP (Community of Practice) view is described as having its own set of rules and guidelines that are used to inquire into and understand the empirical world. This example would be representative of a specific research perspective. To understand the research from a different inquiry/research perspective, a different set of world views would be needed. Thus, multiple perspectives of research exist, and each informs understanding the world from a different point-of-view.

This idea of using and needing multiple perspectives to view a research topic is one that has been described in much of the HRD literature (Lynham, 2000; McGoldrick, et al., 2004; Swanson & Holton, 2001). As noted above, different inquiry perspectives often contain a series of beliefs or guidelines that make them non-comparable. The fundamental assumptions inherent in some such perspectives make viewing the world through an alternate perspective impossible (Creswell & Creswell, 2005; Lincoln & Guba, 1985). In Chapter II, I described a period of time in paradigm research called the incommensurability of paradigms debate. This debate regarding paradigms is similar to what the above units have cautioned. Also from Chapter II, I discussed the differences
between the epistemologies of positivism/post-positivist, interpretive, and critical. Each makes certain assumptions about the nature of reality that do not always allow for a shared understanding of the world (Guba & Lincoln, 2005).

The essence of *The Need for Multiple Perspectives of HRD Research* theme is to articulate that there are multiple perspectives for inquiry in research. Multiple inquiry perspectives on research allow HRD to investigate a phenomenon using different assumptions about the nature of reality. These differing assumptions allow researchers to uncover and explain a phenomenon more deeply, because each has a different set of assumptions, and each offers both a way of seeing and not seeing the world (Lincoln & Guba, 1985).

**Theme 2: Understanding and Investigating Social Phenomena**

The *Understanding and Investigating Social Phenomena* theme described a series of data units that advocate understanding the social world. These data units predominantly described understanding a phenomenon from an interpretive perspective. As I described in Chapter II, an interpretive epistemology seeks to uncover answers to questions based on a subjective understanding of the world (Burrell & Morgan, 1979; Lincoln & Guba, 1985; Merriam, 1998). Article O further described the interpretive perspective:

“From an interpretive paradigm perspective, units are often the unique concepts that combine to produce understanding of some social phenomena.” (Storberg-Walker, 2008, p. 558) [Unit# O32-558]
In this interpretive perspective, the subjective understanding of the world is constructed within the individual. The research is designed to uncover the individual’s interpretation of the world. A unit form article D provides evidence of this idea:

“Research is designed with the understanding that it is a subjective process, affected by both the positionality of the researcher and the researched.”

(Bierema, 2002, p. 258) [Unit# D56-258]

The value for a researcher of understanding and investigating social phenomena through an interpretive perspective is that they can learn about how the world is seen through the eyes, minds and experience of those participants (Lincoln & Guba, 1985). Further, understanding how others view the world can lead to uncovering a deeper understanding of ourselves and who we are, as described by article O:

“Engagement in social practice is the fundamental process by which we learn and so become who we are” (Storberg-Walker, 2008, p. 562) [Unit# O63-562]

The essence of the *Understanding and Investigating Social Phenomena* theme is one of understanding some social phenomena based on a subjective understanding and interpretation of the world (interpretive epistemology). I see this theme as describing concepts of interpretive research and of social constructivism (Lincoln & Guba, 1985). I have described both of these ideas previously in this document and encourage readers to review Chapter II for more detailed information.

*Theme 3: A Functionalist Worldview*

The third theme identified in the research category is entitled *A Functionalist Worldview*. As the reader may remember from Chapter II, functionalism is the name that
Burrell and Morgan (1979) applied to the concept of post-positivism. In functionalism, the goal is to regulate an objective world:

“From a functionalist paradigm perspective, units are often the independent, moderating, and mediating variables that combine to produce a dependent variable.” (Storberg-Walker, 2008, p. 558) [Unit# O31-558]

Several authors used a functionalist perspective as seen in the above example; however, there were also some negative or humorous remarks regarding the notion of functionalism. This example from article A criticizes positivistic reviewers:

“Want to get scorned in the editorial process of scholarly writing? Try placing humorous perspectives in your literature review (Berk, 1998). You will likely receive a stern reprimand from surly, positivistic reviewers blasting the inappropriate levity of your prose.” (Roth, 2002, p. 351) [Unit# A2-351]

I take functionalism and post-positivism to represent identical ideas. A post-positive perspective has been a dominant research epistemology within HRD (Swanson & Holton, 2001); although many HRD scholars have advocated for alternate research perspectives (Bierema, 2002; Lee, 2001; Lincoln & Guba, 1985). One result of a post-positive dominance in HRD, as evidenced by the final example unit, is that those advocating for alternate research perspectives tend to poke fun at or demean post-positivistic perspectives. However, I did not see any evidence, in the articles surveyed, of this kind of reaction from post-positivistic advocates regarding interpretive or other forms of research.
A Functionalist Worldview theme encompassed those units that described a functionalist or post-positivistic epistemology. These units assume that the world is logical and that all things can be understood within some level of certainty.

Theme 4: Critical

The Critical theme advocates for the heightened awareness in other perspectives. The others in this theme typically represent those groups who have historically been misrepresented or under-represented, such as African Americans, women, and indigenous cultures. Units in this theme often described specific issues that their authors claimed had been under-represented within HRD. Units from articles D and G expressed several of these issues:

“HRD has not vigorously studied diversity, equality, power, heterosexism, discrimination, sexism, racism, or other issues of oppression in organizations.”
(Bierema, 2002, p. 245) [Unit# D3-245]

Valuing all people is described as a core component of this theme, as a unit from article G illustrates. There is a strong need for capitalist societies to value others.

“With regard to today’s world, it is necessary and even imperative for a capitalist society that heavily values productivity and efficiency to appreciate basic human values such as social equality and justice.” (Yang, 2004, p. 257) [Unit# G48-257]

Sub-Theme 1: Feminist Perspective

A sub-theme within the Critical theme included several data units that addressed specifically the role of and need for a Feminist Perspective within HRD. These data
units often articulated what the feminist perspective is and how a feminist views knowledge.

“Feminist research views knowledge as socially constructed and holds as its premise that the knowledge of women is marginalized, devalued, and invisible in large part because women have been traditionally excluded from the knowledge creation process.” (Bierema, 2002, p. 247) [Unit# D22-247]

Although only one specific sub-theme was identified here, it is likely that additional sub-theme in this category exist within HRD. For nearly every group that has been socially or culturally misrepresented, there is likely research that has been conducted that informs our understanding of and advocates for those groups. Feminism focuses specifically on the misrepresentation of women and of gender inequality (Bierema, 2002); however, there are many other groups that have been subjugated. Racial, ethnic, national, religious, sexual orientation, and age subjugation are a few examples of potential additional sub-categories. All of these examples likely exist within HRD research and could be logically represented here as additional sub-themes within the Critical theme.

The essence of the Critical theme is one of emancipation, to free those voices that have been marginalized. This theme is perhaps best associated with the notion of a critical epistemology which has similar, if not identical, goals.

Theme 5: Describing Methodology within Research

The fifth theme focused on Describing Methodology within Research. The two most prevalently described methodologies were qualitative and quantitative, which may
not, in fact, be methodologies. Qualitative methodologies typically use the voice or text of a participant to describe research (Merriam, 1998). Quantitative methodologies typically use some form of numeric value to describe research (Swanson & Holton, 2001). Further, data units describing a methodology in HRD typically focused singularly on these two approaches, as evidence by this unit form article D:

“A wide variety of research designs is used in HRD, and there appears to be a balance in methodology between qualitative and quantitative approaches”

(Bierema, 2002, p. 257) [Unit# D50-257]

Two units from articles N and O provided two different examples of how the ideas surrounding quantitative and qualitative perspectives were discussed.

“Quantitative designs are less effective in capturing the complexity of context.”

(McGuire, Garavan, O'Donnell, Saha, & Cseh, 2008, p. 345) [Unit#N78-345]

“From a qualitative research perspective, each analytical component must be unique—it is necessary to rigorously define/specify each component so that there is no overlap in definitions.” (Storberg-Walker, 2008, p. 567) [Unit# O92-567]

Further, although several units described methodology using qualitative and quantitative descriptors, other units described methodology as a different concept altogether, as this unit from article K describes.

“The most widely used methodology for developing new systematic training programs is often called instructional systems design (ISD). (Allen, 2006, p. 430) [K1-430]
Given all of the above example units, there appears to be some lack of clarity regarding the distinction between methodology and methods. As units D, N, and O illustrate, many authors describe methodology in regards to different qualitative and quantitative views. However, as unit K illustrates, methodology could be described as a process used for developing something.

The Describing Methodology within Research theme described approaches to conducting research. Often, these approaches were described as being either qualitative or quantitative. However, there was evidence of other views on what methodology entails. These different perspectives provide evidence of a lack of clarity on how authors define methodology and distinguish methodology from method.

Theme 6: Describing Specific Methods within Research

The Describing Specific Methods within Research theme described the specific approach or technique that was used by the research to investigate the phenomena. From a qualitative perspective, data units described methods using different types of interviews, such as: open-ended, close-ended, group, structured, and semi-structured interviews (Merriam, 1998). From a quantitative perspective, data units described using methods such as structural equation modeling, meta-analysis, and factor analysis (Swanson & Holton, 2001). Two examples from articles F and M depict how research methods were typically described:

“Semi-structured interviews with open-ended response categories allow for the exploration of the subjective meanings encountered during the interview process (Bailey, 1982). In contrast to a standardized close-ended format, open-ended
interviews enable subjective meanings to be considered” (Bonnin, Lane, Ruggunan, & Wood, 2004, p. 11) [Unit# F14-11]

“A survey research method was used to investigate the associations among organizational culture, organizational subculture, leadership behavior, and motivation to transfer.” (Egan, 2008, p. 310) [Unit# M103-310]

Additionally, in regards to the research methods used, several data units described methods as being specific to a methodology or an epistemology. For instance, in regards to feminist research, article D described the types of methods that are often utilized:

“Feminists embrace all modes of inquiry including well-known research methods such as interviews, ethnography, survey research and statistical analysis, experimental studies, cross-cultural studies, oral history, content analysis, case studies, and action research.” (Bierema, 2002, p. 254) [Unit# D41-254]

“Feminists also apply uniquely feminist methods (see Reinharz, 1992) such as consciousness raising, group diaries, scale creation, drama, genealogy and network tracing, multiple narrative, conversation/ dialogue, intuition, identification, personal experience, structured conceptualization, photography, and self-interviewing.” (Bierema, 2002, p. 255) [Unit# D42-255]

This last example of specific feminist research methods speaks to the interrelatedness of these research themes. A feminist perspective allows for a certain type of methodology that then also specifies particular methods; these notions seem to indicate that each of these themes is related to each other.
**Theme 7: Context Specific Discussions of Research Results**

The seventh theme in this category provides the *Context Specific Discussions of Research Results*. Within the articles, especially the research articles, authors provide detailed description and results of their investigation. Most authors provided a several page presentation of these results. Although, all of these descriptions and results were captured in this analysis, the vast majority of them are focused on the specific research topic of the article. As this study is focused on a higher level of analysis, it was deemed not necessary to articulate all of the *Context Specific Discussions of Research Results* within the 16 articles. However, similar in nature to the Theory category theme 5: *Context Specific Descriptions of Specific Theory*, this theme encapsulates the core results and descriptions of specific research, relative to each researched problem and its context.

**Theme 8: Recommendations, Cautions, or Deficiencies of Research**

This theme is comprised of those data units that in some way provided *Recommendations, Cautions, or Deficiencies of Research*. Recommendations were typically future-oriented and tended to impart suggestions regarding further research on a topic.

“Research is needed that asks deep questions of how people learn, the impact of context, and the meanings people attach to work.” (Hatcher, 2006, p. 2) [Unit# I9-2]

“In-depth qualitative investigation would be helpful in confirming the personal values of managers and in seeking to study more fully the impact of context.” (McGuire, Garavan, O'Donnell, Saha, & Cseh, 2008, p. 345) [Unit# N77-345]
These examples illustrate common recommendations because they both described the kind of research that would be needed for future study within their given topics. While recommendations of research tended to be both future-oriented and positive in tone, cautions about the research tended to take a more neutral tone and focused on warning other researchers:

“Caution should be exercised in extending the results to other cultures and samples of line managers.” (McGuire et al., 2008, p. 344) [Unit# N76-344]

Cautions for other research often addressed those problems or deficiencies that authors saw within their own research or body of relevant literature. The final area of focus in this theme addressed deficiencies with other research. Authors’ expressing a deficiency tended to be more negative in tone and often suggested that there were significant gaps in our understanding of a topic.

“Failure to capture richness, context, and multiple perspectives in analysis is another feminist criticism of social science research.” (Bierema, 2002, p. 258) [Unit# D54-258]

“Presenting a study out of its historical contexts, while ignoring the overall literature on economic development, and following the research domain defined by a single empirical study, is seen as problematic and misleading to sound HRD research and theory development” (Wang & Swanson, 2008, p. 80) [Unit# P8-80]

In summary, the Recommendations, Cautions, or Deficiencies of Research theme within the research category describes critiques of research and researcher practices.
These critiques often called for further research to answer questions or to further inform understanding within a topic. It was also noted that there seemed to be a value-oriented tone present within each of these areas. This tone ranged from positive in nature, describing what the future might hold; to negative in nature, articulating a problematic understanding. Further, this theme was seen as a mediating influence to all other themes in this category. The *Recommendations, Cautions, or Deficiencies of Research* theme often focused on an area of study (e.g., NHRD) or a specific type of research (e.g., feminist research). The existence of this theme is not a surprising result as the requirements for publishing in applied fields like HRD encourage authors’ to describe implications for future research.

**Theme 9: Responsibilities of Research and Researchers**

The final theme within the *Research* category describes the *Responsibilities of Research and Researchers*. Within this theme, data units describe the value of research and often called for more understanding in regards to epistemologies, methodologies, and methods. In general, all research practices were seen as needing some guiding principles. Three examples of these types of articulated value statements can be seen from articles D, I, and O:

“As researchers, we have a constant responsibility to critically evaluate our questions, methods, and findings.” (Bierema, 2002, p. 264) [Unit# D69-264]

“We need to learn all we can about workplace ethics and how ethics should be applied to HRD.” (Hatcher, 2006, p. 3) [Unit# I19-3]
“Empirical evidence—from any paradigm—is needed to generate new knowledge.” (Storberg-Walker, 2008, p. 575) [Unit# O121-575]

Similar to the Recommendations, Cautions, or Deficiencies of Research theme, this theme is seen as mediating and informing all of the prior themes within the Research category. The values that are expressed often described all of research, not one specific research topic or area. The Responsibilities of Research and Researchers theme name was chosen to try and articulate these value statements and position this theme as a mediating influence to all others within this category.

Having described all of the themes in the Research category, next is a discussion of the practice category themes.

**Themes Expressed within the Practice Category**

The practice category consists of ideas that pertain to the practical outcomes of the articles investigated. I have defined practice as the activities, outcomes, or results (generally presented in real-world terms) that are suggested or implied of any idea, process, or phenomenon. The data units in this category describe the outcomes of the articles and the topics they discuss. Within this category, the open coding of data units clustered around six major themes: (a) Levels of Practical Outcomes, (b) Topics of Practice, (c) Context Specific Outcomes and Beliefs of Practice, (d) Applicable Tools for Practice, (e) Problems and Critiques of Practice, and (f) Goals for Practice. Further, there were several sub-themes associated with several themes in this category. Themes and sub-themes in the research category are described below.
Theme 1: Levels of Practical Outcomes

There was a clear indication in the Practice category of data units that described various Levels of Practical Outcomes. In using the term levels, I am indicating that there were different groups to which practical outcomes were often targeted. The five levels identified were: (a) individual, (b) group, (c) organizational, (d) national, and (e) global and societal. These levels often indicated to whom the results or outcomes of the unit were targeted.

Further, several data units provided additional support for the sub-themes as they described the use of one or more of these levels. Two examples from articles I and J provide evidence of this notion that outcomes can be targeted at multiple levels:

“Understand that HRD has responsibilities and consequences beyond the obvious. HRD has many stakeholders, including learners, employees, management, processes, groups, organizations, communities, the profession, society, and the ecosystem.” (Hatcher, 2006, p. 3) [Unit# I15-3]

“We are seeing a dramatic shift occurring that continues the evolution of HRD from an individual focus in training, to an organizational and process focus in organization development (OD), to the emerging applications to communities, regions, nations and national consortia.” (Byrd & Demps, 2006, p. 555) [Unit# J8-555]

These two examples illustrate well the multiple levels at which the outcomes were often described. In describing practice, authors often described one level and then articulate how that understanding could benefit another level. Additionally, the level at
which the authors described a practical activity or outcome could further aid in
describing the second theme within this category (Theme 2: *Topics of Practice*). Thus,
the selection of a level was interpreted as being a first stage or building-block in
articulating the *Levels of Practical Outcomes* of the research. Each of the sub-themes
(specific levels) is described below.

**Sub-Theme 1: Individual Level**

The *Individual Level* represented a sub-theme of the *Levels of Practical Outcomes* theme in the *Practice* category. It describes outcomes of practical activities and targets those outcomes at a person:

“Successful WFD [Workforce Development] systems also benefit individuals by
building their potential for success in the world of work and their capacity to
make positive contributions to the communities in which they live.” (Naquin &
Baker, 2002, p. 133) [Unit# C3-133]

“At the individual level, it is well accepted that goals and performance feedback
are the most effective interventions available to improve learning and
performance” (London & Sessa, 2006, p. 306) [Unit# L51-306]

Individuals were clearly a major outcome focused level within the practice
category. Many data units described outcomes targeted at people or individuals. The
*Individual Level* was also seen as having a clear connection to the *Group Level*
(described below). In the individual level, context specific topics of practice were broad
and diverse ranging from areas of study like leadership to improving feedback between
people.
Sub-Theme 2: Group Level

The *Group Level* sub-theme described practical outcomes that were targeted at a group or a team. Although, there are distinctions between a team and a group (Noe, 2008; Tubbs, 2004), for simplicity of analysis, no distinction was made here other than to suggest that there are differences between them. These data units often described the role of individuals within a group and the outcomes of groups.

“Other explanations for differences between results for different occupational groups could be differences in workplace culture, differences in characteristics of persons in different lines of work, and differences in standards or regulations in different fields.” (Brewer & Shapard, 2004, p. 118) [Unit# H21-118]

“Teamwork is required between personnel performing system functions and those designing, developing, and implementing instructional systems” (Allen, 2006, p. 438) [Unit# K58-438]

“Groups use feedback about their actions and choices to determine behaviors that should be repeated in the future when the same or similar circumstances arise” (London & Sessa, 2006, p. 306) [Unit# L56-306]

The group level was interpreted as being intimately connected to both the *Individual Level* and the *Organizational Level* (discussed below). There were several data units that presented multiple influencing levels. The reason for this intimate connection could be attributed to their relationship to one another. As article L describes:

“Individuals are embedded in groups and groups in organizations” (London & Sessa, 2006, p. 305) [Unit# L38-305]
Sub-Theme 3: Organizational Level

The Organizational Level sub-theme within the Levels of Practical Outcomes theme in the practice category is representative of those data units that describe an outcome of practice as being attributed to an organization. As with the individual level and group level sub-themes, there were many descriptions of organizational level outcomes:

“In general, flexible work schedules are expected to provide such organizational benefits as increased employee job satisfaction, organizational commitment, and productivity, and decreased absenteeism and turnover.” (Rogier & Padgett, 2004, p. 91) [Unit# E8-91]

“In the United States, HRD is generally practiced within the context of organizations.” (Byrd & Demps, 2006, p. 560) [Unit# J27-560]

“From an HRD practice point of view, these findings suggest that organizations interested in influencing motivation to transfer, and therefore meaningful organizational learning overall, must focus efforts on shaping organizational subunits.” (Egan, 2008, p. 317) [Unit# M131-317]

The Organizational Level sub-theme was also influential to the Individual Level, Group Level, National Level (described below), and Global/Societal Level (described below) sub-themes. Topics within the organizational level often described the use of multi-national organizations, politics, and culture.
Sub-Theme 4: National Level

The *National Level* sub-theme describes a national focus of a practice activity. In the *National Level* sub-theme, some data units describe an individual level influence; however, the vast majority describes an organizational level influence. Further, there also appear to be a connection between the *National Level* and *Global/Societal Level* sub-themes.

“Expatriate managers were found to be key figures in transferring learning across national boundaries” (Hetrick, 2002, p. 344) [Unit# B21-344]

“Like many other countries, South Africa has a comprehensive, relatively complex, national skills accreditation and development framework.” (Bonnin, et al., 2004, p. 7) [Unit# F1-7]

“NHRD [National Human Resource Development] presents the opportunity for the HRD profession to partner with governments and nations and expand our research and practice in the context of larger performance systems.” (Byrd & Demps, 2006, p. 560) [Unit# J28-560]

These examples illustrate some of the variation within national level descriptions. As can be seen, some data units focused on outcomes of specific nations, whereas others addressed general national outcomes. The *National Level* sub-theme was also described as being an emerging idea, specifically within the context of HRD, as can be seen in the last example from article J. The national sub-theme often addressed topics like rural areas within a nation, developing nations, policy, politics, and governance.
Sub-Theme 5: Global and Societal Level

The final sub-theme in the Levels of Practical Outcomes theme describes outcomes at a Global and Societal Level. This sub-theme, like that of the National Level sub-theme, was depicted as being emerging. It was not clear as to exactly what a global and societal level contained; however, authors described their practice as having or needing a global focus or context.

“HR policies and practices were consistently used on a global basis as providing a common language understood across the many different countries in which the MNC [Multi-National Corporation] operated.” (Hetrick, 2002, p. 346) [Unit# B23-346]

“I realized that the ethnocentric, Western perspective that we have is not adequate to represent the field [HRD] in a global context.” (Byrd & Demps, 2006, p. 554) [Unit# J4-554]

The Global and Societal Level sub-theme tended to discuss specific organizational topics and then relate those topics to global and societal levels. There also was a focus on policy and governance in terms of a global agenda.

In summary, the Levels of Practical Outcomes theme within the practice category describes outcomes in terms of levels. The levels identified were individual, group, organizational, national, and global and societal. Of those five levels, individual, group, and organizational clearly had more accumulation of data units and discussion within data units. The national and global and societal levels appear to be either emerging concepts or areas that were not discussed within these articles. In the Levels of Practical
Outcomes theme, there was also clear evidence of a connection between levels. Specifically, the individual and group levels were often discussed together, national and global and societal levels were often presented together, and the organizational level served as a connecting element between these discussions.

**Theme 2: Specific Topics of Practice**

The Specific Topics of Practice theme describes areas of practical outcomes that were specific to the articles. Although there are numerous topics that were studied within these 16 articles, there was evidence to indicate five different specific topics of practical outcomes. These five are identified and described briefly below.

**Sub-Theme 1: Governance, Policy, and Politics**

The Governance, Policy, and Politics sub-theme is comprised of data units that advocated a practical outcome of improving political structures at various levels. This theme described outcomes that could be improved or adapted by governance, policy, or politics. Data units in this theme often focused at the organizational and national levels. Three examples from articles C, J, and P illustrate this theme.

“A mutually reinforcing set of policies and governance structures enables the WFD [Workforce Development] system to provide the greatest possible benefit for society.” (Naquin & Baker, 2002, p. 135) [Unit# C12-135]

“I think policy – making, implementation, evaluation and adaptation – needs to be core to our HRD programme coursework – regardless of the context in which HRD is practiced. Policy is a powerful point of leverage for change and thus
should form an important part of the repertoire of skills of the HRD professional.” (Byrd & Demps, 2006, p. 558) [Unit# J19-558]

“In the political arena, the interactions of social forces of modernization and existing power structures led to a certain degree of instability and internal violence and to less participatory forms of political structure.” (Wang & Swanson, 2008, p. 85) [Unit# P44-85]

**Sub-Theme 2: Training and Development**

*Training and Development* was seen as a sub-theme within the *Topics of Practical Outcomes* theme because articles often described an outcome of training and development. Articles F and N, provide example units.

“Individuals are more likely to gain jobs if they have formal internationally recognized training and on-board experience in sought-after areas, such as tankermen” (Bonnin, Lane, Ruggunan, & Wood, 2004, p. 5) [Unit# F6-5]

“Training and development can give organizations a competitive edge in the content and delivery of products and services.” (McGuire, Garavan, O'Donnell, Saha, & Cseh, 2008, p. 336) [Unit# N12-336]

Authors discussed the implications of their research for training and development and made recommendations as to its improvement or adaptation in practice. The *Training and Development* sub-theme tended to focus at the individual, group, and organizational levels.
Sub-Theme 3: Education and Teaching

The Education and Teaching theme was described as a sub-theme of practical topics. Education and teaching were often described as being necessary for some outcome or other practice activity to occur. Three examples from article B, G, and K illustrate how education and teaching were often described.

“The respondents all expressed themselves as pioneers of HRM or ‘missionaries’ educating and teaching their counterparts in Polish firms about HRM as distinctive from personnel management.” (Hetrick, 2002, p. 341) [Unit# B18-341]

“Modern educational systems, such as professional education, normally start from teaching students with explicit/technical knowledge and then having them observe the real behavior through internship and practicum.” (Yang, 2004, p. 243) [Unit# G41-243]

“All instruction should be based directly on mission or job requirements.” (Allen, 2006, p. 438) [Unit# K62-438]

The above three data units describe the role of education and teaching as being important to different practice activities. This sub-theme tended to focus at the individual, group, and organizational levels.

Sub-Theme 4: Learning and Performance

The Learning and Performance sub-theme describes practical outcomes relating to the ideas of learning and performance. It should be noted that, in several cases, authors described a learning outcome, a performance outcome, or a learning and
performance outcome. Two examples of learning outcomes can be seen from articles G and M.

“All of the existing concepts and models of (critical) reflective learning seem to have adopted a pragmatic approach to adult learning, assuming that experience is the starting point of learning.” (Yang, 2004, p. 251) [Unit# G37-251]

“To the extent that a major success factor in organizational learning outcomes is employee utilization or transfer of learning to workplace applications, motivation to transfer is a central consideration for HRD.” (Egan, 2008, p. 303) [M37-303]

Performance was also described as an outcome of practice as evidenced by this unit from article K.

“The criteria are directly linked to performance requirements in the field.” (Allen, 2006, p. 439) [Unit# K69-439]

Finally, there were several units that specified a learning and performance outcome of practice. Two examples from articles I and M describe these learning and performance outcomes.

“We need to expand our frame beyond performance and learning and seek to understand more about the contextual factors at work.” (Hatcher, 2006, p. 2) [Unit# I8-2]

“Understanding motivation to transfer is essential for HRD and has important implications regarding investment in HRD efforts, organizational learning, and performance.” (Egan, 2008, p. 318) [Unit# M142-318]
As the above units indicate, the ideas of learning and performance were sometimes presented together, and at other times they were presented separately. Data units in this theme were most often described as existing at the individual, group, and organizational levels.

**Sub-Theme 5: Culture**

Finally, *Culture* was depicted as a specific practice-context related sub-theme. Three example units from articles B, L, and M illustrate how culture was often described.

“For an international company to be successful, it should have the capacity to coordinate its employees to achieve the same goals through one global culture, as well as having the ability to be responsive to local customs and markets.” (Hetrick, 2002, p. 333) [Unit# B2-333]

“Some groups establish a culture in which feedback is an expected part of interaction.” (London & Sessa, 2006, p. 315) [Unit# L103-315]

“Innovative cultures emphasize values more oriented toward change, dynamism, excitement, and entrepreneurialism, with an attitude of acceptance focused toward challenge, risk, creativity, and experimentation.” (Egan, 2008, p. 304) [Unit# M52-304]

As the above units illustrate, many units in the *Culture* sub-theme described how culture was important to an outcome or they described culture as being an outcome in and of itself. Culture was typically described as being a function of the group, organizational, and national levels.
Theme 3: Context Specific Outcomes and Beliefs of Practice

The *Context Specific Outcomes and Beliefs of Practice* theme focused on the outcomes and beliefs that authors described as being relevant to practice. Although there were many data units contained within this theme, these data units were specific to the topic under study. These practical outcomes or beliefs were often either stated or suggested by article authors. Because these outcomes and beliefs are specific to the topic under study, describing all of these ideas is beyond the scope of this analysis. As an example consider this unit from article P:

“To avoid a world economy functioning under the two types of circles [rich get richer; poor get poorer] that operate and drive the dynamics of divergence in opposite directions, a “critical mass” in between is deemed to be necessary.”

(Wang & Swanson, 2008, p. 101) [Unit# P54-88]

In this article P unit, the authors are describing a belief regarding the necessity of a ‘critical mass’; however, the unit does not make sense unless you clearly understand the topic that they are investigating, in this case, economics.

This theme is nearly identical in nature to Theme 5: *Context Specific Descriptions of Specific Theory* in the *Theory* category and Theme 7: *Context Specific Discussions of Research Results* theme in the *Research* category. All three of these themes are similarly titled because of their role in describing theory, research, and practice within the context of the topic that was the article’s focus.
Theme 4: Applicable Tools for Practice

The Applicable Tools for Practice theme describes concepts that could be utilized or had been utilized to investigate practice topics. The Applicable Tools for Practice theme was seen as being independent of context specific topics because authors often described multiple venues or topics that could be aided by the tool:

“By 1999, HRM [Human Resource Management] in the MNC [Multi-National Corporations] subsidiaries was consolidated through HR [Human Resource] tools, such as performance appraisal, reward and compensation, job evaluation, etc., most of which had been transferred from the parent company, with HRM defined as part of the corporate philosophy.” (Hetrick, 2002, p. 343) [Unit# B19-343]

“Although alternative work arrangements have been adopted in a variety of industries and professions, they have been especially popular in large public accounting firms because the demanding work schedule, especially during the busy season, has made it difficult to attract and retain qualified female accountants” (Rogier & Padgett, 2004, p. 90) [Unit# E6-90]

“If younger employees are more likely to experience burnout than are older employees, it might be beneficial for employing organizations to take preemptive measures against burnout, such as aiding employees in developing coping skills” (Brewer & Shapard, 2004, p. 105) [Unit# H13-105]

As the examples illustrate, the Applicable Tools for Practice theme described specific techniques, philosophies, or work practices that could aid in addressing practice-
based problems. The *Applicable Tools for Practice* theme was seen as mediating the other themes described here as it describes tools specific for the levels and the topics of practice.

**Theme 5: Problems and Critiques of Practice**

The *Problems and Critiques of Practice* theme describes those data units that critiqued practice or identified a problem with practice. Data units in this theme suggested that there is a deficiency or lack of some activity, often, within a national or organizational context:

“The unless employers assume leadership roles in school to-work transition programs, the development of skill standards, and work based learning experiences and other initiatives, it is unlikely that significant numbers of students will have opportunities to participate, receive appropriate skills as a result of their participation, or attain the kind of recognition essential for success in the business world” (Naquin & Baker, 2002, p. 146) [Unit# C31-146]

“South Africa’s training institutions enjoy an excellent international reputation in industry that has become global, but have yet to institute a system commensurately capable of training and certificating seafarers to a uniformly high standard and providing socio-economic conditions necessary to attract and retain a committed workforce” (Bonnin, et al., 2004, p. 18) [Unit# F24-18]

“Constant changes in the instructional environment, increasingly complex job requirements, new instructional technologies, emerging automated instructional
development tools, and other changes, stretched the capabilities of the ADDIE process” (Allen, 2006, p. 434) [Unit# K27-434]

This theme was seen at all levels but was most prevalently articulated at the organizational level. Organizations were viewed as the entities that created the problems described. The Problems and Critiques of Practice theme was seen as being a mediating influence to both the levels and topic of practice. As a mediating influence, the Problems and Critiques of Practice theme described issues that could additionally aid many different practice outcomes. In many instances similar problems exist within multiple organizations. By identifying and critiquing these problems within one organization, other organizations with similar problems are made more aware of these concerns.

**Theme 6: Goals for Practice**

The final theme of the practice category describes the Goals for Practice. These goals were often articulated at a specific level or a specific practical topic. The Goals for Practice theme was seen as a mediating influence to other themes in the practice category:

“The success of other high-performance WFD [Workforce Development] systems in the world, particularly those in Japan and Germany, underscores the importance of WFD policies and goals that accurately reflect community social, economic, and labor market values and goals” (Naquin & Baker, 2002, p. 139) [Unit# C20-139]

“if you ‘over-educate’ the people, the labour force becomes ‘too expensive’ for the very industries needed to create job opportunity, economic development and
social upliftment, and these organizations end up moving to regions promising cheaper labour prospects.” (Byrd & Demps, 2006, p. 558) [Unit# J16-558]

“The ADDIE goal, which has not changed, is field-effective and efficient instruction that help prepare individuals to meet their work-performance requirements.” (Allen, 2006, p. 434) [Unit# K26-434]

The Goals for Practice theme identifies broad goals for practice activities that were described in units. These goals aid practice by expressing what the desired end result of the activity should be. As a mediating influence, these goals for practice aid multiple levels and practical activities by describing the purpose of those activities.

Having described the three axiom-based categories of theory, research, and practice and the themes and sub-themes that emerged within each, a discussion of how these themes were confirmed is presented. The following section describes the use of the shared side categories and how they were used in the open coding process.

**Confirming Axiom-Based Category Theme Construction: Shared Side Categories**

In the typology used in this analysis, there were three axiom-based categories of theory, research, and practice. Each has been described as existing within a cube, meaning that each category shares its side with one of the other categories (see Figure 4, Chapter IV, Venn diagram depicting this relationship). Thus, three shared sides exist (theory-research, theory-practice, and research-practice) each of which is represented in this analysis as an additional category. Additionally, there exists a point where all three sides meet (theory-research-practice); this point is also represented as an additional category.
Each of these shared sides was used to confirm the construction of the themes that have been presented above. If the themes have been constructed appropriately and are based on the data units identified, then each of the data units contained within the four shared sides categories identify with at least one of the themes from each of the three axiom-based categories of theory, research, and practice.

Shared Sides 1: Theory-Research

On the boundary between the Theory category and the Research category exist a series of data units that describe both categories. This category is entitled Theory-Research to denote this shared side. Data units identified in this category depicted at least one of the six theory themes and at least one of the nine research themes. As an example, consider these two units from articles D and P:

“The third reason why the field of HRD should consider feminist research is because HRD is in the process of defining itself and must entertain a wider range of critical perspectives than traditional theories of learning, performance, and change.” (Bierema, 2002, p. 249) [Unit# D28-249]

The article D example describes types of HRD theory (learning, performance, and change). This articulation clearly puts this unit in the Description of Specific Theory theme within the Theory category. The unit also discusses a specific area of research (feminism). Feminism is a sub-theme within the Advocating Social and Cultural Equality theme in the Research category.

“The lenses used to view HRD and its identity should be firmly based on the core foundational theories of the HRD discipline and on established theory
development requirements and logic.” (Wang & Swanson, 2008, p. 101) [Unit# P135-101]

The article P example addresses, theory development, a function of the Theory Building in HRD theme in the Theory category. At the same time, the article P example also uses the phrase, lenses used to view HRD, a component of The Need for Multiple Perspectives of HRD theme in the Research category.

All data units within the theory-research category could be classified as having one or more affiliations with the themes contained in both the theory and research categories. Authors providing these data units often described a specific theory and some form of research activity (methodology or method) regarding that theory.

Shared Sides 2: Theory-Practice

The Theory-Practice shared sides category was comprised of data units that describe one or more themes contained within the theory and practice categories. These data units tend to focus on the outcome of a specific theory. Articles A and G provide two strong examples:

“Current global conditions are causing severe trauma to organizations, and some HRD practitioners are caught in the middle of it. Perhaps humor and humor theory can help us recognize the lesions below the skin in HRD contexts.” (Roth, 2002, p. 354) [Unit# A17-354]

The article A example denotes a specific category of theory (humor theory) that could be used to aid in improving various levels (organizational and individual) within HRD.
“Holistic learning theory further suggests that learning is not only an individual activity but also a social event (Yang, 2003). An individual learner has to interact with his or her immediate social group or organization within certain social and cultural contexts. The holistic theory posits that for a group or organization to function, there have to be three knowledge facets—critical knowledge, technical knowledge, and practical knowledge.” (Yang, 2004, p. 245) [Unit# G22-245]

The article G example similarly expresses a specific theory (holistic learning theory) and specifies the level (individual, group, and organizational) at which this theory often operates. All data units within this category express one or more themes or sub-themes with both the theory and practice categories.

Shared Sides 3: Research-Practice

The Research-Practice category shares its perspective with both the research category and the practice category. Data units within this theme focused on using some type of research to discuss an outcome or level of practice, as seen in the following examples:

   “most of the research on flexible work schedules has focused on benefits to organizations.” (Rogier & Padgett, 2004, p. 92) [Unit# E10-92]

The example from article E provides a description of prior research (Theme 7: Context Specific Discussions of Research Results, Research category) in the area of flexible work schedules and suggests that this research has focused predominately on organizations (Theme 1: Levels of Practical Outcomes, Practice category):
“HRD inquiry into organizational culture issues has maintained a macro-level perspective conceptualizing employee perceptions regarding their organization as an antecedent (Egan, Yang, & Bartlett, 2004) or as an outcome (Bartlett & Kang, 2004) associated with learning and performance.” (Egan, 2008, p. 302) [Unit# M34-302]

The example from article M describes prior research (Theme 7: Context Specific Discussions of Research Results, Research category) that was conducted on employees (Individual Level sub-theme, Levels of Practical Outcomes theme, Practice category). All data units within this category describe themes contained within both the research and practice categories.

*Shared Sides 4: Theory-Research-Practice*

The final category to discuss briefly is the Theory-Research-Practice category. This category is comprised of data units that in some fashion concurrently describe each of the three axiom-based categories of theory, research, and practice. This category was the smallest in regards to data accumulation. The majority of data units contained in this category expressed a desire for more understanding or described their outcome as being one that could inform theory, research, and practice. Three examples illustrate these types of statements:
“Learning is revered as a foundational philosophical, theoretical, and practical component of HRD.” (Bierema, 2002, p. 248) [Unit# D25-248]

“The failure to critically assess the field’s [HRD] research, dominant research paradigms, and practices could result in the field developing a skewed theoretical and practical base that discounts HRD’s multidisciplinary history.” (Bierema, 2002, p. 249) [Unit# D29-249]

“Feedback contributes to individual and group learning, and this has implications for human resource development theory, research, and practice.” (London & Sessa, 2006, p. 325) [Unit# L145-325]

These examples encapsulate the essence of this category as they all describe an outcome, desire, or criticism of theory, research, and practice. Units also described HRD in general. As this example unit from article A humorously describes:

“Although I may not be able to specify what HRD is, I know that it is bigger than a breadbox” (Roth, 2002, p. 352) [Unit# A9-352]
All data units within this category described at least one theme within each of the theory, research, and practice categories. Further, the *Theory-Research-Practice* category supports to the HRD Cube. Units in this category describe a need for HRD to be understood (as supported by the example unit above) and represent the integration of each axis in the HRD Cube.

**Chapter Summary of Open Coding Results**

This chapter presented results obtained through the open coding of data units. Open coding was used to explore themes and sub-themes within each of the axiom-based categories of theory, research, and practice. Themes and sub-themes that developed within each of the category were presented. The *Theory* category identified six themes, the *Research* category identified nine themes, and the *Practice* category identified six themes. Table 8 summarizes the themes and sub-themes that were presented in this chapter.
Table 8. Summary of Themes and Sub-Themes that were Identified from the Open Coding of Units

<table>
<thead>
<tr>
<th>Category</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory</td>
<td>1. Description of HRD Foundations</td>
</tr>
<tr>
<td></td>
<td>2. Description of Specific Theories</td>
</tr>
<tr>
<td></td>
<td>3. Systems as a Discipline/Systems as a Theory</td>
</tr>
<tr>
<td></td>
<td>4. Theory Building in HRD</td>
</tr>
<tr>
<td></td>
<td>5. Context Specific Descriptions of Specific Theory</td>
</tr>
<tr>
<td></td>
<td>6. Describing the Need, Value, or Purpose of Theory</td>
</tr>
<tr>
<td>Research</td>
<td>1. The Need for Multiple Perspectives of HRD</td>
</tr>
<tr>
<td></td>
<td>2. Interpretive</td>
</tr>
<tr>
<td></td>
<td>3. Functionalist Worldview</td>
</tr>
<tr>
<td></td>
<td>4. Critical</td>
</tr>
<tr>
<td></td>
<td>Sub-theme: 1. Feminist Perspective</td>
</tr>
<tr>
<td></td>
<td>5. Describing Methodology within Research</td>
</tr>
<tr>
<td></td>
<td>6. Describing Specific Methods within Research</td>
</tr>
<tr>
<td></td>
<td>7. Context Specific Discussions of Research Results</td>
</tr>
<tr>
<td></td>
<td>8. Recommendations, Cautions, or Deficiencies of Research</td>
</tr>
<tr>
<td></td>
<td>9. Responsibilities of Research and Researchers</td>
</tr>
<tr>
<td>Practice</td>
<td>1. Levels of Practical Outcomes</td>
</tr>
<tr>
<td></td>
<td>2. Specific Topics of Practice</td>
</tr>
<tr>
<td></td>
<td>3. Context Specific Outcomes and Beliefs of Practice</td>
</tr>
<tr>
<td></td>
<td>4. Applicable Tools for Practice</td>
</tr>
<tr>
<td></td>
<td>5. Problems and Critiques of Practice</td>
</tr>
<tr>
<td></td>
<td>6. Goals of Practice</td>
</tr>
</tbody>
</table>
Each of the themes and sub-themes in Table 8 were described in this chapter. Several data units were presented throughout the chapter to provide examples that illustrate the themes and sub-themes in Table 8. The chapter concluded with a presentation of how the four shared sides categories (Theory-Research, Theory-Practice, Research-Practice, and Theory-Research-Practice) were used to confirm the themes that were identified (see Table 8). Next, Chapter VI will provide a summary of this work, discuss the research results that were reported in Chapters IV and V, and provide some conclusions and recommendations for future research.
CHAPTER VI
SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the study, provides discussion, states the conclusions, and suggests recommendations for theory and future research.

Summary

This section summarizes the problem, purpose, and significance of the study; the literature review; the methods used; and the findings. Further details regarding each of these topics were presented in previous chapters of this document.

Problem, Purpose, and Significance of the Study

This study was designed and implemented to address paradigms in HRD. Specifically, the problem is that there is an uncertain understanding of the paradigms that are represented within HRD as an integrated area of theory, research, and practice. In Chapter I, several perspectives of HRD were presented that identify some of these potential representations of the uncertainty in HRD. Most notably, contention involving the definitions of HRD (i.e., Lee, 2001; McLean & McLean, 2001, Swanson, 1995) and the models of HRD (Lynham, 2007, 2008; McLagan, 1989; McLagan & Bedrick, 1989; McLagan & Suhadolnik, 1989; McLean, 1998; Swanson, 1999; Swanson & Holton, 2001) were discussed as potential examples of these differing perspectives. Chapter I also provided some definitions for, and a brief history of, the notion of paradigms. Throughout this discussion, paradigms were described as being the embodiment of those ideas and beliefs, those perspectives, that an individual or an entire field of study holds.
central to their understanding of the world (Guba, 1990; Guba & Lincoln, 1981, 1994; Lincoln & Guba, 1985).

Chapter I also described a developing model of HRD entitled the HRD Cube (Lynham, 2007, 2008) (see Appendix A). The HRD Cube is an integrated model of relevant theory, research, and practice perspectives of HRD. The HRD Cube was used as the informing theoretical frame for this study. Given the problem that this study addressed, the purpose of this study was twofold: to validate the HRD Cube as a synthesizing model of HRD, and to explicate some of the extant paradigms within HRD. The significance of this study was to gain a deeper understanding of HRD.

Literature Review

The second chapter in this study provided a detailed summary of the history of paradigms and description of the HRD Cube. Paradigms are intimately tied to the idea of epistemologies. As described in Chapter II, several epistemologies were presented that greatly influence HRD, namely; positivism/post-positivism, interpretive, and critical science. These epistemologies influence how the world is interpreted and enacted by individuals in HRD; each represents a different perspective through which to do so.

A paradigm is a lens through which the world is viewed (Kuhn, 1996). The historical development of the word and of the ideas pertaining to paradigms was described in Chapter II in a series of five categories beginning in the early 1960s and ending in the first decade of the 21st century. Although the word, paradigm, has been in existence since at least the year 1483 (Paradigm, 2010), the term gained much of its popularity and recognized status with the work of Kuhn (1996) in the early 1960s. In
these early years, paradigms were seen as specific period(s) of time where one perspective of the world held dominance over all others (Kuhn, 1996). As research and scholarship continued, refinement in the understanding of paradigms occurred (Lodahl & Gordon, 1972), and the idea of multiple paradigms specific to the social and organizational sciences was explored (Burrell & Morgan, 1979; Guba & Lincoln, 1981, 1989; Guba, 1990). This idea of multiple paradigms in the social and organizational sciences lead to what was labeled the paradigm wars (Jackson & Carter, 1993) or the paradigm incommensurability debate (Willmott, 1993). From this debate a series of scholars further developed the notion of multiple paradigms (Guba, 1990) and introduced the idea of a meta-paradigm (Gioia & Pitre, 1990). The final period in the history of paradigms focused on the popularity of paradigms and how this popularity changed interpretations of the word. One effect of this growth in popularity of the word, paradigm, is an increase in the number of ideas that received the label of paradigm (Marris, 2008). Gokturk (2005) described it as a *watering down* of the definition and ideas contained in a paradigm across many social and scientific disciplines.

The HRD Cube was presented as a way of identifying representative paradigms of HRD. Imbedded in the Cube are perspectives of theory, research, and practice (see Appendix A). Each of these three perspectives is denoted as a side of the HRD Cube and has several associated categories. Although opinions differ as to the understanding of paradigms, they are embedded in all three sides of the HRD Cube. Paradigms are grounded in theories and, in some cases, are theories themselves. Paradigms are often grounded in philosophical or metaphysical levels used in research. Paradigms often have
an outcome or performance focus used in practice. Thus, it was posited that each of the cubes within the HRD Cube represented a potential paradigm of HRD. Further details concerning the HRD Cube’s sides and categories were described in detail.

Methods Used

In addressing this study’s problem and purposes, a series of methods focused on document analysis was used. The study was guided by four research questions:

1. What evidence of theory, research, and practice perspectives of HRD exists within the Academy of HRD journals?

2. How does this evidence support, or not, the hypothesized construction of the HRD Cube?

3. What (if any) changes need to be made to the HRD Cube to increase its trustworthiness and utility as a synthesized model of theory, research, and practice in HRD?

4. Given an understanding of the theory, research, and practice perspectives of HRD and the adaptation/confirmation of the HRD Cube, what can be postulated and described about the predominant paradigms of HRD and how can this discovery be used to inform further development of inquiry and practice in HRD?

The articles used in this study came from published Academy of Human Resource Development (AHRD) sponsored journals. The articles selected were treated as the representative voices of their authors. Articles were used as if they were transcribed participant interviews.
Sixteen articles published in AHRD-sponsored journals were purposefully selected in three stages. First, the four AHRD-sponsored journals (HRDQ, HRDI, ADHR, HRDR) were identified. Next, articles were listed in each journal for even numbered years, 2002 through 2008. Finally, one article was randomly selected from each identified journal for each of the four years, comprising a total of 16 articles.

The selected articles were read for clarity and understanding, and units were identified from within each article in a process described by Lincoln and Guba (1985). Units were then coded. First, all units underwent an axial coding process where they were sorted into one of seven potential categories (theory, research, practice, theory-research, theory-practice, research-practice, and theory-research-practice). These categories were predetermined and based on the axes, and interaction of axes, contained in the HRD Cube. Second, each of the three axiom-based categories (theory, research, and practice) underwent an open coding process. During this data coding stage, units were compared using the constant comparative method, and representative themes were identified based on similarity of content.

Findings

The findings are presented in Chapters IV and V. Chapter IV presents those findings that pertain to the demographics of the 16 articles and the results of the axial round of coding. Chapter V presents the themes identified from the open round of coding.

In regards to the findings pertaining to the axial round of coding (Chapter IV), the number of data units collected within theory, research, and practice categories had a
heavy emphasis on practice. The *practice* category had the greatest number of units, followed by *research* and *theory*. The number of units in the shared-sides categories (*theory-research*, *theory-practice*, *research-practice*, and *theory-research-practice*) similarly had a heavy emphasis on practice. Within the shared-sides categories, *research-practice* had the most units, followed by *theory-practice*, then *theory-research*, and *theory-research-practice*. The relationship between the number of units within each of the seven categories was depicted in a proportional Venn diagram (see Figure 4, Chapter IV).

The findings from the open round of coding (Chapter V) identified several themes within each of the three categories of theory, research, and practice. The *theory* category consisted of data units that articulated some aspect of theory. Theory was defined as “any coherent description, explanation, and representation of observed or experienced phenomena” (Lynham, 2000, p. 161). Units within this category often described a specific theory that was being used or explored within the article. Within this category, the open coding of the data units clustered around six themes: Description of HRD Foundations, Description of Specific Theories, Systems as a Discipline/Systems as Theory, Theory Building in HRD, Context Specific Descriptions of Specific Theories, and Description of the Need, Value, or Purpose of Theory.

The *research* category consisted of data units that articulated some aspect of research that was defined as an orderly investigative process for the purpose of creating new knowledge or confirming or replicating prior knowledge (Russ-Eft, 2004; Swanson, 2005a). The data units in this category described a particular approach to research or a
research philosophy of the author. Within this category, the open coding of data units clustered around nine themes, *The Need for Multiple Perspectives of HRD Research*, *Understanding and Investigating Social Phenomena*, *A Functional/Post-Positive Worldview, Interpretive, Describing Methodology within Research, Describing Specific Methods within Research, Context Specific Discussions of Research Results, Recommendations, Cautions, or Deficiencies of Research, and Responsibilities of Research and Researchers*.

Finally, the *practice* category consisted of ideas that pertain to the practical outcomes of the articles investigated. I have defined practice as the activities, outcomes, or results (generally presented in real-world terms) that are suggested or implied by any idea, process, or phenomenon. The data units in this category often described the outcomes of the articles and the topics discussed. Within this category, the open coding of data units clustered around six major themes: *Levels of Practical Outcomes, Topics of Practice, Context Specific Outcomes and Beliefs of Practice, Applicable Tools for Practice, Problems and Critiques of Practice, and Goals for Practice*. Next is presented a discussion of the findings.

**Discussion**

This discussion is organized around the first three research questions. Each question is discussed in sequence, along with my interpretation of the findings presented in Chapters IV and V. The fourth research question is presented in the conclusions section of this chapter.
Evidence of Theory, Research, and Practice Perspectives

The first research question was: What evidence of theory, research, and practice perspectives of HRD exists within Academy of HRD literature? The articles used in this analysis clearly utilized these three perspectives as a way of understanding and interpreting their topics. Evidence of theory, research, and practice can be seen from the classification of data units during the axial coding process. All collected data units were classifiable into at least one of these three perspectives or a combination thereof (i.e., one of the four shared-sides categories).

The practice category was articulated more than the research or theory categories. This finding indicates that it was the outcome of an author’s work that was more often expressed. Additionally, authors utilized more than one perspective to describe their topics, as evidenced by the four shared-sides categories described in Chapter V (theory-research, theory-practice, research-practice, theory-research-practice). Of these four categories, the data units were most numerous if they included the category of practice. Thus, the shared categories of research-practice and theory-practice had more units than did those of the theory-research and the theory-research-practice categories; the later category had the fewest data units. No interpretation of the order of the data units in the shared-sides category was made (i.e., theory-practice vs. practice-theory). Hence, it is impossible to determine which axis (theory, research, or practice) was more influential on a single unit. These findings further support the heavy emphasis on the practice category within the 16 articles.
Although large in number of units, a heavy emphasis on practice is not necessarily a novel finding. HRD has historically been described as an applied area of study (Holton, 1999; Storberg-Walker, 2006; Torraco, 2002), and, as such, the practice category emphasizes the applied nature of HRD. All of the articles that were used came from AHRD-sponsored publications. As described in Chapter IV, one of the missions of AHRD is “to foster research-practice linkages” (Academy of Human Resource Development, 2009a). This mission would logically apply to publications sponsored by AHRD; hence, authors often link their research to practice.

Additionally, the four AHRD-sponsored journals that were used all require authors to identify explicitly how their research connects to practice. To ensure that these connections are made, each article is blind reviewed using a criteria matrix. One element of that matrix mandates that authors explicitly articulate the practical outcomes of their research. Thus, regardless of an author’s desire (or not) to connect research to practice, they are required to make these connections. By mandating research to practice connections, there will undoubtedly be many practice category units and a greater emphasis placed on practical outcomes in HRD.

Many scholars (Garavan, Gunnigle, & Morley, 2000; Lynham, 2002; Marsick, 1990; McGoldrick, Stewart, & Watson, 2004; Swanson, 1999; Storberg-Walker & Chermack, 2007) have claimed that HRD needs to do a better job of integrating theory, research, and practice. The results of the axial coding process (a heavy emphasis on practice) may provide one potential reason why scholars feel that HRD is lacking in
theory and research connections. The publication requirements and the mission of AHRD encourage potential authors to emphasize practice.

If there is an implicit assumption that theory, research, and practice perspectives of HRD should be equally represented within the HRD literature, as suggested by the HRD Cube, then, based on this analysis, these 16 articles are in need of more research and theory connections. It is probable that similar results would be found in the broader extant literature given the article selection process used. However, there are no guidelines from which to gauge how many theory, research, and practice units an article should have. The number of units is only one potential indication of an article’s theory, research, or practice focus.

All units were classifiable into one of the seven possible pre-determined categories; however, the accumulation of units in these categories was not equally dispersed. The HRD Cube is designed as a cube and, as such, is itself comprised of at least 162 smaller cubes, allowing for “other” categories on each axis. Each of these smaller cubes represents a specific perspective of theory, research, and practice. During the axial coding of units, these individual perspectives would be represented in the theory-research-practice category. However, this category did not have 162 units; in fact, it was the smallest of all categories. This is a concerning result as it demonstrates that the literature does not necessarily address an integrating of theory, research, and practice. Rather, each theory, research, and practice perspective is treated more often as an independent idea that is merged with another perspective throughout an article.
In summary, all three axes of the HRD Cube were represented within the 16 articles. The Practice category was found to be the single largest contributor in terms of the number of units identified. However, questions were raised about why practice was emphasized. One potential reason for this emphasis could be attributed to the publication requirements of AHRD-sponsored journals. Next is a discussion of the hypothesized construction of the HRD Cube and the evidence that was collected to support, or not, its construction.

Supporting the Hypothesized Construction of the HRD Cube

The second research question was: How does this evidence support, or not, the hypothesized construction of the HRD Cube? This section provides discussion and connections to the Cube’s current construction. It presents the themes that developed and makes interpretations about each regarding the hypothesized construction of the HRD Cube. Each side of the Cube is described, and support for the Cube as a whole is presented.

Theory Interpretations about and Connections to the HRD Cube

In considering the data collected and the themes developed within the theory category, the hypothesized construction of the HRD Cube is supported. Within the theory side (x-axis) of the HRD Cube (see Appendix A), Lynham has described two significant components; theory areas and disciplines.

The first component is positioned closest to the Cube itself and describes the areas of people, processes, and outcomes of theory. At a superficial level, the results of the theory category suggest that authors often present a theory specific to their topic of
study and do not tend to describe that theory using the words *people, process, or outcomes*.

Lynham’s propositions of people, processes, and outcomes represent a more open classification of specific theories. The heuristic nature of the HRD Cube encourages this open classification. Lynham designed the theory areas of people, processes, and outcomes around Swanson’s (1999) theoretical foundations of psychology, systems, and economics. As described by Lynham (personal communication, August 8, 2009), people, processes, and outcomes are more broadly oriented than psychology, systems, and economics and, thus, allow the Cube to be more inclusive of theory.

Although the use of *people, processes, and outcomes* were not explicitly identified in the analysis, results suggest that informing HRD theory comes from this type of categorization of theory. Ideas labeled as a theory by article authors (see Table 7, Chapter V) could be positioned within these theoretical foundations areas. Theme 2, *Description of Specific Theory*, in the *theory* category, describes many of these ideas. As an example, consider what was found regarding learning theories. Theories about learning (e.g., adult learning, andragogy, behavioral, cognitive, critical pedagogy, critical reflective, holistic, self-directed, situated, social, and transformational) could be considered theories that explain how individuals learn; thus, they could be logically and loosely associated with *people* on the theory side of the HRD Cube. Similarly, leadership theories (e.g., transactional and transformational) could logically be associated with the *people or process or outcomes* areas. The theoretical area of *process* could be associated
with systems theory. Within the outcomes area, several economic theories (e.g., big
push, dual labor market, and human capital) were described and could logically be
associated with this area. Thus, there was evidence to indicate the existence of the
people, processes, and outcomes components of the HRD Cube.

The second significant component on the theory side of the HRD Cube is
positioned furthest away from the Cube and lists informing disciplinary foundations (see
Appendix A). Many of the disciplines presented in the Cube were articulated by authors
in this analysis (see Table 6, Chapter V, for a complete list of ideas labeled as a
discipline by article authors). It is assumed that those disciplines identified in the Cube
are presented as example disciplines and not as an all-encompassing list of HRD-related
disciplines.

Those disciplines identified in this analysis provide evidence for the existence of
many of the example disciplines presented in the HRD Cube. Additionally, they provide
further evidence for the multi-, intra-, inter-, and cross-disciplinary nature of HRD
(McGuire & Cseh, 2006; McLean, 1998). Those disciplines that were identified in this
analysis (e.g. Allied Health, Anthropology, Communication, Community Development,
Economics, Education [Adult and K-12], History, Human Resource Development,
Ideology, Instructional Technology, Management, Performance Improvement, Politics,
Psychology [Behavioral and Cognitive], Sociology, and Systems Engineering) could be
potentially added to the HRD Cube.

Additionally, four of the 16 articles, described HRD as a discipline. As briefly
presented in Chapter I, there has been some debate as to the disciplinary nature of HRD
itself (see Bing, Kehrhahn, & Short, 2003; Kuchinke, 2001b). As evidenced by all of the disciplines identified in this analysis, HRD clearly utilizes multiple disciplines for gaining its informing theoretical understanding. This point is indicated on the theory side of the HRD Cube which further aids in supporting its hypothesized construction.

**Research Interpretation about and Connections to the HRD Cube**

The research side (z-axis) of the HRD Cube (see Appendix A) is entitled *Modes of Knowledge and Inquiry (Metaphysical position)*. In this side of the HRD Cube, three ideas were confirmed through the findings. First, there was evidence of a need for multiple perspectives of HRD. Second, three of the six epistemologies identified in the Cube were identified in this analysis. Third, the undergirding system from which the Cube operates was identified.

The first theme in the research category, *The Need for Multiple Perspectives of HRD*, provides evidence for all of the ideas that Lynham identified on this side of the Cube. Units in this theme described why we need multiple perspectives of HRD. This side of the Cube defines some of those perspectives and provides opportunity to expand or reframe inquiry as needed.

The second component on the research side names six specific epistemologies and denotes metaphysical systems and perspectives of HRD. Of those named epistemologies, three were expressed within the research category: post-positivism, interpretive, and critical. The post-positive epistemology was presented in the *Functional/Post-Positive Worldview* theme. The interpretive perspective is encapsulated
in the *Understanding and Investigating Social Phenomena* theme. The critical perspective is described in the *Critical* theme.

Three epistemologies named in the Cube were not represented: the positivism, participatory, and indigenous perspectives. Although, there was no evidence to suggest that they existed in the 16 articles, the reader is reminded that other articles within the HRD literature may provide evidence of those perspectives not identified.

The majority of data units describing one of the three epistemological perspectives came from the articles that took a critical focus. Post-positivist articles rarely (if ever) discussed their philosophical perspective. Interpretive articles presented their philosophical perspectives on only a few occasions. However, the critical articles generally went to great lengths to describe their philosophical position. This finding may suggest that post-positive and interpretive authors do not feel the need to articulate their philosophical position. Swanson (2005) said that the dominant paradigm in HRD is post-positivism. Perhaps these perspectives have become dominant within the literature such that authors do not perceive the need to describe their undergirding philosophy.

Authors using the critical perspective did elaborate on their philosophical position, suggesting perhaps that they feel required philosophically to justify/clarify their work. These authors may also feel the need to define their philosophical positions because critical theory is relatively new and unknown, as compared with post-positive and interpretative perspectives. Finally, it should also be noted that only one article in this analysis specifically dealt with the critical epistemology.
The third significant finding that confirms the construction of the research side of the HRD Cube is evidence of the undergirding metaphysical system. Lynham has suggested (personal communication, August 8, 2009) that the research side of the HRD Cube has embedded in it an implicit metaphysical system consisting of a series of ontological, epistemological, methodological, method, axiological, and teleological questions that are used to inform research (this system is informed by Guba & Lincoln, 2005, among others). There was evidence in these 16 articles of authors describing this embedded system. Although, this system is not specifically described on the research side of the Cube, all of the themes in this category could be attributed to at least one element of this embedded system.

Further, there is evidence of author confusion regarding the use of methodology and methods. For example, several units described methodology as being either quantitative or qualitative. The imbedded metaphysical system (Guba & Lincoln, 2005), on this side of the Cube, does not consider quantitative or qualitative as methodologies. They are considered two different categories/strategies of methods. The system functions by working down from ontology to methods while always being informed by the context and nature of the phenomenon under investigation. Hence, this confusion raises concerns about where authors obtained these views.

**Practice Interpretation about and Connections to the HRD Cube**

The practice side (y-axis) of the HRD Cube (see Appendix A) describes the domains of outcomes and performance for the inquiry of practice. Significant results
include the confirmation of levels of practice, the relatedness of practice levels, the emergence of developing areas, and specific topics of practice.

The practice side describes nine different domains of outcomes and performance. Of these nine levels, five were described within articles used in this analysis. The Individual Level was presented as a sub-theme of the practice category and corresponds to the individual level on the Cube. The Group Level sub-theme corresponds to the group level on the HRD Cube. Organizations existed both as a sub-theme in this analysis and in the Cube. Similarly, a National Level sub-theme existed in both. A Global/Societal sub-theme was described in this research; the HRD Cube suggests only a global level and suggests the need to add societal level. Thus, this analysis confirmed evidence of the existence of at least these five levels within HRD.

Four levels on the practice side of the HRD Cube were not represented in the articles analyzed: process, family, community, and regional. Although this analysis did not find these levels, they may be represented in other articles. Additionally, certain levels may be more difficult to identify than others. For instance, consider the process level. Many outcomes have an embedded process. Unless that process is specifically labeled as such, then it would not have been captured in this analysis. The Tuckman model (1965; Tuckman & Jensen, 1977) of group development is an example. In the Tuckman model, a group works through a series of stages, beginning with forming and ending with adjourning. One perspective of the Tuckman model is to suggest that its outcome is how the group develops, classifying it in the group level. Another perspective might suggest that its outcome is the process that the group moves through
as it develops, classifying it in the *process* level. Hence, the *process* level may be represented in many of the other levels.

A second significant finding in the *practice* category was that many (if not all) of the levels were related. A unit from article L succinctly describes this relationship:

“Individuals are embedded in groups and groups in organizations” (London & Sessa, 2006, p. 305) [Unit# L38-305]

Evidence of the relatedness between levels, as described in unit L, was seen throughout units in the *practice* category. The *individual*, *group*, and *organization* levels were most often described as being related. The above unit from article L depicts why this is the case. All levels described on the Cube appear to share some form of relatedness. Other than to suggest that all levels exist as domains of outcomes and performance, this relatedness is not depicted in the HRD Cube.

The *National Level* and *Global/Societal Level* sub-themes were described as emerging or developing areas. Many of the units in these themes described an outcome of the work as having the ability to impact a global arena, or having the ability to change a society. In recent years, National Human Resource Development (NHRD) has come to prominence as an area of research in HRD (see Lynham & Cunningham, 2004, 2006; McLean, 2007; McLean, Osman-Gani, & Cho, 2004; McLean, Lynham, Azevedo, Lawrence, & Nafukho, 2008; Swanson, 2007; Wang & Swanson, 2008). Much of NHRD deals with the outcomes of HRD at the *National Level*. Two articles used in this analysis focused on the concept of NHRD; one in support of the idea, the other in
opposition to the idea. Both articles described this national focus as an emerging and developing idea of HRD. These levels are confirmed in the HRD Cube.

The final finding on the practice side of the HRD Cube is the existence of various topics of practice. Although not necessarily a surprising finding, it is interesting to note some of the sub-themes that developed on this side of the Cube. The Topics of Practice theme describes those data units that described a specific topic as an outcome of practice. This theme was divided into five sub-themes: Governance, Policy, and Politics, Training and Development, Education and Teaching, Learning and/or Performance, and Culture. There are undoubtedly more topics of practice in HRD, but these sub-themes represent a sampling of some of those areas on which HRD has focused. Interestingly, many of the units in these sub-themes additionally describe a level of outcome. For example, a learning outcome targeted at an individual. This finding implies that the topic of practice is tied to the level of practice in HRD.

Supporting the HRD Cube as a Whole

There are two additional points to be made when interpreting the Cube as a whole. The Cube relies on the role of context and nature of the problem/phenomenon being investigated. There are mediating themes within each axiom-based category that influence sides of the Cube. Each of these points is discussed below.

Importance of Context and Nature of the Problem/Phenomenon Being Investigated

Lynham placed a dashed line surrounding the HRD Cube (see Appendix A) in which she suggested that the context and the social problems and conditions affect all components of the Cube. This analysis confirmed that the context and nature of the
problem/phenomenon being investigated played an important role in how authors describe their perspectives. Within each category are themes that were tied to the context and nature of the problem/phenomenon being investigated (see Chapter V--theory category, theme 5, research category, theme 7; practice category, theme 3).

An example that was presented in Chapter V illustrates the importance of context. Feminists share a series of methods with other researchers, but also have specific methods that they use. When feminist research is conducted on a specific topic (the context and nature of the problem/phenomenon being investigated); it is the nature of the problem and the kind of inquiry that drive the selection of methodology. Once a methodology has been established, the researcher would select a specific feminist method(s) with which to investigate the phenomenon. Thus, the context and nature of the problem/phenomenon being investigated play a critical role in the research endeavor because these are what drive the selection of methodology and subsequent methods and ensure alignment between the two.

Mediating Themes

Within each of the three axiom-based categories was a series of mediating themes (see Chapter V--theory category, theme 6; research category, themes 8, 9; practice category, themes 4, 5, 6). These themes aided in describing all of the other themes within the category. Mediating themes were often value statements about theory, research, and practice.

For example, within the theory category, the mediating theme of Describing the Need, Value, or Purpose of Theory was identified. Units in this theme often described
why HRD needs theory, why theory is important, and what the value of theory is to HRD. By expressing these views, authors are describing value statements regarding all theory in HRD. Similarly, in the practice category, three mediating themes were identified: *Applicable Tools for Practice, Problems and Critiques of Practice, and Goals for Practice*. These three themes all describe ideas that could be applied to practice as a whole and not one specific practical activity.

The purpose of these mediating themes could be attributed to an author’s desire to see the topic grow and expand beyond what is currently known. Consider the introductory and concluding paragraphs of most published journal articles. Often, the statements of authors within these sections are broad and generalized. These statements are written to introduce and conclude the article, but in writing these types of statements, authors often impart a value statement about their work. What these mediating themes are describing are those types of value statements that are specific to theory, research, and practice.

*Suggested Changes in the HRD Cube*

The third question that this research study sought to address asked: *What (if any) changes need to be made to the HRD Cube to increase its trustworthiness and utility as a synthesized model of theory, research, and practice in HRD?* While this analysis used a limited number of articles, some changes to the HRD Cube are offered for consideration.

Because the Cube has not yet been formally published, there is understandably a limited understanding of the meaning and relationships of the dimensions/categories. As
such, the first priority for the HRD Cube is to be formalized as a developing model of HRD by publishing an article that describes the Cube and defines its theoretical underpinnings.

**Whole HRD Cube Suggested Changes or Improvements in the HRD Literature**

Findings from the axial coding indicated that there was limited evidence of a *theory-research-practice* category. This finding has direct implications for the shape of the Cube and for the nature of the HRD literature. As a cube, the HRD Cube is comprised of at least 162 smaller cubes. Each of these smaller cubes represents a specific perspective of theory, research, and practice. The results of this analysis suggest that there was more evidence to indicate that current HRD literature is better depicted as a Venn diagram than as a Cube. If it is possible to re-conceptualize/orient all of the information contained in the HRD Cube into the shape of a Venn diagram (or similar), then this might prove valuable.

Additionally, it would be valuable to consider how the Cube itself is named. As the title implies, the HRD Cube is designed for use within HRD as an area of theory, research, and practice. But there is evidence to conclude that the HRD Cube may have a broader impact and utility for other applied social science disciplines. On the theory side, evidence was found of multiple informing theories and disciplines used by HRD. There is no reason why these theories and disciplines would not be used by other applied social sciences. On the research side, modes of knowledge and inquiry are metaphysical positions that have applicability to many fields of study and disciplines. Many of those epistemologies described on the research side are not unique to HRD as evidenced by
much of the literature that describes them. On the practice side, all applied sciences focus their efforts at different levels of outcomes; thus, it could be utilized by fields outside of HRD. The HRD Cube could potentially be re-titled to reflect its broader nature and applicability within other applied social science fields and disciplines.

Assuming the shape and name of the HRD Cube is to remain as it is, then changes may be necessary only to specific sides (described below) without significant fundamental changes to the Cube itself. In this case, the Cube may well be informing authors and editors that articles need to be more complete in describing all three sides of the Cube in every article.

**Theory Side Changes**

On the theory side of the HRD Cube, I would recommend that two changes be made. First, the results of this analysis showed that authors do not use the terms *people*, *processes*, and *outcomes*. Lynham indicated that these are categories of theories. I suggest that this distinction be clearly identified. Further, the results suggested that authors often used specific theories to inform their work. It would be helpful to provide examples of specific theories that might exist within each of the categories of people, process, and outcomes, at least in the description of the Cube, if not in the Cube itself.

Second, authors described informing disciplines to which their work was tied. While this aspect of the Cube already indicates that there are “Other” disciplines, it might help to clarify that those disciplines listed are only examples of potential informing disciplines of HRD.
Research Side Changes

The results pertaining to the research side of the Cube did not identify all proposed metaphysical positions. Positivism, participatory, and indigenous were not identified in the 16 articles used. A more detailed look in the HRD literature would likely identify these, as well as others that are not specified on the Cube. It might also be positive to combine positivism and post-positivism into one category. This analysis found no evidence that authors made a distinction in the way they described these two perspectives.

Practice Side Changes

On the practice side, two recommendations appear to be warranted. First, while this analysis did not find evidence of the outcome levels of process, family, community, and regional, it is probable that these levels, and others, are almost certain to be found with additional exploration of the HRD literature.

Second, many of the data units identified in this category showed a degree of relatedness between outcome levels (i.e., individuals form groups, groups form organizations, organizations aid nations, etc.). It might prove beneficial to denote this relationship with dotted, rather than solid, lines on the outcome side of the Cube.

Utility of the HRD Cube

The HRD Cube has been described within this document using several different words. I have described it as a theoretical framework, a typological sort mechanism, a synthesizing model of HRD, a learning tool, and a heuristic. Using each of these descriptions, the utility of the Cube is highlighted.
As a theoretical framework of HRD, the Cube represents a series of HRD-relevant perspectives. These perspectives are informed by HRD literature, and they represent many of the informing theory, research, and practice ideas in HRD. This analysis provides evidence of these literature and theory, research, and practice connections. Further, as a theoretical framework, the HRD Cube depicts the integration of theory, research, and practice perspectives in HRD.

The HRD Cube has been described as a typological sort mechanism (Lynham, Lincoln, Hurt, & Mclean, 2010). As such, the Cube could be used to sort articles within a typology of theory, research, and practice. An article could be read, then sorted based on its informing theory, chosen research philosophy, and practical outcome. This process would identify which smaller cube in the HRD Cube is most representative of that article’s perspectives. Thus, the HRD Cube could be used to show where knowledge gaps are located within a topic of inquiry. The three dimensional construction of the Cube aids those who seek to understand a topic fully by emphasizing where knowledge does, and does not exist.

I have described the HRD Cube as a potential synthesized model of HRD. As a synthesized model of HRD, it describes the extant theory, research, and practice areas of HRD. Similarly, the Cube has been described as a learning tool (Lynham et al., 2010). As a learning tool, it provides HRD educators with a way of organizing and presenting theory, research, and practice components of HRD to learners.

Finally, the HRD Cube’s greatest contribution may be as a heuristic for authors and editors to determine the adequacy of a manuscript in describing as fully as possible
the components that were critical in the conduct of research. Determining if there are
gaps in any one of the axes on the Cube could be useful in helping identify such
adequacy. As a heuristic, the Cube acts as a tool for conducting a meta-analysis of
relevant literature. Within a given topic or phenomenon, the Cube could be utilized to
identify where gaps exist and where historical knowledge resides.

Conclusions

The conclusions of this research are divided into two sections--those conclusions
pertaining to the fourth research question about the paradigms of HRD and personal
conclusions about this research and about the study of paradigms in HRD

Conclusions about Paradigms of HRD

The fourth research question asked: *Given an understanding of the theory, research, and practice perspectives of HRD and the adaptation/confirmation of the HRD Cube, what can be postulated and described about the predominant paradigms of HRD and how can this discovery be used to inform further development of inquiry and practice in HRD?*

On the theory side of the HRD Cube, specific theories were most often described
by authors. Of those specific theories, several authors identified multiple theories about
people (e.g., learning theories), though the theories identified were often broad and non-
specific. Process theories were seldom identified, and outcome theories were limited and
not necessarily related only to economics.

On the research side of the HRD Cube, three of the six modes of knowledge and
inquiry perspectives were identified. The post-positivist perspective was articulated in
some units; however, the majority of authors who wrote post-positivistic articles did not express their philosophical position. The interpretive perspective was articulated. Similar to post-positivistic authors, interpretive authors did not often express their philosophical position. A critical perspective was also articulated; however, authors using this perspective often clearly described their philosophical positioning. Thus, within these 16 articles, it appears that the post-positive and interpretive articles were more dominant than critical articles. Thomas Kuhn (1996) suggested that paradigms pervade all that we do. They become entrenched as a way of thinking. A paradigm is a paradigm because it is assumed to be true within an area of research. Because post-positive and interpretive authors did not articulate their views, it could be argued that they assumed that these views were understood and accepted by the HRD community. Other perspectives provided in the HRD Cube were not identified within these 16 articles; however, it is presumed that a wider sampling of literature would provide examples of these perspectives, as well as others that might not be listed explicitly on the Cube.

On the practice side of the HRD Cube, three outcome levels of practice were clearly described. The individual, group, and organization levels were often articulated. Although two additional levels were identified, national and global/societal, these levels were seen as emerging.

As defined in Chapter I, paradigms are the embodiment of those ideas and beliefs, those perspectives that an individual or an entire field of study holds to be central to their understanding of the world (Guba & Lincoln, 1994). Based on this research, there are at least 18 prospective paradigms of HRD represented in these 16
articles with three dominant theoretical areas, two dominant research areas, and three
dominant practice areas.

The 18 paradigms found within 16 articles provide evidence of the multiple
paradigms of HRD. These 18 represent some of the potential views within HRD as an
area of theory, research, and practice. Additional study will have to be given to these
identified paradigms to understand how they exist within HRD and in what form they
predominantly take within the literature. Further, they indicate that HRD is multi-
paradigmatic. Many of the historical debates and controversies that exist within HRD
may be attributed to these distinct views.

Personal Conclusions

There are several conclusions regarding this type of research that I have come to
in the conduct of this dissertation. I have encountered many struggles throughout the
process. Of course, there are the traditional struggles and problems that every doctoral
student has when writing their dissertation. I have had my fair share of these. However,
the process of discovery also presented many challenges. This dissertation has taken
many different forms. The original conception of this work changed dramatically. As the
months passed, the ideas changed and ultimately developed into this document. During
that process, many forms of discovery happened--regarding paradigms, HRD, the HRD
Cube, and me. Thus, I will discuss some of my personal insights and struggles regarding
this topic.

Paradigms are not easy to study. I think that what makes them difficult is that
everyone and everything exists within at least one paradigm. A paradigm is a paradigm
because people agree on certain assumptions about the nature of reality, and thus what
makes for knowledge of that reality, and appropriate methods to come to know that
reality. These assumptions are implicit and rarely explicated. Thus, the struggle in
studying paradigms is that you have to be able to understand a specific paradigm without
necessarily knowing all of its assumptions. Yet, assumptions are inherent in everything
we do, how we think, and how we act, thus being made explicit through choices of
language, means, and ends of inquiry.

Early in my dissertation work, I came to the conclusion that perspectives are not
paradigms, but a perspective could become a paradigm if a group of people could agree
to and believe in its fundamental assumptions. I have maintained this belief throughout
this process, and it has provided me with a wealth of knowledge. When I read a phrase
that includes the word *paradigm*, I immediately ask myself if the authors are describing
an actual paradigm or if the authors are describing their perspective. More often than
not, those who use the word *paradigm* are not describing a paradigm but, rather, an
individual perspective. This research has made me guarded about how and where I use
the word and discerning about how others use it at well.

I have discovered many things about HRD and the HRD Cube. As with much of
life, HRD is comprised of many gray areas that do not conform to a black and white
spectrum. Really, it does not matter how many colors in the spectrum you have, you can
always seem to find a case in HRD that does not conform. When I was working through
the open coding process (described in Chapter III, results in Chapter IV), the above
metaphor became exceptionally clear. Regardless of how many categories or themes I
created, I could likely find at least one instance where these categories or themes did not make sense. It started me thinking about a broader picture of HRD. There are always going to be scholars who do not agree with a particular perspective. Regardless of how open or specific that perspective is, there will always be someone who disagrees. Perhaps this notion is common in all fields of study, but it might be particularly prevalent within HRD. As a young field/discipline/area of research, HRD is trying to come to grips with what it is, who it serves, and what its area(s) of expertise are. Having an applied focus means that HRD draws a diverse crowd of researchers, scholars, and practitioners. All of these elements create vast potential for differences in perspective and dialectic opportunity. Regardless, the point should be underscored that HRD is comprised of many different views, and, as researchers, scholars, and practitioners, we had better get used to working with all of these different, and often divergent, perspectives.

The HRD Cube could likewise be described using the spectrum of colors metaphor. The HRD Cube represents diversity. Each smaller cube could be represented by a different color. However, the HRD Cube was drawn with dashed lines to indicate that it can grow as new knowledge is create/identified. If each small cube is represented by a color, how many colors would we need? Or, to put this question in a more practical form, at what point does HRD say that the HRD Cube is too big--or is that point ever reached? At what point does it become too diverse--or can it become too diverse? Just as HRD will always have those who disagree, there will always be those who want to confine it and those who want to open it.
On a personal level, I have learned much about myself throughout this research. Perhaps the biggest struggle I have had, and also the biggest conclusion that I have come to, is that I am inclined towards a post-positivist perspective. Having an inclination towards post-positivism, I have an internal desire to answer those questions like, *What are the paradigms of HRD?* Yet, I have come to realize that a question such as this may not be answerable. In recognizing these internal tendencies, I believe that I have come to understand myself better and am able to come to terms with many of these internal debates. Articulating these internal personal paradigmatic struggles aids all who might read this document.

**Recommendations for Future Research**

This section provides some recommendations for future research in two areas: potential research opportunities focused on the HRD Cube, and the identification of paradigms in HRD.

*Future Research on the HRD Cube*

Future research endeavors focused on the HRD Cube have several potential options. Given the results of this study, more investigation into the HRD Cube would appear to be warranted. Utilizing a similar research methodology, investigators could add to the existing data. Adding to this analysis’s data would likely be the single greatest improvement in confirming or modifying a revised HRD Cube. Simply expanding the sample with different articles and with articles outside of the four AHRD-sponsored journals would provide additional details not captured in this analysis.
Additional options might include utilizing specific types of articles, focusing article selection within a single topic of study, using exemplary articles as determined by awards received, or investigating one of the axiom-based categories. Articles of a specific type (e.g., conceptual, research-empirical, literature review, editorials, etc.) could aid in the investigation of the HRD Cube by focusing on literature relevant to the type of article selected. As an example, in conducting this work, two of the articles utilized were editorials. Editorials often describe what the editor (or guest editor) believes to be important for the journal. The two editorials utilized here provided a wealth of perspectives targeting the future of HRD. If the HRD Cube is conceived as a hypothetical model that describes desired outcomes, then conducting a similar study with editorial articles might prove valuable.

Selecting articles based on a specific topic of inquiry may also prove valuable. The HRD Cube in its current construction in designed to accommodate many perspectives of HRD (Lynham, Lincoln, Hurt, & McLean, 2010). In utilizing articles that all focus on a specific topic, the Cube could be adapted so that it is reflective of that topic’s various perspectives on theory, research, and practice.

Exemplary articles might also prove valuable to increasing understanding of the HRD Cube. The Academy of Human Resource Development has an awards committee that annually or bi-annually identifies one article from each of the four sponsored journals. Award winning articles are identified because they exemplify research (Academy of Human Resource Development, 2009b). A potential follow-up study could
be to identify these articles and conduct a similar investigation. Results could aid this study’s finding and contribute further knowledge.

Additionally, studies focused on the HRD Cube could specifically investigate one of the three axiom-based categories within the typology used. This research concluded that there was clear evidence of theory, research, and practice perspectives in HRD. Future studies could focus on one side of the HRD Cube and attempt to describe and define that side’s categories further.

**Future Research on Paradigms of HRD**

Future research in the area of paradigms of HRD could take many different approaches. One such approach would be to try and make explicit those implicit assumptions of a dominant paradigm(s). The fundamental problem with studying paradigms is how to identify an idea/belief/perspective that is assumed. As defined in Chapter I, paradigms are those perspectives that an individual or an entire field of study holds central to its understanding of the world (Guba & Lincoln, 1994). Further, as Kuhn (1996) suggested, paradigms exist in history. A paradigm is a paradigm because it is a dominant perspective within a field of study and defines how normal science functions within that field, i.e., what is taken to constitute normal (acceptable) science within that field. Rarely do individuals express their philosophical perspectives when those perspectives are the same as the dominant paradigm (Kuhn, 1996).

One method of identifying those dominant paradigms of HRD might be to look at published articles (historical context) and identify what types of articles express their philosophical positions (assumptions inherent in a paradigm) and what types of articles
do not. The articles that do not express a philosophical position would tend to indicate that they are written from a dominant paradigm, those that do express a position might be seen as emerging paradigms. Thus, uncovering those dominant perspectives, makes explicit what is otherwise an implicit assumption of a dominant paradigm.

Regardless of the methods that researchers use or the approaches that future investigators might take, more research is needed focusing on both the HRD Cube and paradigms within HRD.

**Chapter Summary of Discussion, Conclusions, and Recommendations**

This chapter summarizes the study, provides discussion, states the conclusions, and suggests recommendations for theory and future research. The first section described the problem, purpose, and significance of the study; the literature review; the methods used; and the findings. The second section provided a discussion and interpretation of this study’s findings. This section was structured around addressing the first three research questions and provided many detailed results and their connection to theory, research, and practice perspectives in HRD. The fourth section presented two conclusions from this research based on the paradigms of HRD and my experiences with this research. Finally, this chapter suggests future research areas for the HRD Cube and for the study of paradigms in HRD.

Throughout the entirety of this document, I have described some of HRD’s public debates and perspectives (through published literature) and some of my personal struggles with paradigms. By understanding these public and personal struggles, the reader is encouraged to consider their own perspectives or paradigms. If we as
individuals can understand and interpret our own paradigmatic controversies, we can then begin to look at those in HRD. People comprise HRD, and it is through those people (scholars, researchers, and practitioners) in HRD that an understanding of HRD will ultimately be gained. However, ambiguity will always exist within HRD, and we must gain a level of comfort with it or find ourselves siloed in one perspective. It is through understanding those individual perspectives, identifying those assumptions that are implicit, and uncovering those paradigmatic controversies that we will be able to explore further the paradigms of HRD. In so doing, we will continue to enhance the development, growth, and maturity of the field.
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APPENDIX A
THE HRD CUBE: A SYNTHESIS FRAMEWORK FOR SELECTING
AND INTEGRATING FOUNDATIONAL THEORY, RESEARCH,
AND PRACTICE IN HRD
THE HRD CUBE: A SYNTHESIS FRAMEWORK FOR SELECTING AND INTEGRATING FOUNDATIONAL THEORY, RESEARCH, AND PRACTICE IN HRD


VITA

Name: Andrew Christopher Hurt

Address: 155 S. Grant Street, Young Hall 442
West Lafayette, IN 47907-2114

Email Address: hurta@purdue.edu

Education: B.S., Organizational Leadership and Supervision, Purdue University, 2001
M.S., Technology, Purdue University, 2004
Ph.D., Educational Human Resource Development, Texas A&M University, 2010

Publications: