Publishing Rates of Graduated Education Ph.D. and Ed.D. Students: A Longitudinal Study of University of California Schools

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ABSTRACT

This study investigated the publishing rates for Ed.D. and education Ph.D. graduates from 1999 to 2003 in the University of California school system, as a function of graduation year and degree type. Random sampling resulted in 409 archival records and multi-journal databases were searched for publications by the authors of those 409 dissertations, published within +/-2 years of graduation. There were no significant differences among graduating years. The data revealed that 36.7% of the Ph.D. graduates published at least one article compared to 13.7% of the Ed.D. graduates. This was a moderate effect and significant (V = .234, p = .001, α = .05).

Key Words: PhD, EdD, Publishing Rates, University of California,

OBJECTIVES

This study investigated the publishing rates for Ed.D. and education Ph.D. graduates from 1999 to 2003 in the University of California school system as a function of degree type. Random sampling resulted in 409 archival records from a dissertation database. A set of multi-journal databases were searched for publications by the authors of those 409 records, published within plus-or-minus (+/-2) years of their graduation. This study provided the first opportunity to compare the publishing rates of Ed.D. and Ph.D. degrees in the same large school system.

The doctor of education (Ed.D.) degree is more broadly focused and applied, as compared to the doctor of philosophy (Ph.D.) degree, which is more research oriented. Mason (1998) declared that "evaluative research data from doctoral students and graduates of Ed.D. and Ph.D. programs in education have been scarce to non-existent in the current literature" (p. 3). This statement is still true and this study compares the publishing rates of both types of degrees in the same school system.

The alpha level for this study was set at the $\alpha = .05$. Data were initially tabulated using standard summary statistics and evaluated using chi-square and Carson's V.

BACKGROUND

Authors and the subjects of their writing become part of history. Written and verbal stories are the basis of knowledge that is passed from one generation to the next, but only written knowledge has the longevity to consistently transcend multiple generations. The transfer of knowledge is the reason that authors publish their work. The ProQuest *Dissertations and Theses* database has an average of over 51,000 doctoral dissertations have been produced every year from 1994 to 2006. Dissertations have many characteristics such as integrity and objectivity, and "high-quality research should be characterized by publication" (Mauch & Birch, 1998, p. 15) so it is available to the people who can use it. Although the research described in a dissertation should be publishable, there has been limited research focused on the scholarly publishing rates of doctoral students. Scholarly publishing is important, for doctoral students attempting to enter the academic profession, because "published research leads to promotions and tenure. Higher salaries come with publications … [and] many good things happen to those who publish" (Blackburn & Lawrence, 1995, p. 116). An earlier National Science Foundation study of 10,000 doctorate holders identified the three major components of job satisfaction to be 1) salary, 2) relationship of job to graduate study, and 3) publishing – however, the authors point out that publishing is on the job satisfaction list only because it relates to salary (Solman & Hurwicz, 1978). It is important for students to publish because "early publication, including publication before the doctorate, predicts future production rate and total production" (Blackburn & Lawrence, 1995, pp. 79-80).

RESEARCH QUESTION 1

What are the overall publishing rates of doctoral students in education over a five year period? The data analysis for Research Question 1 used standard summary statistics and chi-square analysis of the data led to the rejection or non-rejection of the null hypothesis for this research question. The null hypothesis 1 (H_o1) is: The observed difference in publishing rates between graduates from year to year is the result of chance variations with the random sampling

process. The alternate hypotheses (H_a1) is that the observed difference in publishing rates between graduates from year to year is not the result of chance variations.

RESEARCH QUESTION 2

Do publishing rates vary by degree type (Ed.D. or Ph.D.)? The data analysis for Research Question 2 used standard summary statistics and chi-square analysis of the data led to the rejection or non-rejection of the null hypothesis for this research question. The null hypothesis 2 (H_o2) is: The observed difference in publishing rates between graduates with Ed.D.s and Ph.D.s is the result of chance variations with the random sampling process. The alternate hypotheses (H_a2) is that the observed difference in publishing rates between graduates with Ed.D.s and Ph.D.s is not the result of chance variations.

METHODS

The general flow of the research started by identifying the Ed.D. and Ph.D. graduates in a database, recording dissertation information (first row of Figure 1), searching for published articles and recording publishing information (second row of Figure 1). The recorded information was coded onto a master matrix and subjected to statistical analysis (third row of Figure 1). The specific procedural steps and a detailed flowchart can be found in Mallette (2006).

Several authors have used a similar approach of initially identifying the population of doctoral graduates and then quantifying research productivity by searching databases for published articles (Gerbasi, Anderson, Gerbasi, & Coultis, 2002; Green, Kvarfordt, & Hayden, 1999; Hutchinson & Zivney, 1995; Lee, 2000; McGinnis, Allison, & Long, 1982; Salmi, Gana, & Mouillet, 2001).

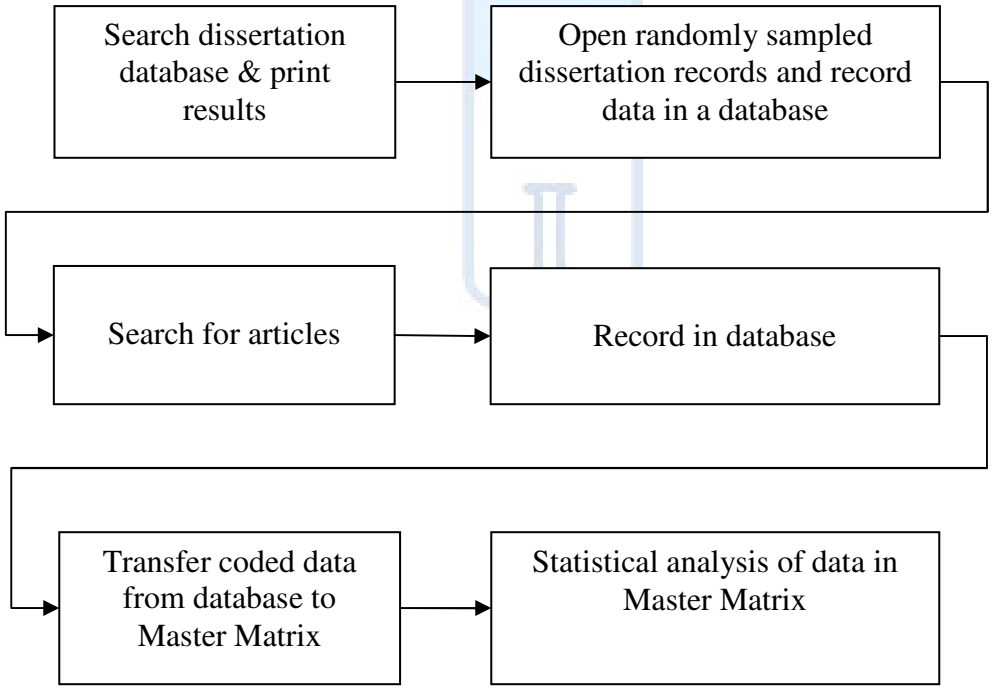

Figure 1. Overview of Research Flow.

POPULATION

The population to be studied is doctoral students of education in the UC school system. Within this population there are two populations of students that were studied: Ed.D. and Ph.D. graduates. The first population is the group of all Ed.D. graduates in the UC system from 1999 through 2003. The population (N) was 185 in those five years. The second population is the group of all Ph.D. graduates in education (as defined by the word *education* in either their abstract or citation), in the UC system, from 1999 to 2003. The population (N) for the Ph.D. group was 873. These populations were randomly sampled according to the "table for determining sample size from a given population" (Krejcie & Morgan, 1970, p. 608).

DESCRIPTIVE STATISTICS OF THE SAMPLE

Table 1 displays the descriptive statistics for the sample. For the five study years, the number of graduates per year in the sample ranged from 74 to 86. There were twice the number of Ph.D. graduates (68.0%) compared to Ed.D. graduates (32.0%) in the study. Students were most commonly female (63.8%) and most (64.3%) of the graduates came from either UCLA (39.1%) or UC Berkeley (25.2%). During the five-year period, 29.3% of the graduates published at least one article ($M = 0.64$, $SD = 1.49$).

SUMMARY OF THE SAMPLE

There were two samples studied in this research. They were sampled from the populations of (a) Ed.D. and (b) Ph.D. graduates in education from the University of California system from 1999 to 2003.

Ed.D. Population and Sample

There were 185 Ed.D. graduates from UC schools from 1999 to 2003 and 131 were sampled. There were Ed.D. graduates from four campus locations. They were UC Berkeley (8), UC Davis (32), UC Irvine (11), and UC Los Angeles (80). The other campus locations did not have Ed.D. graduates.

There were 29 Ed.D. graduates sampled from 1999, 22 from 2000, 30 from 2001, 27 from 2002, and 23 from 2003. The majority (54%) of Ed.D. students were female. There were 57 male students, 71 female students, and 3 students with neutral names that could not be identified from the acknowledgments, dedication, or vita in the dissertation. The information on the Ed.D. sample described above is summarized in Tables 2 and 3 by year and campus location.

Ph.D. Population and Sample

There were 873 Ph.D. graduates from UC schools from 1999 to 2003 and 278 were sampled. There were Ph.D. graduates from nine campus locations. There were 95 from UC Berkeley, 21 from UC Davis, eight from UC Irvine, 80 from UC Los Angeles, 16 from UC Riverside, 15 from UC San Diego, four from UC San Francisco, 36 from UC Santa Barbara, and three from UC Santa Cruz. It should be noted that five of the dissertations from UC Berkeley were listed as being conferred with UC San Francisco. These five dissertations were listed with the first listed school (UC Berkeley). The UC Merced campus locations did not have any graduates because it had not opened during the study range of this dissertation. There were 55

Table 1
Demographics of the Sample (N = 409), n is Number of Graduates in the Sample

		n	%
Graduation Year			
	1999	84	20.5
	2000	81	19.8
	2001	86	21.0
	2002	84	20.5
	2003	74	18.1
Campus			
	Berkeley	103	25.2
	Davis	53	13.0
	Irvine	19	4.6
	Los Angeles	160	39.1
	Riverside	16	3.9
	San Diego	15	3.7
	San Francisco	4	1.0
	Santa Barbara	36	8.8
	Santa Cruz	3	0.7
Degree			
	Ed.D	131	32.0
	Ph.D.	278	68.0
Student Gender			
	Male	134	32.8
	Female	261	63.8
	Unknown	14	3.4
Total Publications in Five Years[a]			
	0	289	70.7
	1	58	14.2
	2	35	8.6
	3	10	2.3
	4 to 17	17	4.2

[a] $M = 0.64$, $SD = 1.49$, N = 409

Table 2
Number of Graduates in the Ed.D. and Ph.D. Samples by Graduating Year

Year of Graduation	Ed.D.	Ph.D.	Combined
1999	29	55	84
2000	22	59	81
2001	30	56	86
2002	27	57	84
2003	23	51	74
Total	131	278	409

Table 3
Number of Graduates in the Ed.D. and Ph.D. Samples by Campus Location

Campus of Graduates	Ed.D.	Ph.D.	Combined
UC Berkeley [a]	8	95	103
UC Davis	32	21	53
UC Irvine	11	8	19
UC Los Angeles	80	80	160
UC Riverside	0	16	16
UC San Diego	0	15	15
UC San Francisco [a]	0	4	4
UC Santa Barbara	0	36	36
UC Santa Cruz	0	3	3
Total	131	278	409

[a] It should be noted that five of the dissertations from UC Berkeley were listed as being conferred with UC San Francisco. These five dissertations were listed with the first listed school (UC Berkeley).

Ph.D. graduates sampled from 1999, 59 from 2000, 56 from 2001, 57 from 2002, and 51 from 2003. The majority (68%) of Ph.D. students were female. There were 77 male students, 190 female students, and 11 students with neutral names that could not be identified from the acknowledgments, dedication, or vita in the dissertation.

RESULTS FOR RESEARCH QUESTION 1

Research Question 1 asked: What are the overall publishing rates of doctoral students in education over a five year period? The null hypothesis 1 (H_o1) stated that *the observed difference in publishing rates between graduates from year to year is the result of chance variations with the random sampling process.* Table 4 displays the chi-square test comparison (the alpha level for this study was set at $\alpha = .05$) for whether the graduates published at least once based on graduation year. The percentage of graduates who published over the years varied between a low of 24.3% to a high of 32.1% but these differences were not statistically significant ($p = .83$). This finding supports the non-rejection of the null hypothesis.

The analysis of publishing rate by year (relative to the graduation year) is reported in Table 5 and contrasted with earlier studies. The results in this study show an increasing trend through all years, similar to the other studies, except for a decrease in the last year.

There were 261 publications identified in this five year study and 120 published graduates. This yields an overall publishing rate of 0.435 publications per graduate per year. This study found that 29.3% of graduated UC doctoral students in education published peer reviewed articles within plus two or minus two (+/-2) years of their graduation year. The next paragraphs discuss early publishers and high publishers.

Early Publishers – Definition

"Early publishers" (Zivney & Bertin, 1992, p. 312) are defined as those who published before graduation.

Early Publishers – Results

This study identified 41 (10% of the 409 graduate sample size) of the 120 graduates who eventually published to be early publishers. Of these 41 early publishers, about half (19) never published again and 22 continued publishing and published from one to 13 publications in their graduation year and the two succeeding years.

High Publishers – Definition

Horner, Rushton, and Vernon (1986) defined low publishers to have 0.2 publications per year or less, medium publishers have between 0.2 and 1.0 publications per year, and high publishers have 1.0 or more publications per year. That would equate to five or more publications during the five-year study period of this dissertation.

High Publishers – Results

There were 11 high publishers (2.7% of the 409 graduate sample size) that published five to 17 articles in the five year study range. Eleven of the 41 early publishers became high publishers and all high publishers were also early publishers. The majority (30; 73%) of the early publishers did not become high publishers.

Table 4
Publishing Rates During the Five-Year Period for Graduation Year. Chi-Square Tests of Significance (N = 409), n is Number of Graduates in the Sample

		No Publications		Published	
		n = 289		*n* = 120	
		n	%	*n*	%
Graduation Year [a]					
	1999	58	69.0	26	31.0
	2000	55	67.9	26	32.1
	2001	62	72.1	24	27.9
	2002	58	69.0	26	31.0
	2003	56	75.7	18	24.3

[a] χ^2 (4, N = 409) = 1.49, p = .83

Table 5
Publications per Publishing Graduate in Specific Years Relative to the Graduation Year (Publications per Graduate per Year)

Years After Graduation	Zivney & Bertin (1992)	Hutchinson & Zivney (1995)	Anwar (2004)	Mallette (2006) (Ed.D.)	Mallette (2006) (Ph.D.)
-2	0.04	[a]	0.07	0.05	0.12
-1	0.05	0.24[a]	0.03	0.05	0.25
0	0.12	0.20	0.07	0.17	0.30
+1	0.22	0.36	0.51	0.44	0.39
+2	0.41	0.49	0.51	0.28	0.35

[a]All years prior to graduation were put into one category.

RESULTS FOR RESEARCH QUESTION 2

Research Question 2 asked: Do publishing rates vary by degree type (Ed.D. or Ph.D.)? The null hypothesis 2 (H_o2) stated that *the observed difference in publishing rates between graduates with Ed.D.s and Ph.D.s is the result of chance variations with the random sampling process.* Inspection of Table 6 revealed that 36.7% of the Ph.D.s published at least one article

compared to 13.7% of the Ed.D.s. The chi-square test was significant (p = .001) which provided support to reject the null hypothesis (the alpha level for this study was set at α = .05). Figure 2 is a bar chart depicting the publishing rates (publications per graduate per year). Reminder: the number in the denominator is published graduates, not total graduates.

This was further reviewed to understand the driving force for this significant result. Of the four campus locations that award both the Ed.D. and Ph.D., the UC Los Angeles campus was most remarkable in the quantity of both degree types (80 each) and the significant difference (p = .000) as shown in Table 7. The next paragraphs describe the early publishers and high publishers by degree type.

Early Publishers by Degree Type

There were 41 early publishers – those who published before graduation. Two were Ed.D. graduates and 39 were Ph.D. graduates.

Ed.D. early publishers by degree type. There were two early publishers among the Ed.D. graduates. Both had a single paper published in the two years prior to graduation and none after graduation. The early published papers were their only contribution to the literature within the study range of this dissertation. Neither of the two Ed.D. early publishers became high publishers.

Ph.D. early publishers by degree type. There were 39 early Ph.D. publishers (14% of the Ph.D. graduates). They had from one to four papers published before graduation. Of these 39 early publishers, 17 never published again and 22 (56%) continued publishing and published from one to thirteen publications in their graduation year and the two succeeding years.

High Publishers by Degree Type

There were 11 high publishers – those who had 1.0 or more publications per year.

Ed.D. high publishers by degree type. There were no Ed.D. high publishers, two Ed.D. medium publishers, 16 Ed.D. low publishers, and 113 Ed.D. non publishers. It was found in reading the publications of the two medium publishers that both authors were in non-faculty administrative academic positions (assistant dean and research specialist).

Ph.D. high publishers by degree type. There were 11 Ph.D. high publishers, 49 Ph.D. medium publishers, 42 Ph.D. low publishers, and 139 Ph.D. non publishers.

Publishing Rates by Year and Degree Type

The analysis of publishing rates by year (relative to the graduation year) and degree type was reported in Table 5 in Research Question 1 above and was contrasted with earlier studies. The results for Ed.D. and Ph.D. graduates in this study show an increasing trend through all years, similar to the other studies, except for a decrease in the last year.

The 11 Ph.D. high publishers published from 5 to 17 articles in the five year study range. It was found in reading their publications that all 11 were university-level faculty

There were 11 of the 39 Ph.D. early publishers who became high publishers. All high publishers were also early publishers. The majority (28; 72%) of the early publishers did not become high publishers.

Table 6

Number of Publications per Published Ed.D. and Ph.D. Graduates. Data is for the Five Year Period From Two Years Prior to Graduation to Two Years After Graduation. Chi-Square Tests of Significance (N = 409), n is Number of Graduates in the Sample

		No Publications		Published	
		n = 289		*n* = 120	
		n	%	*n*	%
Degree [a]					
	Ed.D	113	86.3	18	13.7
	Ph.D.	176	63.3	102	36.7

[a] χ^2 (1, N = 409) = 22.62, p = .001.

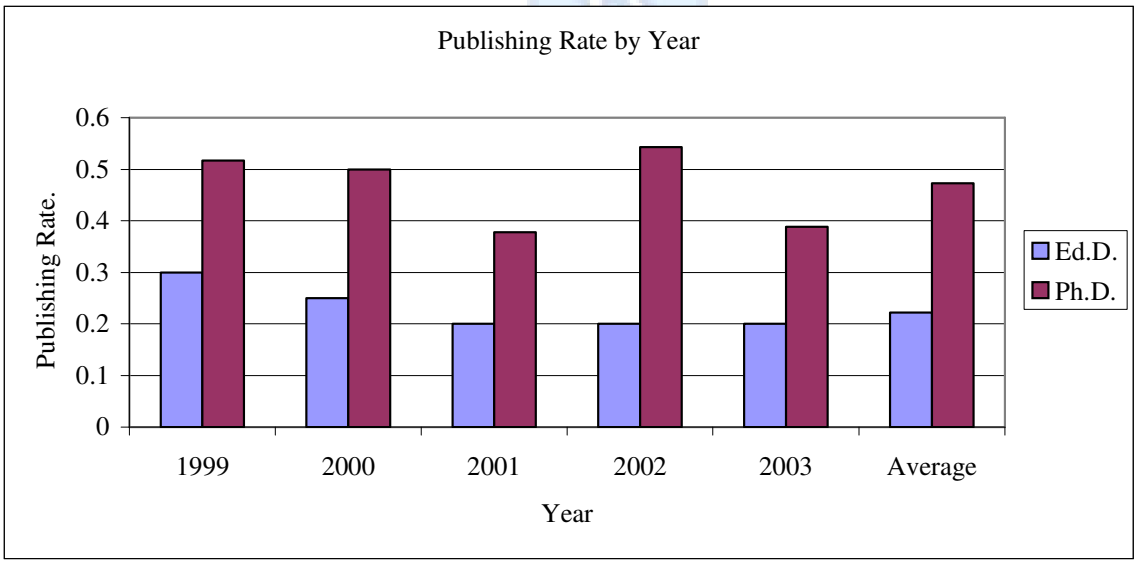

Figure 2. Bar Chart for Number of Publications per Published Ed.D. and Ph.D. Graduates. Data is for the Five Year Period From Two Years Prior to Graduation to Two Years After Graduation.

Table 7
Number of Ed.D. and Ph.D. Graduates by Campus Location. Chi-Square Tests of Significance (N = 409)

Campus of Graduates	Ed.D.	Ph.D.	Pearson Chi-Square (p =)
UC Berkeley [a]	8	95	.218
UC Davis	32	21	.227
UC Irvine	11	8	.636
UC Los Angeles	80	80	.000

[a] It should be noted that five of the dissertations from UC Berkeley were listed as being conferred with UC San Francisco. These five dissertations were listed with the first listed school (UC Berkeley).

DISCUSSION OF RESEARCH QUESTION 1

Research Question 1 asked: What are the overall publishing rates of doctoral students in education over a five year period? The research found 120 (29.3%) of the 409 doctoral graduates published 261 articles in the five year study range for a publishing rate of 0.435 publications per graduate per year.

The null hypothesis for research question 1 (H_o1) stated that the observed difference in publishing rates between graduates from year to year is the result of chance variations with the random sampling process, was not rejected by the use of the Pearson Chi-Square test and no significant differences were found between years (p = .828).

Comparison to Published Research

It was found in the current study that 29.3% of all doctoral graduates publish in the five year study range. This 29.3% publishing level is above the 15% level for education students (Nettles & Millett, 2006, p. 110), similar to the literature graduates in Lee's (2000) study, but is less than the average of 54.8% (Mallette, 2006, p. 38). One possible explanation for the difference is due to the reasons of limitation 4: There may be an undercount due to articles not being in the databases searched by this research. Another possible explanation for the difference is the population differences in the databases. The 54.8% publishing rate is for Ph.D. graduates and this research includes both Ed.D. and Ph.D. graduates. It has been shown that Ed.D. graduates have lower publishing rates as identified by Research Question 2.

Comparison of Early Publishers and High Publishers

It has been reported that 9% to 37% of Ph.D. graduates who eventually published had published prior to graduation (Hutchinson and Zivney, 1995, Zivney and Bertin, 1992, Anwar, 2004). The identification of early publishers is important because Blackburn & Lawrence (1995)

state "early publication, including publication before the doctorate, predicts future production rate and total production" (pp. 79-80). This was emphasized by Nettles and Millett's (2006) discussion of predoctoral publications: "the importance of early demonstration of research productivity cannot be overstated" (p. 112).

This study identified 41 graduates to be early publishers (10% of the 409 graduate sample size) and 11 graduates who were high publishers (2.7% of the 409 graduate sample size). They published five to 17 articles in the five year study range. Of the 41 early publishers, about half (19) never published again and 22 continued publishing and published from one to 13 publications in their graduation year and the two succeeding years. The quantity of early publishers found in this study is in agreement with Hutchinson and Zivney, 1995, Zivney and Bertin, and 1992, Anwar, 2004. The majority (30; 73%) of the early publishers did not become high publishers. Although all high publishers were also early publishers, this study found that is not a certainty, nor is it even likely, that "publication before the doctorate, predicts future production rate and total production" (Blackburn & Lawrence, 1995, p. 79-80).

Summary of Discussion of Research Question 1

The research found 120 (29.3%) of the 409 doctoral graduates published 261 articles in the five year study range for a publishing rate of 0.435 publications per graduate per year. The null hypothesis was not rejected indicating there is no significant year-to-year variation (p = .828). There were 41 early publishers and 11 high publishers. Although all high publishers were also early publishers, this study found that is not a certainty, nor is it even likely, that "publication before the doctorate, predicts future production rate and total production" (Blackburn & Lawrence, 1995, p. 79-80).

DISCUSSION OF RESEARCH QUESTION 2

Research Question 2 asked: Do publishing rates vary by degree type (Ed.D. or Ph.D.)? The research found 18 (13.7%) of the 131 Ed.D. graduates published 20 articles in the five-year study range for a publishing rate of 0.222 publications per graduate per year. The research found 102 (36.7%) of the 278 Ph.D. graduates published 241 articles in the five year study range for a publishing rate of 0.472 publications per graduate per year. Note: the graduates in the denominator are *published* graduates, not all graduates.

The null hypothesis for Research Question 2 (H_o2) stated that *the observed difference in publishing rates between graduates with Ed.D.s and Ph.D.s is the result of chance variations with the random sampling process* was rejected by the use of the Pearson Chi-Square test (p = .001), indicating a significant difference in publishing rates between Ed.D. and Ph.D. graduates.

The analysis of publishing rate by year (relative to the graduation year) was reported in Table 5 and contrasted with earlier studies. The results for Ed.D. and Ph.D. graduates in this study show an increasing trend through all years, similar to the other studies, except for a decrease in the last year. One possible explanation for the decrease in the last year may be due to a delay in indexing some journals, and all the 2005 publications may not have been indexed at the time of the study. This will downwardly skew the publishing rate statistics in 2005 (only) as compared to earlier years. One might propose a second possible explanation: there may be an undercount due to publications that are not in the database. This is possible, but unlikely because the publishing rates associated with this study are higher for the first three years of this study, but

are in-line with the previous studies in last two years. The next paragraphs compare the high publishers and early publishers by degree type.

Comparison of Early Publishers and High Publishers by Degree Type

This study identified two Ed.D. early publishers, 39 Ph.D early publishers, no Ed.D. high publishers and 11 Ph.D. high publishers. The study also found that two Ed.D. graduates (1.5% of all Ed.D. graduates) and 39 Ph.D. graduates (14% of all Ph.D. graduates) who eventually published had published before graduation. The Ph.D. value of 14% is in the range of findings of Hutchinson and Zivney (1995), Zivney and Bertin (1992), and Anwar (2004). As Nettles and Millett (2006) declared: "what is surprising and somewhat novel is the growing expectation that students publish while they are in the process of pursuing their doctoral degrees" (p. 104); this researcher was also surprised to find that 41 (34%) of the 120 published graduates were also early publishers.

Neither of the two Ed.D. early publishers became high publishers, but 11 of the 39 Ph.D. early publishers became high publishers. All high publishers were also early publishers. All the Ed.D. early publishers and the majority (28; 72%) of the Ph.D. early publishers did not become high publishers. This further confirms the finding in Research Question 1 that it is not a certainty, nor is it even likely, that "publication before the doctorate, predicts future production rate and total production" (Blackburn & Lawrence, 1995, p. 79-80).

It was found in reading their publications that both Ed.D. medium publishers were in administrative positions (assistant dean and research specialist) in academic settings and all 11 Ph.D. high publishers were university-level faculty. This finding supports Archbold's (1991) premise that "individuals who aspire to scholarly (e.g., faculty) positions will usually seek the Ph.D., while individuals who choose to pursue professional jobs will seek the Ed.D. more frequently" (p. 82) and Golde and Walker's (2006) statement that "the Ed.D. aims to prepare managerial and administrative leadership in education …. [and the] Ph.D. … aims to prepare researchers, college teachers and scholars in education" (p. 247).

Rieger (1990) found that "there was no statistically significant difference between high knowledge producers [greater number of publications] and low knowledge producers holding the Ph.D. and the Ed.D." (Rieger, 1990, p. 1). Brown (1990) stated that "students pursuing the Ed.D. do not differ greatly from Ph.D. students in their evaluation of the contextual and structural features of their doctoral study to any significant extent" (p. 15). Another study found there was very little difference between, the two types of degrees, but the Ph.D. dissertations were more likely to use high level statistics (Nelson & Coorough, 1994).

In contrast to Rieger (1990), Brown (1990), and Nelson and Coorough (1994) who found no differences in the areas they studied, this study shows a significant difference ($p = .001$) between Ed.D. and Ph.D. graduates in the area of scholarly publishing.

Summary of Discussion of Research Question 2

The null hypothesis was rejected by the use of the Pearson Chi-Square test ($p = .001$), indicating a significant difference in publishing rates between Ed.D. and Ph.D. graduates. There were two Ed.D. and 39 Ph.D. early publishers. There were zero Ed.D and 11 Ph.D. high publishers and all high publishers were also early publishers. It was also found that the 11 Ph.D. high publishers were all university-level faculty and the two Ed.D. highest publishers were in non-faculty administrative positions supporting the thought that the Ed.D. degree is more broadly focused and applied and the Ph.D. degree is more narrowly focused and research oriented.

EDUCATIONAL IMPORTANCE

This study provided the first opportunity to compare the publishing rates of Ed.D. and Ph.D. degrees in the same large school system. This study investigated how many individual doctoral students publish to communicate research done in their dissertations. The study fills an unresearched niche in the body of knowledge on publishing trends. Additionally, this research may lead other researchers and administrators to consider curriculum adjustments that would encourage more broadly disseminating dissertation research.

SUMMARY

This study investigated the publishing rates for Ed.D. and education Ph.D. graduates from 1999 to 2003 in the University of California school system as a function of degree type and campus location. Random sampling resulted in 409 archival records from a dissertation database. A set of multi-journal databases were searched for publications by the authors of those 409 records, published within plus-or-minus (+/-2) years of their graduation year. This study provided the first opportunity to compare the publishing rates of Ed.D. and Ph.D. degrees in the same large school system.

There were twice the number of Ph.D. graduates (68.0%) compared to Ed.D. graduates (32.0%). The research found 120 (29.3%) of the 409 doctoral graduates published 261 articles in the five year study range for a publishing rate of 0.435 publications per graduate per year. The null hypothesis was not rejected indicating there is no significant year-to-year variation (p = .828). There were 41 early publishers and 11 high publishers. Although all high publishers were also early publishers, this study found that is not a certainty, nor is it even likely, that "publication before the doctorate, predicts future production rate and total production" (Blackburn & Lawrence, 1995, p. 79-80). In comparing the publishing rates of Ed.D. and Ph.D. graduates, the null hypothesis was rejected, indicating a significant difference in publishing rates between Ed.D. and Ph.D. graduates. A moderate association existed (V = .234, p = .001, α = .05) indicating that Ph.D. graduates have a higher publishing rate than Ed.D. graduates.There were two Ed.D. and 39 Ph.D. early publishers. There were zero Ed.D and 11 Ph.D. high publishers and all high publishers were also early publishers. It was also found that the 11 Ph.D. high publishers were all university-level faculty and the two Ed.D. highest publishers were in non-faculty administrative positions supporting the thought that the Ed.D. degree is more broadly focused and applied and the Ph.D. degree is more narrowly focused and research oriented.

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