A CRITICAL ANALYSIS OF Ph.D. AND Ed.D. DISSERTATION ABSTRACTS PUBLISHED DURING 2009 AND 2010

Thomas W. Newsom, B.S., M.S.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2011

APPROVED:

Ron W. Newsom, Major Professor
Kathleen Whitson, Minor Professor and Program Coordinator
Marc Cutright, Committee Member
Jan Holden, Chair of the Department of Counseling and Higher Education
Jerry R, Thomas, Dean of the College of Education
James D. Meernik, Acting Dean of the Toulouse Graduate School

Newsom, Thomas W. *A Critical Analysis of Ph.D. and Ed.D. Dissertation Abstracts Published during 2009 and 2010.* Doctor of Philosophy (Higher Education), May 2011, 73 pp., 31 tables, references, 67 titles.

The completion of the dissertation certifies the completion of the academic rigors of the doctoral degree and verifies the candidate's achievement of independent scholarship. The Carnegie Project on the Education Doctorate was a 5-year effort to define the distinct purpose of the Ph.D. and Ed.D. in education. The Carnegie Project sought to ensure that the academy moved forward on two fronts: rethinking and reclaiming the research doctorate, the Ph.D., and developing the distinct professional practice doctorate, the Ed.D. The project determined that there has been a blurring of the distinctions between these two degrees over the past half-century which invites examination of their purpose and their content. Given this, this qualitative study examined Ph.D. and Ed.D. dissertation abstracts to determine if abstracts differ in terms of these selected factors: research design, data analysis, use of theoretical frameworks, subjects or participants, the setting or context of the study, and to compare Ph.D. and Ed.D. abstracts to the abstract format recommended in literature to explore if there are differences in the abstracts and to determine to what extent abstracts in either degree are congruent with the recommendations. This study used a digital dissertation database to study 100 Ed.D. dissertation abstracts and 100 Ph.D. dissertation abstracts on the topic of higher education. The design was qualitative and used a frequency of terms and an accepted understanding of concepts between two researchers to reach a conclusion regarding the contents of the abstracts. Two researchers separately coded a selection of dissertations for each degree to establish an acceptable level of credibility for the coding of the abstracts. Multiple findings describe similarities and differences between these two degrees and the extent of the convergence of Ed.D. and Ph.D. abstracts with recommended

abstract components in the literature. The study concludes that many dissertations do not include all eight of the criteria of an ideal abstract and many are not likely to include five of the items. Dissertation abstracts, as they currently exist, are not good tools for use of dissertations as a resource for ongoing research. The study recommends that a national norm for dissertation abstracts would be helpful in improving the ability to use dissertations as a resource for future research.

ACKNOWLEDGEMENTS

There are many people who assisted in the efforts that have resulted in this body of work. I would first like to acknowledge the understanding of my wife Vicky and my three children whose patience during many weekends of research and writing has been invaluable, hopefully now we can have the family weekends back.

A special thank you to my dissertation committee for all their patience and understanding, with special thanks to my chair, Dr. Ron Newsom, who truly showed a genuine interest in me as an individual with a goal of success in this process. He inspired me to complete the work, when the many distractions of life made it difficult to focus.

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

CHAPTER 1

INTRODUCTION

The first United States dissertation-based doctoral degree, in the form of a doctor of philosophy degree (Ph.D.), was awarded at Yale University in 1861 (Malone, 1981). In 1920, the first doctor of education degree (Ed.D.) was awarded at Harvard University (Maher & Ford, 1974). The Ed.D. was created because arts and science faculty generally opposed professional schools awarding the doctorate in the form of the Ph.D. (Richardson & Walsh, 1978). The Ph.D. was patterned after the German university model, intended to be a degree for scholars who wished to specialize in some phase of the arts or the sciences and was for the advancement of research (Brubacher & Rudy, 1968). Historically, the doctoral dissertation has been defined by many to be the final step in demonstration of one's ability to contribute to a profession in a scholarly way. Some argue that this final stage in doctoral education insures the high standards of the educational process and maintains the academic respectability of students (Rudolph, 1990).

The completion of the dissertation certifies the completion of the academic rigors of the doctoral degree and verifies the candidate's achievement of independent scholarship. The Carnegie Project on the Education Doctorate was a 5-year effort to define the distinct purposes of the Ph.D. and Ed.D. in education (Carnegie, 2010a). The Carnegie project sought to ensure that the academy moved forward on two fronts: rethinking and reclaiming the research doctorate, the Ph.D., and developing the distinct professional practice doctorate, the Ed.D. (Carnegie, 2010b). The project determined that there has been a blurring of the distinctions between these two degrees over the past half-century which invites examination of their purpose and their content.

In the historical distinction between the Ph.D. and the Ed.D., it has generally been agreed that the Ph.D. is a research-based degree, and that the Ed.D. is focused as a practical degree for

those wishing to become educational professionals. The dissertation is the body of work that demonstrates the doctoral candidate's ability to conduct original research. When the Ph.D. and Ed.D. degrees in education were developed, scholars described different purposes for these degrees. The literature and authorities indicate there should be differences between the Ph.D. and the Ed.D. It seems logical that the distinction between the degrees would be inferred by the contents of the dissertations; however, research on differences between these two degrees during the 20th century indicates that though there may be a few differences in policies and practices for the two degrees, there apparently is little or no difference in the dissertations produced for either degree (Brown & Slater 1960; Brown 1966; Anderson 1983; Dill & Morrison 1985; Carpenter 1987; Clifford & Guthrie 1988; Brown 1990; Osguthorpe & Wong 1993; Deering 1998). Because there is limited discussion in the literature based on contrasts and comparisons of dissertation abstracts for these degrees, this study analyzes dissertation abstracts found in Digital Dissertations to determine the existence of any differences on selected indicators that may exist in abstracts of Ph.D. and Ed.D. dissertations.

Statement of the Problem

Given that the stated purposes of these two degrees differ and the fact that researchers have concluded that there is no difference in dissertations on which these degrees are awarded, it becomes critical to determine if, in fact, there are distinct differences in dissertations of these two degrees that are evident in the abstracts and if these differences reflect the stated differences of these degrees.

Purposes of the Study

The purposes of the study are:

1. To examine Ph.D. and Ed.D. dissertation abstracts to determine if abstracts differ in terms of these selected factors: research design, data analysis, use of theoretical frameworks, and the setting or context of the study.

2. To compare Ph.D. and Ed.D. abstracts to the abstract format recommended in the literature to explore if there are differences in the abstracts based on these recommendations and to determine to what extent abstracts in either degree are congruent with the recommendations.

Research Questions

1. Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?

2. Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?

3. Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?

4. Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?

5. Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

Significance of Study

The study has the potential to determine the extent to which differences do or do not exist

in the abstracts of Ph.D. and Ed.D. dissertations. The results would support scholars who argue there is no difference or would support those who created the degrees and claimed there are distinct differences between these two degrees. The study may provide knowledge to influence how colleges and universities should distinguish between the two doctoral degrees and communicate those differences to students.

Definitions

In this study research design comprises any statement in the abstract that identifies the research design applied by the author. Also, if there is no statement of design, it is inferred, as possible, based on statements about data analysis, whether analysis was statistical or whether verbal concepts were used.

In this study data analysis comprises statements in the abstract that identify the study as one that employs quantitative or qualitative methods of analyzing data.

In this study indication of existence of theory or theoretical design is only determined if specific reference to theory or theoretical design is stated in the abstract. Existence of theory or theoretical design is inferred based on key words related to theoretical concepts, constructs, or references to recognized theorists.

In this study setting or context of study is determined by the identification of the setting or context of the study sample. No setting or context of study is inferred if it is not directly stated.

In this study the definition of the ideal recommended abstract format applied was developed in 2005 by Miech, Nave, and Mosteller in their article "The 20,000 Article Problem: How a Structured Abstract Can Help Practitioners Sort Out Educational Research." Abstracts that

do not include at least 5 of the 8 defined structural elements are defined as not containing elements of structure.

Limitations

Coding of dissertation abstracts, while based on some proposed schemas for critical factors to plan and describe research and for abstracts, is subjective and interpretive based on the inductive perceptions of the researcher. This subjective interpretation could lead to judgment in the categorization of the elements of the abstracts.

The conclusions drawn can not be generalized over a period of time longer than that of the sample groups, as the sample does not have a historical perspective. The study conclusions should also not be generalized across other academic fields of study or disciplines.

The study is also limited as it only studied dissertation abstracts and did not consider other factors that could distinguish Ed.D. and Ph.D. dissertations such as research requirements, curriculum requirements, and institutional requirements of Ed.D. and Ph.D. programs in higher education.

Delimitations

The study is at this point limited to analyzing abstracts that are available as part of the Proquest Dissertation Abstracts online database. The abstracts that were chosen were limited to those that filtered out using the search criteria of "higher education" in the subject search field, and those that were published between 2009 and 2010. Dissertations in the database that did not include an abstract were also filtered out of the sample.

Assumptions

If, in fact, the purpose of these two degrees differ, then it is assumed that dissertation research for these degrees might differ and that abstracts of Ph.D. and Ed.D. dissertations would differ.

The study assumes that abstracts should describe the research sufficiently to be able to infer the five factors and that abstracts should include several standard points similar to ideal components of an abstract recommended in the literature.

CHAPTER 2

REVIEW OF THE LITERATURE

In American doctoral education the final step in conferral of the doctoral degree lies in the successful completion of the dissertation. “Graduates of doctoral programs in education are responsible for the thinking and research that underlie the philosophies and theories of education, the foundations for the policies, structures, and programs of education” (D’Andrea, 2002, p. 42).

Three areas of existing literature inform this study. First, the following discussion provides a review of the historical development of doctoral degrees in education within the United States. This insight is relevant as it helps frame the understanding that there is at least a perceived difference between the two degrees. This historical perspective of the doctor of education degree (Ed.D.) and the doctor of philosophy degree (Ph.D.). is imperative to gaining a complete understanding of doctorates in the field of education. Second, this review analyzes current research on dissertations to determine the breadth and scope of such research as relevant to this specific study. The third area of interest to this study is the perceived and expected differences in the Ed.D. and Ph.D., and review of published expectations of a select group of institutions that grant the doctorate degree with an emphasis in higher education, to illustrate these differences. This discussion examines the existence of a framework of an explicit understanding that there exists a difference in the two degree types.

Development of the Doctoral Degree in Education

There are a number of differing stages in the literature in regards to the description of the development of doctoral education in the United States (Berleson, 1960; Geiger 1997; Goodchild & Miller, 1997). Much like elementary, secondary, and postsecondary education, the development

of doctoral education in the United States has a strong German influence with an emphasis on preparation of individuals for careers in academia. One scholar looked at this development in four historical settings (Geiger, 1997): from the Civil War to 1890, identified as the formative period; from 1890 to the first World War identified as the American university period; from 1918-1941, identified as the inter-war period; and from 1945-1975, identified as the post war period. Geiger also discusses the modern era that includes doctoral development from 1975 to the present time.

The first dissertation-based doctoral degree, in the form of a Ph.D., was awarded at Yale University in 1861 (Malone, 1981). Yale saw a need to develop an educational degree to help fuel the rapid growth of higher education in America as a result of the increased number of land grant colleges after the conclusion of the Civil War. Yale established the Ph.D. a year earlier, in 1860. The degree at Yale was granted as part of the curriculum of the general college. Not until 1876 was the first graduate school established at Johns Hopkins University (Nettles & Millet, 2006). This identified need for graduate degrees in education was further met by 1900, when over 150 universities across the country were offering post baccalaureate degrees. Columbia, Johns Hopkins, Yale and Harvard, offered a terminal educational doctorate at the turn of the century, all of which were Ph.D. level degrees. Of those post baccalaureate degrees conferred in 1900, 239 of those were Ph.D.s.

In 1920, the first Ed. D. was awarded at Harvard University (Maher & Ford, 1974). The Ed.D. was created because arts and science faculty generally opposed professional schools awarding the educational doctorate in the form of the Ph.D. (Richardson & Walsh, 1978). The Ph.D. was patterned after the German university model, intended to be a degree for scholars who wished to specialize in some phase of the arts and sciences and for the advancement of research (Brubacher & Rudy, 1976). The original Ph.D. was conceived as a degree to be awarded to an

elite cadre of serious students for extended study as they prepared for careers as scholars and researchers (Nettles & Millet, 2006). The Ed.D. was created because of a need for more practitioners to possess the doctorate, and originated as a practitioner's certificate (Maher and Ford, 1974) and was designed as a degree for applied research rather than original research (McLaughlin and Moor, 1991). For a half century after the first Ph. D was granted the doctoral degree steadily grew and spread though the United States. In 1924, 61 universities were granting doctoral degrees. By 1964 that number had risen to 208 (Nettles & Millet, 2006), and in 2008, 693 postsecondary institutions eligible for Title IV funding were conferring Ph.D.s upon their students (National Center for Education Statistics, 2009). Of those, 317 institutions currently offer graduate degrees in the field of education. By the end of the 19th century doctoral education in America had established itself as a core curriculum and model for the basis of what is now known as research universities. Doctoral programs had established an accepted structure that included several years of study with coursework, final examinations, and a dissertation requirement (National Science Foundation, 2006).

The 20th century brought structure to the doctoral degree and specifically to the study of education as a post graduate degree. The first stage of this evolution came when universities began separating professional programs in business, law, and medicine from programs in arts and sciences (Geiger, 1997). By the start of World War I, doctoral education had expanded to over 140 disciplines and fields. With small growth in doctoral enrollment during this time, universities began to use this shift in categorization by field to study doctoral research and the academic structure of the dissertation (Berelson, 1960). By 1920, 615 doctoral Ph.D.s were awarded in the United States, an increase of more than 157% over a 20-year period.

Between 1920 and 1940 the number of doctoral degrees conferred rose almost 500%, and the number of institutions granting these degrees went from just over 61 in 1924 to over 100 in 1940 (Berelson, 1960). At this time in American educational history, the demographic of students began to change with the insurgence of regional accrediting bodies to oversee educational quality and access (Goodchild & Miller, 1997). This shift caused a change in the demographic of doctoral students as the degree was seen as one that reflected academic and intellectual ability rather than socioeconomic background or family history (Geiger, 1997). The creation of the Graduate Records Exam (GRE) in 1937, and its use as an entrance and acceptance tool, gave universities a common tool that did not use socioeconomic or family background as acceptance criteria (Geiger, 1997). This period also saw an increase in scholarly studies of doctoral education, as 14 significant reports on the subject were published by 1945. These reports concentrated for the first time on discussions around the quality of students in doctoral programs and the types of research being produced by students in these programs (Geiger, 1997).

After the second World War, doctoral education got another boost as the GI Bill and federal funding in the form of research grants made post graduate education more accessible (Geiger, 1997). As a result of the Russian space program and the launch of the *Sputnik* spacecraft, the United States established the National Institutes of Health, the National Science Foundation, the Departments of Defense, Agriculture, and the Atomic Energy Commission. All of these entities were funded to focus efforts to increase knowledge through academia and research in order to compete with Russian innovation (Geiger, 1997). This funding directly impacted the continued growth and expansion of education at the elementary, secondary, post secondary, graduate and post graduate levels.

The final period that Geiger describes in the development of doctoral education, from 1975 to present, is the one that has seen the most expansion and revision. Doctoral education has seen some dramatic shifts during this time period as the pressures of productive research and decreasing resources have become the focus of many American universities. Doctoral education has evolved into a complex relationship with academic research, the funding of that research, and the needs of universities to meet the demands of a growing undergraduate population (Gumport, 2005). This pressure is not only from the direct needs of the institution to fill teaching, non-teaching, and administrative roles at the university, but to provide academic professionals for academia. This pressure has been compounded as funding for doctoral programs has shifted. In 1968 the federal government awarded 51,000 fellowships and traineeships to doctoral students. That number plummeted to 6000 by 1981 (Gumport, 2005). The federal government did, however, continue the funding for graduate assistantships through the idea of academic research and fellowship. The 1986 Tax Reform Act increased the burden directly on students as these assistantship stipends became taxable income. Assistantships have become the key source of financial aid for doctoral students as the number of grants and loans dwindle and become more difficult to obtain. In 1975, the number of graduate assistantships around the country was estimated to be at about 160,000 and grew to an estimated 216,000 by 1995 (Gumport, 2005). In 1975 there were 33,755 earned doctorates, up from 9733 in 1960 (Baker, Wolf-Wendel, & Twombly, 2007). Of those degrees conferred in 1975, 7202 were in the field of education (National Center for Education Statistics, 2009). Since 1975 the number of doctoral degrees has grown to an all-time high of 63,712 in 2007-2008, of which 8491 were in the discipline of education (National Center for Education Statistics, 2009). The majority of doctoral degrees are awarded as the Ph.D. or doctor of philosophy but there are 23 other categories of doctoral degrees

including the Ed.D. (doctor of education) that are not considered professional research doctorates (Nerad, 2007).

Colleges of education in the United States play a critical role in the future of higher education in the country. In 2008-2009, of the 4409 accredited institutions that offered degrees at the associate's level or above, 693 of those colleges offered doctoral degrees (National Center for Education Statistics, 2009). The explosive growth of the doctorate degree over the last 20 years is only exceeded by the number of conferred master's degrees. From 1997-2007, the number of masters degrees granted increased by 45%, doctoral degrees increased by 38%. In 2006-2007, and 2007-2008, the number of doctoral degrees granted to females exceeded those awarded to males. In the 20-year period between 1997-2007 females receiving doctoral degrees rose 68%. Education continues to be one of the top fields in which degrees are awarded.

In 2007-2008, more education master's degrees were awarded (176,000), while at the doctoral degree level, education ranked second only behind health professions and related clinical sciences (9886 degrees conferred), with 8491 educational doctorates conferred by 317 institutions (National Center for Education Statistics, 2009). Of those 8491 doctoral degrees in education conferred, 5066 were awarded at 188 public institutions, while 3425 were awarded at 129 private institutions. More educational doctorates were awarded in 2007-2008 than in any of the previous 12 years in which statistics were compiled. Of those doctorates awarded in 2007-2008, 1906 were conferred on white males, 383 on black males, and 149 on Hispanic males. White females accounted for 3683 education doctorates in 2007-2008, while black females earned 1054 degrees and Hispanic females 293 degrees. Of the total 8491 doctoral degrees conferred during the same time period, 679 were awarded to non-resident aliens. Specifically in the discipline of higher education, 376 doctoral degrees were awarded in the United States from 2007-2008. Females

accounted for 229 of those degrees while males were conferred the degree 147 times (National Center for Education Statistics, 2009).

Current Research on Doctoral Degrees

As early as 1903, doctoral degrees were scrutinized when William James warned against the development of a tyrannical machine with unforeseen powers of exclusion and corruption (Golde & Walker, 2006). Researchers have identified a number of areas that are seen as important changes in the context of doctoral education. These changing conditions are being judged by some to indicate that doctoral programs can no longer be effective in meeting their purpose and could lead to some programs becoming obsolete (Golde & Walker, 2006). Time-to-career continues to increase as the expectation becomes reality that new Ph.D.s should complete post-doctoral positions before obtaining permanent tenure positions. This issue is not as pronounced in the field of education as most educational doctorates are awarded to older students who are already in the work place and tend to return to continue with their current institution after completion (Golde & Walker, 2006). Disciplines are evolving at a faster rate than the curriculum, creating tensions as Ph.D. students are challenged to be flexible and inter-disciplinary. Financial support for Ph.D. students is becoming increasingly difficult to secure as institutional funding is decreasing and the need for private funding is increasing. In the field of education, this problem is magnified as the lowest number of teaching or research assistantships are in the area of education. Most educational doctoral students self-finance their education or rely on employers for funding. This leads to a longer time to degree. The average educational tenure for a doctoral student is 8.3 years (Golde & Walker, 2006).

There have also been a number of scholarly writings that directly addresses the doctoral degree in education. One of the first studies was produced in 1951 as part of *The Fiftieth Yearbook of the National Society for the Study of Education, Part I: Graduate Studies in Education.* This study describes the organization and administration of doctoral degrees at institutions that offer teacher-education. The yearbook describes the general development of doctoral and graduate education at colleges and universities in the United States, as well as specific information on individual programs.

Nine years later, in 1961, the American Association for Colleges in Teacher Education (AACTE) published a report titled *The Doctorate of Education, Volume I, The Graduates*. The AACTE report, the first such study on a large scale, questioned all available persons who had received a Ph.D. or Ed.D. in education from the 91 institutions that offered educational doctorates from 1956 to 1958. The study sought to find factors that would increase the quality and quantity of educational doctorates in America. The questions were directed at discovering factors and events that affected a person's ability to achieve the degree. Six factors were eventually identified: age, program length, financial situation of candidates, occupation while seeking the degree, occupation after completion, and the ability of institutions to control these factors.

Also in 1961 the AACTE published *The Doctorate in Education. Volume II, The Institution*. This study expanded on the Volume I study by looking at the institutions instead of the student. The purpose of this study was to identify practices that showed promise and would lead to future increases in the number of educational doctorates produced, as well as areas of doctoral degree production that needed improvement. Like the Volume I study, a questionnaire was administered to the 91 schools offering an educational doctorate from 1956-1958. Select administrators at those schools were asked a series of questions that dealt with admissions

requirements, curricular requirements, and related conditions. The study concluded that there were not meaningful differences in the requirements of the two degrees.

In 1961, a conference report was published to document a conference that was attended by 137 institutional representatives from schools that offered the doctoral degree in education. The conference attendees were convened in order to study the findings of the first two volumes of the 1960 AACTE studies. *The Doctorate in Education, Volume III, Conference Report*, outlined results of the conference held in Chicago from May 2 to May 4, 1960. The attendees were invited to use the 1960 AACTE studies to draw conclusions regarding implications of the study on their own programs and explore the possibility of developing minimum standards for the improvement of educational doctoral programs.

A follow-up study was published in 1964, *The Doctorate in Education, Volume IV, Follow-Up Study*, that continued the work done on the 1960 questionnaire but expanded the study to include an investigation of 5-year career development and job satisfaction. The follow-up study used the same participants as the original study and attempted to draw a correlation between career placement and satisfaction with ability and achievement. The significant finding of the study was that there was no measurable difference between the Ph.D. and the Ed.D. in regards to placement in the field of education.

The 1960 study was again verified in 1966 with a study, *Doctoral Graduates in Education. An Inquiry into Their Motives, Aspirations, and Perceptions of the Program*, that compared findings from graduates from 1963-1964 with those studied in the 1960 report. The main points of the study were to further investigate the cohort from the earlier study and compare them with the cohort of the latter study. Again the results were verified that there was no measurable difference in regards to placement in the field of education.

In 1971, *The Doctorate in Education: An Inquiry into Conditions Affecting Pursuit of the Doctoral Degree in the Field of Education, The Institutions*, was published as a report to update the 1960 AACTE study. The report inquired into 145 institutions that offered doctoral programs in education and included institutions that were sampled in the 1960 study as well as new institutions that had begun offering educational doctorates since that time. The study found that the Ph.D. and Ed.D. in the discipline of education had moved toward similarity in degree requirements, as the Ph.D. for the most part was no longer requiring a foreign language element. This led to increased popularity among students in seeking a Ph.D. instead of the Ed.D.

Although these preliminary studies lay the foundation for research on doctoral studies, the majority of the research in regards to doctoral education has taken place since the early 1990s (Golde, 2001). According to Golde, the majority of this research has focused on two general subjects: the demand for doctoral education in regards to who in the future will seek this level of education, and what is their level of preparedness; and the process and content of the doctoral study in regards to the time to degree, funding for doctoral education and the purpose of doctoral education (Golde, 2001).

The literature is somewhat extensive with studies comparing the Ph.D. and Ed.D. and poses arguments for either a sharper distinction between the two degrees or eliminating one of them (Golde & Walker, 2006). One of the most recent and extensive studies in the area of doctoral education is the Carnegie Initiative on the Doctorate. The Carnegie Initiative on the Doctorate (CID) was a 5-year action and research project that worked with doctoral-granting departments committed to restructuring their programs to better prepare graduates. Six disciplines were included: chemistry, education, English, history, mathematics and neuroscience.

The results of the CID are recorded in three volumes released by the foundation. The first published report, *Envisioning the Future of Doctoral Education: Preparing Stewards of the Discipline - Carnegie Essays on the Doctorate*, is a volume of essays commissioned for the CID project. The question posed to the essayists was, "If you could start *de novo*, what would be the best way to structure doctoral education in your field to prepare stewards of the discipline?" This 2006 publication, argues for the creation of a ritual ceremony of initiation for students entering doctoral education. The final product of the Carnegie Initiative on the Doctorate released in September 2007, The Formation of Scholars: Graduate Education for the 21st Century, written by Carnegie scholars George Walker, Chris Golde, Andrea Bueschel, Laura Jones and Pat Hutchings, distills the lessons learned from five years of work with more than 80 doctoral programs.

The 2006 article, “Putting Doctoral Education to Work: Challenges to Academic Practice,” addressed the idea that professional doctorates are designed to meet the needs of particular groups, and that the Ph.D. now encompasses a wide range of academic pursuits. However, the combination of the Ph.D. and designated professional doctorates does not exhaust the range of doctoral-level education. The researchers asked the question, is there a particular role for a doctoral-level qualification for those who do not wish to follow the academic path of the PhD, or the designated path of existing professional doctorates? This article argued that there is such a need, and identified and explored some of the issues to be faced in addressing such a need. The article also examined issues universities face in meeting the needs of new populations of doctoral candidates, particularly the need to develop new academic cultural practices.

Recent developments suggest that the Ph.D. is at a turning point. Professional groups have criticized the so-called traditional Ph.D. New routes to the Ph.D. are proposed by several bodies and endorsed by one funding council. In light of these developments, it is appropriate to ask what

the implications are for the Ph.D. and for the academy. A focus group was used to gather student responses to these developments. The findings show qualified support: students agree that the Ph.D. should cater for different careers but challenge what they see as a simplistic channeling of Ph.D. routes. However, it is argued that there is cause for concern in the lack of attention paid to student views and the continuing neglect of quality issues in the Ph.D. (Golde & Walker, 2006).

Specifically the doctoral degree in education has become a vast field of study that differentiates itself from other programmatic degrees as it is multidisciplinary and broad reaching. Educational doctoral studies range from administration and supervision of institutions to the theory of individual teaching and learning (Golde & Walker, 2006). Just over 7,000 doctorates of education are awarded each year in the United States: 2,100 in educational administration and leadership, 1,000 in teaching fields, 800 in curriculum and instruction and 700 in the disciplines of educational psychology and the study of higher education (Golde & Walker, 2006).

There have been a number of studies and reports over the last three decades that have concluded that modern day doctoral programs do not meet the needs of students, employers, and society. The general consensus is that many Ph.D. recipients are not prepared well to function effectively in the market place. This ill-preparedness specifically relates to the ability to carry out the wide-range of roles that are currently required by today's professoriate. Studies also continue to conclude that women and ethnic minorities are underrepresented in doctoral programs. Some argue that there is a systematic bias that negatively impacts the number of minorities and women entering and completing doctoral programs. This trend, at least among women is being reversed in the discipline of education. Prior to 1980 educational doctorates were dominated by males, but in 1980 this demographic was reversed and by 2003, two-thirds of educational doctorates were awarded to women. The only other discipline with a higher proportion of women is psychology.

Minorities are also well represented among educational doctorates. Nearly half of all African American Ph.D. recipients are in the field of education (Golde & Walker, 2006).

Doctoral students in education tend to take longer to finish their degrees. In a recent study, engineering students had the fastest progress towards completion of their terminal degree, followed by those studying the sciences, and mathematics. Education ranked only ahead of the humanities and social sciences in terms of time to degree (Nettles & Millet, 2006). This study showed that the mean elapsed time to degree for completers was 5.97 years with those seeking a degree in education at a significantly longer time to completion of 6.28 years. At the time of the study the average cost of doctoral tuition for a year was $35,000, making the total cost of an educational doctorate among the highest of all disciplines.

In 2005, the United States Secretary of Education created the Commission on the Future of Higher Education with a primary task of considering how best to improve our system of higher education, to ensure that our graduates are well prepared to meet our future workforce needs and are able to participate fully in the changing economy (U.S. Department of Education, 2010). The commission is focusing its efforts on achieving this task by exploration of the "testing" of skills (Miller, 2006). One of the chief instruments that the commission has determined useful in this assessment is an instrument developed in 2000 by the Rand Corporation. This tool is designed to measure critical thinking, analytical reasoning, and written communication as general education skills measured by direct student outcomes. Much like the Rand Corporation's interest in higher education accountability, the Pew Charitable Trust has sponsored as a national initiative, the National Forum on College Level Learning, that focused on the comparison of college educated persons in the workforce compared to those in the workforce without a college education (Maki & Borkowski, 2006).

States have also focused on assessment and accountabilities of higher education as state systems have seen more than a 33% decline in funding from the federal government for higher education during the last decade, which has forced states to increase their focus on accountability for the funding allocated to higher education (Maki & Borkowski, 2006). The National State Higher Education Executive Officers Association recently established the National Commission on Accountability in Higher Education with a purpose of reviewing initiatives that states have in place to improve performance and uses of accountability systems (National Commission on Accountability in Higher Education, 2010). States have adopted a system of assessment mandates that calls for use of one or more of three standardized performance models. These models include performance funding, performance budgeting, and performance reporting, with all three models rooted in results, progress, and achievement. The models use traditional tracking over time, benchmarking and comparison, as well as comparison to established standards (Maki & Borkowski, 2006).

Accreditation is also playing a very visible role in assessment of higher education through regional, national, and programmatic accrediting agencies. This role is only increasing as critics of higher education are continually calling for accrediting bodies to move to a more assertive and aggressive stand on their requirements for evidence of actual student outcomes in comparison to stated programmatic goals and competencies (Ewell, 2001). In the 1992 federally mandated Higher Education Act, regional accrediting agencies were forced to change their process of accreditation and reaffirmation to include assessment of learning outcomes. While there are only 6 regional and 2 national accrediting bodies, there are over 60 specialized, professional, and programmatic accrediting organizations that also have an influence on higher education. These 60 organizations tend to be directly linked to professional workforce organizations and while regional

and national accreditors focus on institution assessment, these organizations focus on specific program outcomes and assessment and often require more accountability from institutions in relationship to specific programs (Palomba & Banta, 2001).

This movement towards accountability has had a direct impact on doctoral level assessment, although accountability in doctoral education tends to be influenced more by market conditions and the need for a more educated workforce to drive a sophisticated economy, meet the needs of a global economy, and address issues of international competition. Phillip Cohen believes that the lack of graduates with advanced degrees is becoming a national crisis (Cohen, 2006), and theorizes that future Americans will need graduate professional degrees to get their first job and advance their careers. He argues that in many fields master's level degrees only meet entry level requirements, a statement that is true for the professoriate (Cohen, 2006).

Expectations and Perceived Differences in the Ph.D. and Ed.D.

Since its inception, the Ph.D. degree has been perceived as a research degree. Demonstrating one's ability to conduct research and scholarship that make a unique contribution and meets the standards of credibility and verifiability is the cumulating experience of the Ph.D. degree. (Carnegie, 2006). The Ed.D., from its roots, has always had a theoretical difference from the Ph.D. in that the Ed.D. is intended more for the educational practitioner. The Ed. D. program was conceived to be "equal in rigor, but different in substance" from the Ph. D. (Maher & Ford, 1974). The Ed. D. was created out of a criticism that overly specialized research training leaves future faculty ill-equipped to perform faculty roles, especially teaching. (Golde, 2001).

These theoretical differences in the two doctoral degrees were accepted as practice until 1950, when criticism of the Ed. D. became prevalent among scholars and practitioners. This

controversy led to many universities moving the Ed. D. degree from the graduate school into the college of education. This movement was an effort by universities to eliminate the criticism that the degree did not meet the literal application of traditional graduate school standards. The Ed.D. was designed to prepare scholars for managerial and leadership roles in education, based on curriculum developed to give administrators the ability and knowledge to solve complex problems within the educational setting. The Ph.D. by design is a degree that nurtures researchers, the professoriate, and educational scholars and authors. This perception assumes that the two degrees are overlapping, yet individually distinctive.

In 1971, Phi Delta Kappa and the American Association of Colleges for Teacher Education, conducted a study of the similarities of the two degrees (Robertson & Sistler, 1971). The study concluded that similarities between the two degrees were apparent and becoming more common place. Prior to 1960, one of the most prevalent distinctions between the two degrees was a foreign language competency required by the Ph. D. The Phi Delta Kappa study showed that this requirement was reduced by at least 50% of the Ph.D. programs in the late 1960s and then was eventually eliminated in favor of statistics and computer competencies in the later 1970s and early 1980s.

Carnegie scholars believe that the purpose of Ph. D. training should be the creation of "stewards of the discipline" (Carnegie, 2010a). The completion of the degree should signal a high level of accomplishment in three areas: generation, conservatism, and transformation. Generation is the idea that the Ph. D. holder should possess the ability to generate new knowledge and defend knowledge against challenges and criticism. Scholars should also possess the ability and desire to conserve the most important ideas and findings, and finally be able to transform that knowledge into understanding and application.

Doctoral education has developed over the last century into a system that encompasses a relatively small but widely diverse group of academic programs, with two common assumptions about purpose and process (Golde, 2001). The Ph. D. is assumed to be a research degree, and its primary purpose is teaching scholars to conduct sound, rigorous research.

The *Journal of Higher Education Policy and Management* printed a research article in 2005, "Doctoral Differences: Professional Doctorates and PhDs Compared", that looked at a decade of professional doctorates in Australia that have continued to grow and diversify across a broadening array of disciplines. An empirical study of the doctoral education experience in Australian universities included an examination of doctoral experiences in departments offering both Ph.D. and professional doctorates. The paper discusses professional doctorates in education, management, law and the creative arts, remarks on similarities and differences found between Ph.D. and professional doctorate programs, provides an insight into practice. Three specific areas are discussed. The first is the recruitment and selection of students, student choice of professional doctorates, and perceived career benefits. The second area is the structure and organization of Ph.D. and professional doctorate programs, including the identification of the research topic. The third area is the perceived status of professional doctorates versus the Ph.D. The findings are discussed within the context of government policy on postgraduate education and the emerging literature on professional doctorates. The concluding section of the paper considers the issue of differentiation between the doctorates and possible future developments.

The Texas Education Coordinating Board has also addressed the issue of Ph.D. versus Ed.D. in a commissioned report in 2004, *Doctoral Education in Texas. Part 1: Past Trends and Critical Issues and Doctoral Education in Texas* and *Part 2: Recommendations for the State*. The purpose of this document, the first of a two-part report, was to examine doctoral education

delivered at public universities and health-related institutions in Texas. The second part of the report provides recommendations for enhancing its effectiveness in closing the gaps in participation, success, excellence, and research. The study concerns itself strictly with "research doctorates," including the doctor of philosophy (Ph.D.) degree and "applied doctorates" such as the doctor of education (Ed.D.) degree. The report does not include "professional" degree programs such as doctor of medicine and doctor of pharmacy degrees. The second of a two-part report, raises several key questions about doctoral education in Texas and provides 16 recommendations addressing these questions. The recommendations, listed below, are grouped by six doctoral education issues: quality, statewide planning, access and opportunity, diversity, attrition and time-to-degree, and research funding.

Many universities set the perception that there exists a difference in the Ph.D. and Ed.D. in education, for instance the University of Indiana states: "in most programs the Ph.D. is considered a research-oriented degree, whereas the Ed.D. degree is oriented more to the training of practitioners" (Indiana University, 2010). It should be noted that Ph.D. students are subject to both requirements listed in this bulletin and those listed in the University Graduate School Bulletin. Doctoral students majoring in education may earn either a doctor of philosophy (Ph.D.) degree or a doctor of education (Ed.D.) degree. The Ph.D. is awarded by the University Graduate School and the Ed.D. is awarded by the School of Education.

Temple University is even more specific in its differentiation of the two educational degrees:

> Doctoral degrees in education are not the same! The Department of Education Leadership and Policy Studies offers two excellent doctoral degree programs. The Ph.D. in Urban Education is research oriented whereas the Ed.D. in Educational Administration is directed towards educational practice and the application of theory and research. The Ed.D. is equal in rigor, but different in substance from the Ph.D. The Ph.D. student would typically be a person who is: anticipating a faculty career or an area of practice which demands research

expertise; excited by theory and conceptual analysis; tending toward research and has potential for primarily advancing the theory in the field rather than implementing its practice. An Ed.D. student would typically be a person who is: planning on working in the field primarily as a practitioner; especially interested in developing new technological capabilities; interested in research which tends to emphasize development, evaluation, or field based projects. (www.temple.edu/education/elps/phdvedd.html)

Another example of this expectation of difference is demonstrated with the published explanation of the educational Ed.D. and Ph.D. at the University of Nebraska:

> The Doctor of Education (Ed.D.) - The Ed.D. in Education is a program of study that prepares the student for professional practice. This is the appropriate degree objective for that individual who intends to either pursue or continue a career as a practicing administrator in an educational organization or in a related type of organization. The Ed.D. is a degree intended to help an individual develop leadership skills and become more versed in developing the analytical skills to confront difficult problems of practice. The Ed.D. program will be characterized by the following: a program of studies that enhances the student's knowledge of the profession toward which she or he is focused; the opportunity to gain real life experience in the area of administration the student seeks to pursue, especially through internships oriented directly at student interests; a grounding in the major cognate areas that have been historically important to practitioners; a dissertation focused on a problem of practice; the opportunity to develop group skills by working on collaborative projects; research tool courses aimed at developing analytical skills.
>
> The Doctor of Philosophy (Ph.D.) - The Ph.D. degree in Educational Leadership and Higher Education is a program of study that prepares the student for a scholarly career. As such, students are expected to master a scholarly research tradition in a specific area of educational administration and to be familiar with both quantitative and qualitative research methods in education. We expect that the skills acquired will be the skills of scholarly inquiry and research. While we realize that a person's future is not readily predicted, we intend that a student who elects this degree objective will be oriented toward research and scholarship. Thus, we intend that students seeking a Ph.D. degree will pursue a doctoral program that is characterized by the following: a strong grounding in a scholarly tradition that leaves the student with expertise in the area of their dissertation research; six courses (18 hours) in research tools; the completion of a minimum of six hours of coursework on campus; the completion of several research studies prepared for presentation and publication; a close working relationship with the supervisory chairperson; a dissertation that seeks to add to the knowledge base of its topical domain. (www.unl.edu/gradstudies)

Dissertations and Dissertation Abstracts

The dissertation is the final body of work that marks the completion of the doctorate

degree. It is an accepted standard that completion of a dissertation is required for both the Ed.D. and the Ph.D.. The American Heritage Dictionary defines dissertation as a lengthy, formal treatise, especially one written by a candidate for the doctoral degree at a university; a thesis (American Heritage Dictionary online). The Council of Graduate Schools states the following in regards to dissertations:

1. The dissertation must be an extended, coherent, written work of original research, demonstrating a doctoral candidate's comprehensive knowledge and mastery of methodological, historical, topical, empirical and theoretical issues relevant to the chosen research subject. It must be a significant contribution to scholarship. It must contain the results of extensive critical research of documentary source materials, laboratory work, and/or field work.

2. The doctoral dissertation should (a) reveal the student's ability to analyze, interpret and synthesize information; (b) demonstrate the student's knowledge of the literature relating to the project or at least acknowledge prior scholarship on which the dissertation is built; (c) describe the methods and procedures used; (d) present results in a sequential and logical manner; and (e) display the student's ability to discuss fully and coherently the meaning of the results.

3. The dissertation is the beginning of one's scholarly work, not its culmination. Dissertation research should provide students with hands-on, directed experience in the primary research methods of the discipline.

4. Dissertations should prepare students for the type of research/scholarship that will be expected of them after they receive the PhD degree. (Council of Graduate Schools, 1990)

The abstract is a brief summary of the dissertation research. This summary is intended to inform others about what was accomplished by the dissertation without having to read through the entire dissertation. The intent of the abstract is to give researchers the ability to determine if the full dissertation will meet their research needs. A good abstract should provide enough information about the research and its results that make examining the full dissertation unnecessary.

Even with this need for access to research through dissertation abstracts, a universally accepted structure for abstracts does not exist. With over 1,000 education journals publishing

more than 20,000 articles and 63,712 doctoral dissertations published from 2007-2008 there is no systematic tool available at present to get the research findings from these tens of thousands of articles to the millions of education practitioners in the United States who might use them (Miech, 2005).

Miech has identified three current issues that could be solved by a commonly accepted structured abstract. First researchers may not have the time, access, or motivation to scan scores of full-text journal articles or dissertation abstracts in order to find those that meet the research criteria that they are working with. Second, most computer-generated searches yield only sketchy and incomplete information about studies and findings, and it is extremely difficult to appraise their relevance and importance to specific realms of educational practice. Lastly, the format of the full-text article or dissertation can compound the difficulties of disseminating educational research to others (Miech, 2005). Miesch also proposes a structure for abstracts. The structure that he proposes is as follows:

- Background/Content – Description of prior research on the subject and/or its intellectual context and/or it policy content.
- Purpose/Objective/Research Question/Focus of Study – Description of what the research focused on and /or why.
- Setting – Specific description of where the research took place or was focused.
- Intervention/Program/Practice – Specific description of the intervention, including what it was, how it was administered and its duration.
- Research Design – Description of the kind of research design (e.g., qualitative case study, quasi-experimental, secondary analysis, analytical essay, randomized controlled field trial).
- Data Collection and Analysis – Description of plan for collecting and analyzing data, including description of data.
- Findings/Results – Description of main findings with specific results.

- Conclusions/Recommendations – Description of conclusions and recommendations of author(s), based on findings. (Miech, 2005, pp. 2-4)

The *Publications Manual of the American Psychological Association* is accepted by many graduate schools as the definitive guide to writing dissertations for doctoral study in education. The manual does address content of dissertations abstracts, specifically for those of quantitative studies, the guide describes an abstract to include the following: the topic, in one sentence; the purpose, thesis, or organizing construct and the scope, (comprehensive or selective) of the article; the sources used (e.g., personal observational, published literature); and the conclusions (American Psychological Association, 2010). The manual does not speak to theory or statement of theory as required contents within an abstract. While this does describe the content of an abstract, this does not address the issues that Miech has described.

Other researchers have attempted to establish abstract guidelines, but generally do not depart from those described by the American Psychological Association. Fischer and Zigmond describe the purpose of the abstract to provide a brief summary of the paper and should be written as a mini-paper to contain the following information: introduction; methods; results; discussion; and final summary (Fischer & Zigmond, 2004). These two authors characterize the abstract as one of the most important components of the research article, along with the title. After reading the title, researchers commonly scan the abstract to determine what the authors found, and based on the information they often decide if they will read the rest of the paper (Fischer & Zigmond, 2004).

Literature Review Conclusion and Rational for Dissertation

The literature and authorities indicate there should be differences between the Ph.D. and the Ed.D., but research to date suggests those differences are not evident. The perceived and published differences in the Ed.D. and Ph.D. in education have created inconsistencies in the

understanding of the product of the dissertation between these two degrees. This inconsistency has created a need for scholars to investigate whether or not there exists identifiable differences between Ed.D. and Ph.D. dissertations.

Academic research directed at programmatic differences in the Ed.D. and Ph.D. through the final outcome of the doctorate degree, the dissertation, is not extensive or exhaustive at this time. Educational practitioners are generally advocates for evaluation and standards, so it only makes sense that there would be a need to examine the idea that the perceptions and stated differences in the two degrees be evident in the dissertation.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the qualitative study and states the study's research purpose and questions. Additionally this chapter outlines data collection, justifies the sample used, and discusses the study's validity.

This study employs a qualitative methodology. The use of qualitative research provides the ability to describe and focus on the comparison of doctor of philosophy degree (Ph.D.). and doctor of education degree (Ed.D.) dissertations as seen through dissertation abstracts. Qualitative research has been described as an inquiry into the process of understanding a social or human problem, based on building a holistic picture, formed with words, reporting detailed views of information (Cresswell, 1994). Much of qualitative research is inferential and the study of dissertation abstracts will lead to inferential conclusions. This study analyzed abstracts using researcher perceptions of those abstracts and qualitative study is the appropriate method for analyzing perceptions (Gall, Gall, & Borg, 2003). Qualitative research is also appropriate when the body of research is not comprehensive. There is limited discussion in the literature based on contrasts and comparisons of dissertation abstracts for these degrees. It is appropriate to use qualitative research when the concept lacks theory based on previous research, or when the availability of theory may be inaccurate (Morse, 1994).

Qualitative research is appropriate due to the nature of the study's approach as one that is subjective and interpretive. Qualitative inquiry is fundamentally interpretive (Shram, 2006). In qualitative design the researcher engages in an active process of interpretation and as significance develops it is used to shape the data collection and analysis. Qualitative data can be thought of as the objects and events that the researcher perceives and describes. By perceived, the researched

obtains an impression of an object or event by use of senses, and by describe, the researcher then givens an account of that which is perceived (Shram, 2006).

Qualitative research is also justified based on the type of phenomena being investigated. This study use structuralism, the study of the properties of language and text. Structuralism is clearly identified as a tradition of qualitative research (Gall, Gall, & Borg, 2003). Analysis is done with words. The words can be assembled, sub clustered, and organized to permit the researcher to contrast, compare, and analyze them (Miles & Huberman, 1994). Qualitative design is also appropriate when the research interest is in the characteristic of language in regards to content analysis and the comprehension and meaning of text (Miles & Huberman, 1994). Given the study's research problem and questions examined a qualitative approach is justified.

Purpose of the Study

This study serves the following purposes:

1. The purpose is to examine Ph.D. and Ed.D. dissertation abstracts to determine if abstracts differ in terms of these selected factors: research design, data analysis, use of theoretical frameworks, subjects or participants, the setting or context of the study.

2. To compare Ph.D. and Ed.D. abstracts to the abstract format recommended in literature to explore if there are differences in the abstracts based on these recommendations and to determine to what extent abstracts in either degree are congruent with the recommendations.

This study answers the following research questions:

1. Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?

2. Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?

3. Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?

4. Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?

5. Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

Procedure for Data Collection

Through the ProQuest Digital Dissertation data base, a search of Ph.D. and Ed.D. dissertations, posted in the database during calendar years 2009 and 2010, with the descriptors of higher education as the subject, identified 3,979 dissertations. Dissertations in the database that did not contain an abstract were eliminated from the sample.

Of the sample of dissertations with available abstracts 1,786 were written to fulfill the requirements of the Ed.D., and 2,193 were written to fulfill the requirements of the Ph.D. From these two groups 100 Ed.D., and 100 Ph.D. dissertations were chosen randomly for the purpose of this study.

The dissertation abstracts were collected through the University of North Texas library website at library.unt.edu using the following procedure.

1. Accessing electronic resources at http://irservices.library.unt.edu/

2. Selecting "D" in the option to browse abstract and index titles by name (http://irservices.library.unt.edu/ais.cfm?alpha=D)

3. Select “Digital Dissertations”

4. Search Proquest Dissertations using the following search criteria: date range – last two years; subject – higher education. All other criteria at the search default.

5. From the list every 10th Ed.D. dissertation that includes an abstract and every 10th Ph.D. dissertation that includes an abstract is chosen until arrived at a sample size of 100 in each category is selected.

The contents of the abstracts were collected and recorded relative to each research question in the following way:

1. Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?

Each abstract by category was coded in the affirmative for those that state the research design and in the negative for those that do not state the research design. Those dissertations that do state the research design were further examined to determine if the type of design can be identified and coded using the categories of: descriptive, experimental, quasi-experimental, or other, for quantitative design; and grounded, ethnography, action, or other, for qualitative design.

2. Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?

Each abstract by category was coded in the affirmative for those that state the type of data analysis used and in the negative for those that do not indicate the type of date analysis used. Those dissertations that indicated the type of data analysis used were further examined to determine if the type of analysis could be identified and coded using the categories of: ANOVA, correlation, nonparametric, multivariate, or other, for quantitative

design; and diagramming, coding, typology, analytical induction, or other for qualitative design.

3. Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?

Each abstract by category was coded in the affirmative for those that state the use of theory or base the study's design on a theoretical framework and in the negative for those that do not state the use of theory or base the studies design on a theoretical framework.

4. Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?

Each abstract by category was coded in the affirmative for those that state the institutional setting or context of the study and in the negative for those that do not indicate setting or context of the study. Those dissertations that stated the setting or context of the study were further examined to determine if the setting or context of the study could be identified and coded using the categories of: local/single institution, national, international, other.

5. Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

In this study the definition of the ideal recommended abstract format applied was developed by Miech, Nave, and Mosteller in their article "The 20,000 Article Problem: How a Structured Abstract Can Help Practitioners Sort Out Educational Research." Abstracts that do not include at least five of the eight defined structural elements were defined as not containing elements of structure. Each abstract by category were coded in the affirmative or in the negative in regards to the existence of non-existence for each of the following categories of content: background/context, purpose/research question or

focus, setting, population/participants/subjects, research design, data collection/analysis, findings, and conclusions/recommendations.

Procedure for Data Analysis

Dissertation abstracts were analyzed with data entered on spreadsheets and then manipulated to produce a descriptive profile of each dissertation group. General frequency counts, percentages, and distributions were calculated for each of the degrees given the variables identified by the research questions. In some cases data entered in the spreadsheet for individual abstracts was inferred from the available information in the abstract.

The following variable list was developed as a guide to identify the data used to answer each research question.

1. Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?
    a. Quantitative
        i. Design stated
        ii. Design not stated
    b. Qualitative
        i. Design stated
        ii. Design not stated
    c. Mixed method
        i. Design stated
        ii. Design not stated

2. Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?
    a. Quantitative
        i. ANOVA
        ii. Correlation
        iii. Nonparametric
        iv. Multivariate
        v. other
    b. Qualitative
        i. Diagramming
        ii. Coding
        iii. Typology
        iv. Analytical induction
        v. Other
3. Do Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the studies design on a theoretical framework within the dissertation abstract?
    a. Theory stated in abstract
    b. Theory not stated in abstract
4. Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?
    a. Setting identified in abstract
        i. Local/single institution
        ii. National

iii. International

iv. Other

b. Setting not stated

5. Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

For the purpose of this study the ideal recommended abstract format applied was developed by Miech, Nave, and Mosteller in their article "The 20,000 Article Problem: How a Structured Abstract Can Help Practitioners Sort Out Educational Research."

a. Abstract contains elements of structure. (Abstract that do not include at least five of the eight defined structural elements will be defined as not containing elements of structure.)

i. Background/context

ii. Purpose/research question or focus

iii. Setting

iv. Population/participants/subjects

v. Research design

vi. Data collection/analysis

vii. Findings

viii. Conclusions/recommendations

b. Abstract does not contain elements of structure.

Procedure to Establish Reliability and Validity of the Data

To insure the credibility and trustworthiness of the data the following theoretical

procedures were used to derive a procedure to develop credibility of the data. Qualitative researchers need to test and demonstrate that their studies are credible. While the credibility in quantitative research depends on instrument construction, in qualitative research, the researcher is the instrument (Patton, 2002). Thus, the credibility of a qualitative research depends on the ability and effort of the researcher. Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead, terminology that encompasses both, such as credibility, transferability, and trustworthiness is used (Golafshani, 2003). Triangulation is defined to be a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study (Creswell & Miller, 1997). To do this a second researcher coded a selected number of both Ph.D. and Ed.D. dissertation abstracts to establish coding reliability between two researchers and to refine any errors or limitations in the coding strategies employed by the principal investigator. A coding agreement of 85% was considered acceptable. If the coders coded the data at less than 85%, variations and differences were examined and discussed to describe the procedures that resulted in any differences. It is expected that any differences could be reconciled and as a result the coding strategy be revised as indicated and as necessary to establish consistency of data coding. The results of this comparison coding between the two researchers can be found in the first table in chapter 4.

Reporting the Data

The results of the data are presented by linking the data with each research question. Each research question is answered with corresponding data presented in table format, followed by a

descriptive analysis in the form of an inductive narrative. The tables and narrative use frequency counts and percentages as primary descriptors to arrive at comparison of the two degrees.

CHAPTER 4

RESULTS OF THE RESEARCH

Introduction

This chapter presents data derived from the research method outlined in chapter 3. These data are compiled from the examination of 100 doctorates in education (Ed.D.) dissertation abstracts and 100 doctorates in philosophy (Ph.D.) dissertation abstracts coded according to the design described in chapter 3. The findings are categorized by the two distinct degree types, Ed.D. and Ph.D. This chapter presents the coding of the sample abstracts generated by the descriptive findings for the following research questions identified in earlier chapters:

1. Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?
2. Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?
3. Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?
4. Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?
5. Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

These five research questions are presented in this chapter with a corresponding date table to illustrate the results of the abstract coding.

Establishment of Reliability and Validity of the Data

A second researcher coded a selected number of both Ph.D. and Ed.D. dissertation abstracts to establish coding reliability between two researchers and to refine any errors or limitations in the coding strategies employed by the principal investigator. A coding agreement of 85% was determined to be acceptable. Results of this coding are demonstrated in the table below.

Table 1

Reliability of Coding of Two Researchers

	Frequency Agreed	
	Ed.D.	Ph.D.
Research Question 1	100%	100%
Research Question 2	90%	100%
Research Question 3	90%	100%
Research Question 4	100%	90%
Research Question 5	90%	90%
Total	94%	96%

At the Ed.D. level 94% of the coding agreed, while 96% of the coding agreed in regards to Ph.D. as illustrated in Table 1. Given that the threshold of 85% agreement between the two researchers was met, this study meets the established test of reliability and validity of data as described in the study.

Research Question 1

Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level? The first four tables illustrate the data as collected specifically for the Ed.D. degree.

Table 2

*Ed.D. Abstracts – Frequency of Statement of Research Design and Design Type (*N = *100)*

	Frequency	Percent
Design Not Stated	54	54.0
Design Stated	46	46.0
Qualitative Design	49	49.0
Quantitative Design	38	37.0
Mixed Method Design	5	5.0
Cannot Be Determined	8	8.0

At the Ed.D. level 54% of the abstracts did not directly state the research design as illustrated in Table 2. From information directly stated as to the design of the study or information that inferred the design is was determined that 49% of the abstracts were qualitative, 37% were quantitative, while 5% were mixed method design. There were also 8 abstracts that were examined that did not contain either direct reference to the design or enough information to infer a research design.

Table 3

*Ed.D. Abstracts – Frequency of Design Type when Design is Stated (*n = *46)*

	Frequency	Percent
Qualitative Design	29	63.1
Quantitative Design	12	26.1
Mixed Method Design	5	10.8

At the Ed.D. level 46% of the abstracts directly stated the research design as illustrated in Table 3. Of those that directly state the design 63.1% were qualitative studies, 26.1% were

quantitative studies, and 10.8% were mixed-method studies.

Table 4

*Ed.D. Abstracts – Frequency of Design when Design is Not Stated (*n = *54)*

	Frequency	Percent
Qualitative Design	21	38.8
Quantitative Design	25	46.4
Cannot Be Determined	8	14.8

At the Ed.D. level 54% of the abstracts did not directly state the research design as illustrated in Table 4. Of those that did not directly state the design 38.3% were qualitative studies, 46.4% were quantitative studies, and 14.8% did not contain enough information in the abstract to determine a research design.

Table 5

*Ed.D. Abstracts – Frequency of Data Collection Method Identified (*N = *100)*

	Frequency	Percent
Collection Method Not Identified	27	36.9
Collection Method Identified	73	73.0
Survey	24	32.8
Interview	21	28.7
Focus Group	12	16.4
Document Analysis	9	12.3
Case Study	7	9.6

At the Ed.D. level 73% of the abstracts identified how the data was collected, with the majority of those abstracts that identified the collection method as surveys (32.8%) and interviews

(28.7%) as illustrated in Table 5. The other collection methods identified were focus groups (16%), document analysis (12.3%), and case studies (9.6%).

Tables 6 through 9 illustrate the data as collected specifically for the Ph.D. degree.

Table 6

*Ph.D. Abstracts – Frequency of Statement of Research Design (*N = *100)*

	Frequency	Percent
Design Not Stated	63	63.0
Design Stated	37	37.0
Qualitative Design	34	34.0
Quantitative Design	28	28.0
Mixed Method Design	16	16.0
Cannot Be Determined	22	22.0

At the Ph.D. level 63% of the abstracts did not directly state the research design as illustrated in Table 6. From information directly stated as to the design of the study or information that inferred the design is was determined that 34% of the abstracts were qualitative, 28% were quantitative, while 16% were mixed method design. Of the 100 abstracts that were examined, 22% did not contain either direct reference to the design or enough information to infer a research design.

Table 7

*Ph.D. Abstracts – Frequency of Design Type when Design is Stated (*n = *37)*

	Frequency	Percent
Qualitative Design	19	51.4
Quantitative Design	6	16.2
Mixed Method Design	12	32.4

At the Ph.D. level 37% of the abstracts directly stated the research design as illustrated in Table 7. Of those that directly state the design 51.4% were qualitative studies, 16.2% were quantitative studies, and 32.4% were mixed-method studies.

Table 8

*Ph.D. Abstracts – Frequency of Design when Design is Not Stated (*n = *63)*

	Frequency	Percent
Qualitative Design	16	25.4
Quantitative Design	21	33.3
Mixed Method	4	6.4
Cannot Be Determined	22	34.9

At the Ph.D. level 63% of the abstracts did not directly state the research design as illustrated in Table 8. Of those that did not directly state the design 25.4% were qualitative studies, 33.3% were quantitative studies, 6.4% were mixed method studies, and 34.9% did not have enough information in the abstract to determine the research design.

Table 9

*Ph.D. Abstracts – Frequency of Data Collection Identified (*N = *100)*

	Frequency	Percent
Collection Method Not Identified	27	27.0
Collection Method Identified	73	73.0
Survey	46	63.0
Interview	9	12.3
Case Study	8	10.9
Document Analysis	3	4.2
Other	7	9.6

At the Ph.D. level 73% of the abstracts identified how the data was collected, with the majority of those abstracts that identified the collection method as surveys (63%) as illustrated in Table 9. The other collection methods identified were Interviews (12.3%), Case Studies (10.9%), and Document Analysis (4.2%).

Research Question 2

Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level? At the Ed.D. level 32% of the abstracts stated the form of data analysis used in the dissertation, as illustrated in Table 10.

Table 10

*Ed.D. Abstracts – Frequency of Data Analysis Identified (*N = *100)*

	Frequency	Percent
Data Analysis Identified	32	32.0
Data Analysis Not Identified	68	68.0

At the Ed.D. level 32% of the abstracts stated the form of data analysis used in the dissertation, with the majority of those abstracts that identified data analysis (56.3%) being from the group identified as quantitative studies as illustrated in Table 11.

Table 11

*Ed.D. Abstracts – Identification of Data Analysis Used (*N = *100)*

Design Type	*n*	Analysis Used	Frequency	Percent
Mixed Method	5	Descriptive	1	20.0
		Not Stated	4	80.0

(table continues)

Table 11 *(continued)*.

Design Type	*n*	Analysis Used	Frequency	Percent
Qualitative	50	Comparative	4	8.0
		Data Analysis/Statistical	3	6.0
		Triangulation	6	12.0
		Not Stated	37	74.0
Quantitative	37	ANOVA	8	21.6
		t-Test	2	5.4
		Regression	4	10.8
		Structural Equation	1	2.7
		Correlation	3	8.1
		Not Stated	19	56.7
Cannot Be Determined	8			

At the Ph.D. level 25% of the abstracts stated the form of data analysis used in the dissertation, as illustrated in Table 12.

Table 12

*Ph.D. Abstracts – Frequency of Data Analysis Identified (*N = *100)*

	Frequency	Percent
Data Analysis Identified	25	25.0
Data Analysis Not Identified	75	75.0

At the Ph.D. level 25% of the abstracts stated the form of data analysis used in the dissertation, with the majority of those abstracts that identified data analysis (60%) being from the group identified as quantitative studies as illustrated in Table 13.

Table 13

*Ph.D. Abstracts – Identification of Data Analysis Used (*N = *100)*

Design Type	*n*	Analysis Used	Frequency	Percent
Mixed Method	16	Structural Equation	1	6.3
		t-Test	2	12.5
		ANOVA/Chi Square	2	12.5
		Not Stated	11	68.7
Qualitative	35	Content Analysis	1	2.8
		Phenomenographic	3	8.7
		Ethnographic	1	2.8
		Not Stated	30	85.7
Quantitative	27	ANOVA	4	14.8
		t-Test	3	11.1
		Regression	3	11.1
		Chi-Square	2	7.4
		MultiVariant/CoVariant	1	3.7
		ANCOVA/MANOVA	2	7.4
		Not Stated	12	40.7
Cannot Be Determined	22			

Research Question 3

Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?

At the Ed.D. level 24% of the abstracts reported the use of theory as illustrated in Table 14.

Table 14

*Ed.D. Abstracts – Frequency of Report of Theory (*N = *100)*

	Frequency	Percent
Theory Reported	24	24.0
Theory Not Reported	76	76.0

At the Ph.D. level 20% of the abstracts reported the use of theory as illustrated in Table 15.

Table 15

*Ph.D. Abstracts – Frequency of Report of Theory (*N = *100)*

	Frequency	Percent
Theory Reported	20	20.0
Theory Not Reported	80	80.0

Research Question 4

Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?

At the Ed.D. level 77% of the abstracts report the setting or context of the study as illustrated in Table 16. Of those reported 48% were studies involving a single institution, 37% involved a regional, or multiple institutions within close geographic proximity, while 10.5% were national studies involving institutions within the continental United States, and 3.8% focused on institutions outside the continental United States.

Table 16

*Ed.D. Abstracts – Setting or Context of Study (*N = *100)*

	Frequency	Percent
Setting/Context Not Reported	23	
Setting/Context Reported	77	
Single Institution	37	48.0
Regional	29	37.0
National	8	10.5
International	3	3.8

At the Ph.D. level 57% of the abstracts report the setting or context of the study as illustrated in Table 17. Of those reported 50.8% were studies involving a single institution, 33.4% involved a regional, or multiple institutions within close geographic proximity, while 14% were national studies involving institutions within the continental United States, and 1.8% focused on institutions outside the continental United States.

Table 17

*Ph.D. Abstracts – Setting or Context of Study (*N = *100)*

	Frequency	Percent
Setting/Context Not Reported	43	
Setting/Context Reported	57	
Single Institution	29	50.8
Regional	19	33.4
National	8	14.0
International	1	1.8

Research Question 5

Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

For the purpose of this study the ideal recommended abstract format applied was developed by Miech, Nave, and Mosteller in their article "The 20,000 Article Problem: How a Structured Abstract Can Help Practitioners Sort Out Educational Research." Abstracts that do not include at least five of the following eight defined structural elements are defined as not containing elements of structure. The eight elements include: (1) background/context; (2) purpose/research question or focus; (3) setting; (4) population/participants/subjects; (5) research design; (6) data collection/analysis; (7) findings; and (8) conclusions/recommendations.

At the Ed.D. level 53% of the abstracts contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 18.

Table 18

*Ed.D. Abstracts – Meeting 5 of 8 Elements of Structure (*N = *100)*

	Frequency	Percent
Meet 5 or more of 8 Elements	53	53.0
Do Not Meet at least 5 of 8 Elements	47	47.0

At the Ed.D. level, data collection/analysis is the least frequently appearing element (32%), while findings appears in all but six of the dissertation abstracts in the sample. Table 19 illustrates the frequency of each the eight defined elements of an abstract for Ed.D. level abstracts.

Table 19

*Ed.D. Abstracts – Contain Elements of the Ideal Structure (*N = *100)*

	Frequency	Percent
Background/Context	47	47.0
Purpose/Research Question or Focus	83	83.0
Setting	78	78.0
Population/Participants/Subjects	65	65.0
Research Design	46	46.0
Data Collection/Analysis	32	32.0
Findings	94	94.0
Conclusions/Recommendations	16	16.0

At the Ed.D. level more than half (56%) of the abstracts contain four or five elements of the ideal abstract, as illustrated in Table 20.

Table 20

Ed.D. Abstracts – By Number of Elements per Abstract

Number of Elements Contained	Frequency	Percent
All 8 Elements	1	1.0
7 Elements	5	5.0
6 Elements	19	19.0
5 Elements	28	28.0
4 Elements	28	28.0
3 Elements	15	15.0
2 Elements	3	3.0
1 Element	1	1.0
None	0	0.0

At the Ed.D. level 58% of the abstracts that have been identified as qualitative design

contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 21.

Table 21

*Ed.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Qualitative (*n = *50)*

	Frequency	Percent
Meet 5 or more of 8 Elements	29	58.0
Do Not Meet at least 5 of 8 Elements	21	42.0

At the Ed.D. level 54% of the abstracts that have been identified as quantitative design contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 22.

Table 22

*Ed.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Quantitative (*n = *37)*

	Frequency	Percent
Meet 5 or more of 8 Elements	20	54.0
Do Not Meet at least 5 of 8 Elements	17	46.0

At the Ed.D. level 80% of the abstracts that have been identified as mixed method design contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 23.

Table 23

*Ed.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Mixed Methods (*n = *5)*

	Frequency	Percent
Meet 5 or more of 8 Elements	4	80.0
Do Not Meet at least 5 of 8 Elements	1	20.0

At the Ed.D. level none of the abstracts that were classified as design can not be determined contained five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 24.

Table 24

*Ed.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Cannot Be Determined (*n = *8)*

	Frequency	Percent
Meet 5 or more of 8 Elements	0	0.0
Do Not Meet at least 5 of 8 Elements	8	100.0

At the Ph.D. level 51% of the abstracts contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 25.

Table 25

*Ph.D. Abstracts – Meeting 5 of 8 Elements of Structure (*N = *100)*

	Frequency	Percent
Meet 5 or more of 8 Elements	51	51.0
Do Not Meet at least 5 of 8 Elements	49	49.0

At the Ph.D. level, data collection/analysis is the least frequently appearing element (25%), while findings (87%) and purpose/research questions or focus (85%) appear the at the highest level of frequency. Table 26 illustrates the frequency of each the eight defined elements of an abstract for Ph.D. level abstracts.

Table 26

Ph.D. Abstracts – Contain Elements of the Ideal Structure

	Frequency	Percent
Background/Context	67	67.0
Purpose/Research Question or Focus	85	85.0
Setting	57	57.0
Population/Participants/Subjects	70	70.0
Research Design	36	36.0
Data Collection/Analysis	25	25.0
Findings	87	87.0
Conclusions/Recommendations	19	19.0

At the Ph.D. level more than half (65%) of the abstracts contain between four and six elements of the ideal abstract, as illustrated in Table 27.

Table 27

*Ph.D. Abstracts – By Number of Elements per Abstract (*N *= 100)*

Number of Elements Contained	Frequency	Percent
All 8 Elements	1	1.0
7 Elements	7	7.0
6 Elements	20	20.0
5 Elements	23	23.0
4 Elements	22	22.0
3 Elements	16	16.0
2 Elements	7	7.0
1 Element	4	4.0
None	0	0.0

At the Ph.D. level 45.7% of the abstracts that have been identified as qualitative design contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 28.

Table 28

*Ph.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Qualitative (*n = *35)*

	Frequency	Percent
Meet 5 or more of 8 Elements	16	45.7
Do Not Meet at least 5 of 8 Elements	19	54.3

At the Ph.D. level 66.6% of the abstracts that have been identified as quantitative design contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 29.

Table 29

*Ph.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Quantitative (*n = *27)*

	Frequency	Percent
Meet 5 or more of 8 Elements	18	66.6
Do Not Meet at least 5 of 8 Elements	9	33.4

At the Ph.D. level 75% of the abstracts that have been identified as mixed method design contain five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 30.

Table 30

*Ph.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Mixed Method (*n = *16)*

	Frequency	Percent
Meet 5 or more of 8 Elements	12	75.0
Do Not Meet at least 5 of 8 Elements	4	25.0

At the Ph.D. level 18.1% of the abstracts that were classified as design can not be determined contained five of the eight elements as defined by Miech, Nave, and Mosteller as illustrated in Table 31.

Table 31

*Ph.D. Abstracts – Meeting 5 of 8 Elements of Structure by Design Type: Cannot Be Determined (*n *= 22)*

	Frequency	Percent
Meet 5 or more of 8 Elements	4	18.1
Do Not Meet at least 5 of 8 Elements	18	81.2

CHAPTER 5

SUMMARY AND DISCUSSION

Introduction

The completion of the dissertation certifies the completion of the academic rigors of the doctoral degree and verifies the candidate's achievement of independent scholarship. Historically, the doctoral dissertation has been defined by many to be the final step in demonstration of one's ability to contribute to a profession in a scholarly way. Some argue that this final stage in doctoral education insures the high standards of the educational process and maintains the academic respectability of students (Rudolph, 1990). The purposes of this qualitative study were to examine doctor of philosophy degree (Ph.D.), and doctor of education degree (Ed.D.) dissertation abstracts to determine if abstracts differ in terms of these selected factors: research design, data analysis, use of theoretical frameworks, and the setting or context of the study, and to compare Ph.D. and Ed.D. abstracts to the abstract format recommended in the literature to explore if there are differences in the abstracts based on these recommendations and to determine to what extent abstracts in either degree are congruent with the recommendations.

The study addressed five specific research questions which were answered via a method of coding applied to dissertation abstracts. Data generated by this research design produced information that resulted in conclusions for each of the five research questions.

Discussion of Research Question 1

Is there a difference in the frequency of the stated research design and the types of designs applied between educational dissertations at the Ph.D. and Ed.D. level?

There is a slight difference in the frequency of the stated research design and the types of design between Ed.D. and Ph.D. dissertations. The examination of abstracts from the two degree

types revealed the following:

The study revealed that 46% of Ed.D. abstracts directly stated the research design while only 37% of the Ph.D. abstracts stated research design. Abstracts written for Ed.D. dissertations were more often qualitative (49%) than Ph.D. dissertations (34%). Abstracts for Ed.D. dissertations that directly stated the design were identified as 29% qualitative studies, while 12% identified themselves as quantitative studies, and 5% were mixed method. Of those Ph.D. dissertations that identified the research design 19% were qualitative, 6% were quantitative, and 12% were mixed method.

When the design was not directly stated by the abstract, and the design had to be inferred by the reader quantitative design appeared with more frequency. In Ed.D. abstracts 25% were inferred as quantitative, while 21% were inferred as qualitative. In Ph.D. abstracts 21% were inferred as quantitative, 16% inferred as qualitative, and 4% as mixed method. This inference of design was a result of the existence of information regarding data collection and data analysis directly stated in the abstract. In the case of Ed.D. abstracts 8% of those examined did not either directly state the research design or provide enough information to infer the research design. In the case of Ph.D. abstracts 22% of those examined did not either directly state the research design or provide enough information to infer the research design.

The Ed.D. and Ph.D. abstracts identified data collection method with the same frequency, 73%. Both abstracts identified Survey as their most frequent collection method. Ed.D. abstracts identified survey as a collection method in 24% of those studied, while Ph.D. abstracts identified survey as the method of collection in 46% of those studied.

The research suggests that while there is a slight difference in the frequency of state research design the real difference between Ed.D. and Ph.D. abstracts lies in the information

provided in the abstracts that allows the reader to directly determine or infer the research design. Among the 100 Ph.D. abstracts that were examined 22 did not either directly identify the method or give enough information to infer a method, while only eight of the 100 Ed.D. abstracts did not state method or provide enough information for it to be inferred. This suggests that those persons completing Ph.D. dissertations may not be as aware of method as it relates to the significance of the study.

Discussion of Research Question 2

Is there a difference in the type of data analysis used in educational dissertations at the Ph.D. and the Ed.D. level?

There is no evidence that there is a significant difference in the type of data analysis as presented Ed.D and Ph.D. abstracts. The examination of abstracts from the two degree types revealed the following:

The study revealed that only 32% of the Ed.D. abstracts and 25% of the Ph.D. abstracts identified the data analysis method that was used in the study. Within those Ed.D. abstracts that identified data analysis, 56.3% were from studies identified as quantitative, while Ph.D. studies that identified data analysis were quantitative at a frequency of 60%. Of those identified within both sets of abstracts ANOVA was the most frequently used method appearing in 21.2% of the Ed.D. studies and 18.65 of the Ph.D. studies.

Discussion of Research Question 3

Do dissertation abstracts indicate that Ph.D. dissertations more often than Ed.D. dissertations report the use of theory or base the study's design on a theoretical framework?

There is no evidence that Ph.D. abstracts more often indicate the use of theory than Ed.D.

abstracts, in fact the study revealed that Ed.D. abstracts indicate use of theory with a slightly higher frequency then do those abstracts for Ph.D. dissertations. The examination of abstracts from the two degree types revealed the following:

The study revealed that 20% of the abstracts examined for Ph.D. dissertations indicated use of theory in the study. Within those Ed.D. dissertations that were studied 24% indicated the use of theory. Within the Ed.D. abstracts studied only one theory, Bandura's concept of self-efficacy and learning environment activities, appeared more than once. In the Ph.D. abstracts that were studied the only theory that was indicated more than once was grounded theory. Within those abstracts that indicated theory, grounded theory was indicated in 20% of those abstracts.

Discussion of Research Question 4

Is there a difference in the setting or context of the study in dissertations at the Ph.D. and Ed.D. level?

There is evidence that there is a significant difference in the setting or context of the study between Ed.D. and Ph.D. abstracts. The examination of abstracts from the two degree types revealed the following:

The study revealed that 77% of the Ed.d. abstracts reported setting or context while 57% of the Ph.D. abstracts reported setting or context. Of those reported just over 50% of the Ph.D. abstracts reported studies involving single institutions, 48% of the Ed.D. abstracts indicated single institutions. Of those dissertations that indicated regional, or multiple institutions within a close geographic proximity, 37% of the Ed.D. abstracts and just under 34% of the Ph.D. abstracts fell in to this category. Of the remaining Ph.D. abstracts that indicated setting or context, 14% were classified as national studies, and 1.8% focused on samples outside the united states, while Ed.D. abstracts indicated 10.5% were national studies, and 3.8% were focused on international samples.

Discussion of Research Question 5

Is there a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format?

For the purpose of this study the ideal recommended abstract format applied was developed by Miech, Nave, and Mosteller in their article "The 20,000 Article Problem: How a Structured Abstract Can Help Practitioners Sort Out Educational Research." Abstracts that do not include at least five of the following eight defined structural elements will be defined as not containing elements of structure. The eight elements include: (1) background/context; (2) purpose/research question or focus; (3) setting; (4) population/participants/subjects; (5) research design; (6) data collection/analysis; (7) findings; and (8) conclusions/recommendations.

There is no evidence that there is a difference in regards to the contents of the abstract in dissertations given an ideal recommended abstract format. The examination of abstracts from the two degree types revealed the following:

The study revealed that both Ph.D. and Ed.D. abstracts reached the threshold of meeting at least five elements of the ideal dissertation abstract at relatively the same frequency. Of the Ed.D. abstracts 53% met the threshold, while 51% of the Ph.D. abstracts indicated at least five of these elements. The study revealed that in both categories of abstract the most frequently appearing element was findings, appearing in 94% of the Ed.D. abstracts and 87% of the Ph.D. abstracts, and purpose/research question or focus, appearing in 83% of the Ed.D. abstracts and 85% of the Ph.D. abstracts. Both categories of abstracts also reported conclusions/recommendations with the least frequency, 16% in Ed.D. abstracts and 19% in Ph.D. abstracts. Overall Ed.D. abstracts had a lower frequency of indicating three or fewer of the elements (19%), than Ph.D. abstracts (27%). By research design Ed.D. abstracts that were qualitative in design met the five element threshold 58% of the time while qualitative Ph.D. abstract met this threshold 45.7% of the time. Conversely

quantitative Ph.D. abstracts met the threshold 66.6% of the time, while only 54% of the quantitative Ed.D. abstracts indicated five ideal abstract elements.

Findings and Conclusions

The purpose of this study was to determine if Ph.D. and Ed.D. dissertation abstracts differ in terms of four different factors, and further to determine if they differ in regards to application of an accepted abstract format. The process began by framing five research questions that would eventually help to determine if difference did exist in the abstracts. The research process appears to have served every purpose outlined in chapter one. The following finding and conclusions can be drawn from the research.

The study revealed that Ph.D. abstracts based on qualitative design reported that 63%, the largest percentage, applied survey research as the method of the study. This leads to the conclusion that quantitative Ph.D. dissertations on the topic of higher education employee survey research more than any other method. This finding supports the understanding of Campbell and Kotana, who noted in 1953 and still appears to be the case, that surveys are one of the most common methods of research. This understanding is supported because survey research does not belong to any one field and it can be employed by almost any discipline.

The study further revealed that 68% of the Ed.D. abstracts did not identify data analysis, while 75% of the Ph.D. abstracts did not identify data analysis. This revelation leads to the conclusion that Ed.D. dissertation abstracts on research topics in higher education describe methods of data analysis on the average only in one out of three abstracts, while Ph.D. dissertation abstracts on the research topics in higher education describe methods of data analysis in only one out of four abstracts. These findings are interesting as a large portion of the resources in the

completion of dissertations are dedicated to data collection and analysis, and one would think that this would lead to more attention to data analysis in the abstract. According to Myers, there is a large volume of data and the detailed level of analysis that results, even when research is confined to a small number of subjects (Myers, 2000). This volume of data and research can often times require researchers to devote the majority of the resources of the study to deal with these to elements of the research. Much time and resources in dissertation research is devoted to data analysis and if the methods of how data are analyzed in research is a critical issue to inform readers of research, dissertation abstracts on topics in higher education are lacking.

An additional finding of the research revealed that Ed.D. abstracts on topics of higher education reported the use of theory in 24 of the 100 dissertations, while Ph.D. abstracts report the use of theory in 20 of the 100 dissertations. This leads to the conclusion that Ed.D. dissertation abstracts on topics in higher education report use of theory to inform research in only one of four cases, while Ph.D. dissertation abstracts on research in higher education report the use of theory in one of out of five cases. Ed.D. abstracts on topics in higher education are more likely to report the use of theory more often than Ph.D. abstracts, but both are likely to report use of theory in no more than 25% of the dissertations. This is concerning, as the understanding of theory, not only as a basis for research, but the understanding of the relationship to the results of research on theory is important, as Floden believes that research should be aimed at trying to improve our understanding of education and to find ways to have that understanding contribute to improving practice (Floden, 1996).

The study also found that the context for the research was reported in Ed.D. abstracts in 77 of the 100 abstracts. Of these a single institution was evident in 37 cases and regional institutions were studied in 29 cases. This leads the research to conclude that in Ed.D. dissertations on topics

in higher education were focused on single institution studies in approximately one third of the cases. Further, the study found that 57% of the Ph.D. dissertations on topics in higher education reported a context for the study, of those, 29% studied single institutions and 19% studied institutions within a region. This leads the research to conclude that 30% of Ph.D. dissertations on topics in higher education are likely to study a single institution, very similar to the frequency of single institution studies among Ed.D. dissertations. The idea that the majority of research on the topic of higher education is performed in the context of a single institution makes the use of that research on a lager scale problematic. According to Firestone research, while valid, that is applicable to a group tested cannot be generalized beyond that particular group (Firestone, 1993). Ph.D. dissertation abstracts on topics in higher education conduct national studies more often than do Ed.D. dissertations. However, in both degrees national studies are strikingly low.

The study revealed that in the case of both the Ed.D. and Ph.D. dissertation abstracts conclusions from the research were reported in 16 cases for the Ed.D. and in 19 cases for the Ph.D. This leads to the conclusion that Ed.D. and Ph.D. dissertation abstracts on topics in higher education will report conclusions based on the research in approximately one of five dissertations. This is somewhat typical of researchers perception of the importance of conclusions as the conclusions section often gets left for last, and consequently it is often the weakest part of a dissertation, but it is as crucial a part of the paper as any and should be treated as such (Writing, 2010).

Finally, the study found that Ed.D. dissertation abstracts met five or more of the eight factors for an ideal abstract in 53% of the abstracts examined. While Ph.D. dissertations met five or more of the eight in 51% of the abstracts examined. Given these findings one would expect Ed.D. and Ph.D. abstracts on topics in higher education to include five or more of the eight ideal

factors for a research abstract about one-half of the time. This lack of elements of a structured abstract limits dissertations ability to help practitioners systematically access, assess, and communicate their study and research findings (Miech, 2005).

The study revealed answers to all five of the posed questions, and has also served an additional purpose that remained unrecognized until further examination of the research. The additional finding is the revelation that there is no clear format or generally accepted rule for the development of dissertation abstracts researching higher education topics. Given that approximately one half of abstracts in both degrees include five or more of the eight recommended abstract factors, it appears that a majority of dissertation abstracts researching higher education topics lack the inclusion of fundamental topics recommended by scholars to readily inform readers of the contents, findings, and conclusions of dissertation research. The focus of the Miech article, *The 20,000 Article Problem*, is that the current state of abstracts, with no universal understanding of contents, makes them a very inefficient way to get information from relevant educational research into the hands of practitioners. This study reaffirmed that premise, as it found that while Ed.D. and Ph.D. abstracts did not differ significantly in those areas related to the research questions, there is very little or no consistency in the contents of either program group that would lead one to believe that they are truly helpful as a research resource. Given this idea that abstracts are not written in a way that makes them a good representation of the research that the dissertation presents, they lead researchers to, as Miech describes, a bottleneck in research due to access, time, and motivation that restricts the flow of information and research findings to practitioners (Miech, 2005). This study examined a sample of 200 dissertations from a total of 3,979 dissertations filed with Digital Dissertations in 2009 and 2010 and classified as on higher education. This sample group is very small fraction of the number of dissertations that are written

across the curriculum each year and the multitude of dissertations that have been written throughout history. Many of these dissertations have been cataloged electronically with the search results of each tied directly to their abstracts. The abstracts inability to find consistency in representing the research limits the use of the research after publication. There is a familiar saying in doctoral education, "A good dissertation is a finished dissertation", and without the development of consistency in abstracts that makes the use of dissertations in research more accessible, this is a true statement. I believe that a good dissertation is one that adds to the body of knowledge and is a living document to facilitate additional research. Without the implementation of a universally accepted structure to abstracts, dissertations will remain as a closing chapter of an educational tenure, instead of a pathway to lifelong learning.

Recommendations

This study has revealed some interesting information in regards to dissertation abstracts in higher education, but has also revealed that this is an area of little research in regards to the usefulness of dissertation abstracts as a research tool. Countless hours are spent yearly by students, faculty, and staff at universities across the globe in preparation, approval, and publication of research through doctoral dissertations. Is the full potential of dissertations as a research tool being realized? Could dissertations better contribute to an evolving body of knowledge? What are the constraints to dissertations as a research tool given the current way that they are referenced as a research source? These are just a few of the questions that additional research on dissertation abstracts could answer. This further research could have the potential to improve the use of dissertations for future researchers and increase their value to the educational process.

The study also leads to recommendations that could be put into practice in order to improve the dissertation process and the usefulness of dissertations as tools for research. Dissertation advisors should consider the extent to which abstracts reflect and contain research components so that abstracts are of value as a tool to researchers. Likewise, program administrators should consider the extent to which abstracts include the recommended elements of a perfect abstract. Programs should also adopt a common list of abstract components, with the understanding that those components should ensure that an abstract represents the contents of the dissertation to improve its usefulness as a research tool, and incorporate that common list into the programs dissertation requirements.

REFERENCES

American Association of Colleges for Teacher Education. (1961). *Doctorate in education. Volume III. The conference report.* Retrieved from http://www.eric.ed.gov/PDFS/ED046874.pdf

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Anderson, D. G. (1983). Differentiation of the Ed.D. and Ph.D. in education. *Journal of Teacher Education, 34*(3), 55-58.

Baker, B.D., Wolf-Wendel, L., Twombly, S. (2007). Exploring the faculty pipeline in educational administration: Evidence from the Survey of Earned Doctorates 1990 to 2000. *Educational Administration Quarterly*, *43*(2), 189-220.

Berelson, B. (1960). *Graduate education in the United States*. New York: McGraw-Hill.

Blackburn, R., Bieber, J., Lawrence, J. and Trautvetter, L. (1999). Faculty at work: Focus on research, scholarship, and service. *Research in Higher Education*, *32*(4), 385- 413.

Boud, D. & Tennant, M. (2006). Putting doctoral education to work: Challenges to academic practice. *Higher Education Research & Development*, *25*(3), 293-306.

Brown, Lawrence D. (1966). *Doctoral graduates in education: An inquiry into their motives, aspirations, and perceptions of the program.* Retrieved from http://www.eric.ed.gov/PDFS/ED010188.pdf

Brown, L.D. (1990). *A perspective on the Ph.D.-Ed.D. discussion in schools of education.* Paper presented at the annual meeting of the American Educational Research Association, Boston.

Brown, L.D. & Slater, J.M. (1960). *The doctorate in education. Volume I: The graduates*. Washington D.C.: American Association of Colleges for Teacher Education.

Brubaker, J. S., & Rudy, W. (1976). *Higher education in transition: A history of American colleges and universities, 1636-1976*. New York: Harper & Row.

Campbell, Angus, A., & Katona, Georgia. (1953). *The sample survey: A technique for social science research*. New York: Dryden Press.

Carnegie (2006). *Carnegie Foundation for the Advancement of Teaching*. Retrieved from http://www.carnegiefoundation.org.

Carnegie Foundation (2010a). *The Carnegie initiative on the doctorate*. Retrieved from http://www.foundation.org/previous-work/professional-graduate-education

Carnegie Foundation (2010b). *The Carnegie project on the education doctorate*. Retrieved from http://www.carnegiefoundation.org/education-doctorate

Carpenter, D.S. (1987). Ongoing dialogue: Degrees of difference. *Review of Higher Education*, *10*(3), 281-86.

Clifford, G. J. & Guthrie, J.W. (1988). *Ed school: A brief for professional education.* Chicago: University of Chicago Press.

Commission on the Future of Higher Education. Retrieved from http://www2.ed.gov/about/bdscomm/list/hiedfuture/index.html

Council of Graduate Schools. (1990). *The role and nature of the doctoral dissertation: A policy statement*. Retrieved from http://www.cgsnet.org/PublicationsPolicyRes/role2.htm

Creswell, J.W. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Creswell, J. W., & Miller, G. A. (1997). Research methodologies and the doctoral process. *New Directions for Higher Education, 99*, 33-46.

D'Andrea, L. M. (2002). Obstacles to completion of the doctoral degree in colleges of education: The professor's perspective. *Educational Research Quarterly, 25*(3), 42-58.

Deering, T.E. (1998). Eliminating the doctor of education degree: It's the right thing to do. *Educational Forum*, *62*(3), 243-48.

Dill, D.D. & Morrison, J.L. (1985). The Ed.D. and the Ph.D. research training in the field of higher education: A survey and a proposal. *Review of Higher Education, 8*, 169-86.

Dissertation: American Heritage dictionary online (2010). Retrieved from http://www.dictionary.com.

Ewell, P. (2001). *Accreditation and student learning outcomes: A proposed point of departure.* ACHEA occasional paper, Council for Higher Education Accreditation.

Firestone,William A. (1993). Alternative arguments for generalizing from data as applied to qualitative research. *Educational Researcher, 22*(4), 16-22.

Fischer, Beth A. & Zigmond, Michael J. (2004). *Components of a research article*. Retrieved from http://www.survival.pitt.edu.

Floden, R.E. (1996). Educational research: Limited, but worthwhile and maybe a bargain. (response to J.A. Eisenberg). *Curriculum Inquiry, 26*, 193-197.

Gall, M.D., Gall, J.P. & Borg, W.R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn and Bacon.

Geiger, R. (1997). Doctoral education: The short-term crisis vs. long-term challenge. *Review of Higher Education*, *20*(3), 239-251.

Geiger, R. (1997). *Research, graduate education, and the ecology of American universities: An interpretive history in graduate education in the United States.* New York: Garland Publishing.

Golafshani, Nahid (2003). *Understanding reliability and validity in qualitative research.* Retrieved from http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf

Golde, C. (2001). *Overview of doctoral education studies and reports: 1990 to present*. Retrieved from http://www.carnegiefoundation.org/CID/resources.htm.

Golde, C.M., & Walker, George T. (2006). *Envisioning the future of doctoral education, preparing stewards of the discipline.* San Francisco, CA: Jossey Bass.

Goodchild, L. and Miller, M. (1997). The American doctorate and dissertation: Six developmental stages. *New Directions for Higher Education*, *99*, 17-32.

Gumport, P. (2005). *Graduate education and research: Interdependence and strain in American higher education in the 21st century: Social, political, and economic challenges*. Baltimore: Johns Hopkins University Press.

Indiana University. (2010). Retrieved from http://www.indiana.edu/~bulletin/iu/educ_grad/2008-2010/index.shtml

Ludlow, H. Glenn, Sanderson, John A., and Pugh, Richard C. (1964). *Doctorate in education. Volume IV. Follow-up study.* Retrieved from http://www.eric.ed.gov/PDFS/ED046875.pdf

Maher, M. A., Ford, M. E., & Thompson, C. M. (2004). Degree progress of women doctoral students: Factors that constrain, facilitate, and differentiate. *Review of Higher Education, 27*(3), 385-408.

Malone, T. L. (1981) *A history of the doctor of philosophy dissertation in the United States 1861-1930*. Unpublished dissertation, Wayne State University. Detroit.

McLaughlin, J.M., & Moor, C.E. (1991). *Catch the "D" train*. Paper presented at annual meeting of American Association of School Administrators, New Orleans, LA.

Miech, Edward J., & Nave, Bill, & Mosteller, Frederick (2005). The 20,000 article problem: How a structured abstract can help practitioners sort out educational research. *Phi Delta Kappan*. 2005, 396-400.

Miles, Matthew B., & Huberman, Michael A. (1994). *Qualitative data analysis: An expanded sourcebook.* Thousand Oaks, CA: Sage Publications.

Miller, C.L. (2006) Case study from making the implicit explicit research project conducted at the University of Colorado at Boulder: An administrator's experience. In P.L. Maki, and N.A. Borkowski (Eds.), *The assessment of doctoral education*. Sterling, VA: Stylus.

Moore, H. E., Russel, J. H., and Ferguson, D. G. (1960). *Doctorate in education. Volume II. The institutions*. Retrieved from http://www.eric.ed.gov/PDFS/ED046873.pdf

Morse, Janice K. (1994). *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage Publications.

Myers, M. (2000). Qualitative research and the generalizability question: Standing firm with Proteus. *Qualitative Report*, *4*(3/4) 45-46.

National Center for Education Statistics. (2002). *Digest of education statistics (2001).* Washington, D.C.: Institute of Education Sciences. U.S. Department of Education.

National Commission on Higher Education (2010). www.sheeo.org/account/comm-home.htm

Nerad, M. (2007). Doctoral education in the USA. In S. Powell and H. Green (Eds), *The doctorate worldwide*. Berkshire, England: Open University Press.

Nettles, M. and Millet, C. (2006). *Three magic letters: Getting to Ph.D.* Baltimore, MD: Johns Hopkins Press.

Neumann, R. (2005). Doctoral differences: Professional doctorates and PhDs compared. *Journal of Higher Education Policy and Management*, *27*(2), 173-188.

Newcomb, Theodore M. (Ed.). *Research methods in the behavioral sciences.* New York: The Dryden Press.

Osguthorpe, R.T. & Wong, M.J. (1993). The Ph.D. versus the Ed.D.: Time for a decision. *Innovative Higher Education, 18*(1), 47-63.

Richardson, V. (2003). *The PhD in education: Carnegie essays on the doctorate*. Carnegie Foundation for the Advancement of Teaching. Menlo Park, CA. Retrieved from http://www.carnegiefoundation.org/CID/essays/CID_educ_Richardson.pdf

Robertson, N. and Sistler (1971). *Doctorate in education: An inquiry into conditions affecting pursuit of the doctoral degree in the field of education.* Retrieved from http://www.eric.ed.gov/PDFS/ED053070.pdf

Texas Higher Education Coordinating Board (THECB). *Doctoral education in Texas. Part I: Past trends and critical issues.* Retrieved from http://www.thecb.state.tx.us/reports/PDF/1050.PDF

Texas Higher Education Coordinating Board (THECB). *Doctoral education in Texas. Part II: Recomendations for the state.* Retrieved from http://www.thecb.state.tx.us/reports/PDF/1050.PDF

Walker, G. E., Golde, C. M., Jones, L., Bueschel, A.C., & Hutchings, P. (2008). *The formation of scholars: Rethinking doctoral education for the twenty-first century.* San Francisco, CA: Jossey-Bass.

Writing at Colorado State (2010). Retrieved from http://writing.colostate.edu/guides/documents/review_essay/com2c5.cfm