

Can a Marketing Strategy Help End the ‘Gender Gap’ in English Language and Literature Scholarly Book Publishing?

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INTRODUCTION

Marketing strategies have been utilized effectively in many industries, ranging from consumer package goods to cell phones. Most higher education institutions adopted marketing strategies to ascertain what academic programs should be added or deleted, how to attract students, and craft fund raising programs. However, marketing strategies have not been developed to address the impact of the “gender gap” among female academics in their pursuit to get their research published in scholarly books so they can obtain tenure or promotion. This paper investigates the “gender gap” among female English professors, an important area in the humanities at U.S. universities.

U.S. Higher Education and Departments of English

According to the U.S. Department of Education, National Center for Education Statistics [NCES 2017a], in 2017 there were 1.55 million higher education faculty members in the U.S.; and they instructed 20.97 million students (17.85 million undergraduates and 3.12 million graduate students) in the U.S. The gender breakdown of faculty members was almost split equally between males (51.2%) and females (48.8%).

English departments were responsible for instruction of almost all undergraduates and a portion of graduate students in the U.S. To staff sections, and specifically composition sections since the number of undergraduate English majors declined in the U.S. (Chase 2009), English doctoral programs were created to train students to enter the profession. NCES (2017b) reported that in 1987 males accounted for 43.95% of the newly awarded Ph.D. degrees in English, and women’s total was 58.20%. In 2000 females still had a predominant share of doctorates (58.44%). In 2014, the ratio was males at 39.99% and females 60.01%. Table 1 has the NCES (2017c) data.

Table 1: English Language and Literature Doctoral Degrees: 1987-2014

Year	Total	Males	Females	Percent	
				Males	Females
1987	853	367	486	43.95%	58.20%
1988	858	380	478	44.29%	55.71%
1980	920	405	524	43.60%	56.40%
1990	986	444	542	45.03%	54.97%
1991	1,056	469	587	44.41%	55.59%
1992	1,142	484	658	42.38%	57.62%
1993	1,201	495	706	41.22%	58.78%
1994	1,205	512	693	42.49%	57.81%
1995	1,393	589	804	42.28%	57.72%

1996	1,395	535	860	38.35%	61.65%
1997	1,431	610	821	42.63%	57.37%
1998	1,489	611	878	41.03%	58.97%
1999	1,412	554	858	39.24%	60.76%
2000	1,470	611	859	41.56%	58.44%
2001	1,330	533	797	40.08%	59.92%
2002	1,291	532	759	41.21%	58.79%
2003	1,246	492	754	39.49%	60.51%
2004	1,207	479	728	39.69%	60.31%
2005	1,212	494	718	40.76%	59.24%
2006	1,264	510	744	40.35%	58.86%
2007	1,178	478	700	40.58%	59.42%
2008	1,262	453	809	35.90%	64.10%
2009	1,271	464	807	36.51%	63.49%
2010	1,334	523	811	39.21%	60.79%
2011	1,344	529	815	39.36%	60.64%
2012	1,427	548	879	38.40%	61.60%
2013	1,377	554	823	40.23%	59.77%
2014	1,393	557	836	39.99%	60.01%

Source: U.S. Department of Education, Center for Education Statistics. Table 325.50; at: <https://nces.gov/pubs2016/2016014.pdf>. All numbers rounded off by NCES and may not always equal 100%. Year refers to the academic year; e.g., 1986-1987 is listed by NCES as 1987 in this table.

Employment and Career Goals of English Ph.D. Recipients

The Modern Language Association (MLA; 2016) reported that, in 2012-2013, 89.1% of all doctoral degree recipients planned a career in academia. A review of earlier MLA (2010) studies revealed similar employment goals, ranging from 86.9% to 90.1%.

The MLA (2008) conducted exhaustive surveys of its members; and they reported there were an estimated 84,100 English faculty members by employment category in the 1992-1993 academic year; of that total: 29,100 were full-time tenured and tenure track English professors; 11,400 were full-time non-tenure track individuals; and about 43,600 part-time (contingent) instructors. By the 2003-2004 academic year, slippage in the MLA (2010) tallies (82,400) were recorded: 26,000 full-time tenured and tenure track English professors; 12,600 full-time non-tenure track individuals; and 43,800 part-time contingent faculty.

Recent studies indicated a continued decline in the number of English language and literature faculty members. The Humanities Indicators (2016) stated that the total number of tenured, tenure-track, and contingent faculty was 72,870 in 2015 in two-year and four-year colleges and universities; unfortunately, they did not provide job title data. The United States Department of Labor, Bureau of Labor Statistics (BLS 2016) reported continued declines in 2016 in English language and literature faculty positions of 69,930, with 41,790 faculty members at colleges and universities with 28,140 at junior colleges.3-17

The MLA (2011; 2012; 2014) also addressed other issues facing their members, including employment and the increased emphasis on a “publish or perish” philosophy at many English departments.

New Title Output of English Literature Books

English doctorates were chasing a shrinking number of full-time tenure and tenure track positions in U.S. English departments. So, the best chance an English Ph.D. had in obtaining tenure at a U.S. college or university was to publish a scholarly monograph.

However, the number of new scholarly books (Greco 2015), published by university presses, often viewed as “the reputable press” in many academic circles, in English language and literature varied significantly between 2001 and 2014: 2001, 505 new English language and literature scholarly books; 2002, 448; 2003, 515; 2004, 450; 2005, 412; 2006, 376; 2007, 435; 2008, 459; 2009, 619; 2010, 484; 2011, 459; 2012, 472; 2013, 415; and 2014, 472.

But was the “scholarly publishing playing ground” level and fair for women? Since women accounted for the clear majority of all new Ph.D.’s between 1987 and 2014, in theory they should account for most of the authored or edited scholarly books. Did they?

REVIEW OF THE LITERATURE

“Gender Gaps” in Scholarly Journals

We could not find any study about the “gender gap” in U.S. scholarly book publishing in English language and literature. However, the review of the literature revealed that “gender gaps” existed in scholarly journals. West, Jacquet, King, Correll, and Bergstrom (2013) conducted an exhaustive study of male and female authors of 8.3 million publications and 4.2 scholarly journals between 1545 and 2011. Between 1900 and 2011, for example, the percentage of female authors was low; in mathematics only 10.64% of the authors were women. This pattern was evident in other disciplines, including: philosophy 12.04%; economics 13.68%; probability and statistics 18.11%; and “organizational and marketing” 25.44%. Sociology posted better tallies with a 41.41% rate; the best percentage was in education with a 46.35% rate.

Roh (2016), who provided the authors of this paper with useful suggestions, investigated power inequality issues and the structures of power in the publishing sector. Mole (2012) argued that while female authors were gaining ground between 1990 and 2010, but “they are still not publishing at the same rate as men.” Pezzoni, Manresa, Stephen, and Lane (2016) concentrated on evaluating the gender output of graduate Ph.D. students at the California Institute of Technology, finding that “female graduate students co-author on average 8.5% fewer papers than men.” “Gender gaps” in scholarly journal publications in the science, technology, and medical (STM) category was the subject of numerous studies.

The medical sector was scrutinized by Jagi, Guancial, Worobey, Henault, Chang, Starr, Tarbell, and Hylek (2006). They analyzed 7,249 authors in six major medical journals: *The New England Journal of Medicine*; the *Journal of the American Medical Association*; the *Annals of Internal Medicine*; the *Annals of Surgery*; *Obstetrics & Gynecology*; and the *Journal of Pediatrics* for the years 1970, 1980, 1990, 2000, and 2004. “Overall, 15.9% of the first authors and 10.3% of the senior authors were women.” Filardo, da Graca, Sass, Pollock, Smith, and Martinez (2016) also investigated female first authorship in medical journals between 1994 and 2014 reviewing a slightly different cluster of journals: *The Annals of Internal Medicine*; the *British Medical Journal*; *The Lancet*; and *The New England Journal of Medicine*. They discovered that 34% of first authors were women. “The representation of women among first authors of original research in high impact general medical journals was significantly higher in 2014 than 20 years ago, but it has plateaued in recent years and has declined in some journals.”

Bohannon (2016) discovered that “a study of nearly 1 million engineering paper co-authorships puts hard numbers on the problem in the male dominated scientific [field]... Female engineers are publishing in slightly more prestigious journals on average than their male colleagues, but their work is getting less attention [i.e., fewer citations].” Mihaljevis-Brandt, Santamaria, and Tullney (2016) concentrated on gender publication patterns in

mathematics journals.

Female representation of the editorial boards of scientific, technical, and medical (STM) journals were investigated by Ioannidou and Rosania (2015), Chu (2001), and Topaz and Sen (2016); and these researchers discovered low female board membership. Gender bias in the scholarly journal peer review process was analyzed by Helmer, Schottdorf, Neel, and Battaglia (2017) and Lerback and Hanson (2017); these authors concluded that STM journals invite a small number of women to review submissions.

Strategy

Sometimes the unexpected happens; and an effective manager will take advantage of the situation. Mintzberg (1994) addressed this conundrum as “planners as strategy finders.” “Some of the most important strategies emerge without the intention or sometimes even the awareness of top managers. Fully exploiting these strategies, though, often requires that they be recognized and then broadened in their impact, like taking a new use for a product [or event] accidentally discovered by a salesperson and turning it into a major new business...”

Chandler (1995) wrote about the “invisible hand” that impacted markets and firms. He observed that “growth came either from an expansion of the firm’s existing lines to much the same type of customers, or it resulted from a quest for new markets and sources of supplies...” To achieve this, a company had to create a viable strategy and then launch the structure needed to achieve the desired strategy.

Levitt (1975) maintained that many companies declined inevitably as technology advanced because they defined themselves too narrowly. Using railroads as an example, Levitt wrote that “the reason they defined their industry wrong was because they were railroad-oriented instead of transportation-oriented; they were product-oriented instead of customer-oriented.”

Haynes & Abernathy (1980) opined that success in most industries required an organizational commitment to compete in the marketplace on technological grounds, to compete over the long run by offering superior products. They believed that developing new products and processes that open new markets or restructure old ones was the pivotal strategy that allowed a company to grow and prosper.³⁰

Porter (2008) developed an overarching framework that he called the “Five Forces” that shape strategy. A manager wants a competitive edge, a unique value proposition, to remain in business. The “Five Forces” model includes understanding and coping with: (1) supplier power; (2) barriers to entry; (3) the threat of substitutes; (4) buyer power; and (5) the degree of rivalry.³¹ Porter also wrote about the need for differentiation; the need to make a firm’s products or services different or more attractive from the competition. Porter (1998) maintained that the need to avoid being viewed as a commodity in the marketplace. How a company achieved this goal depends on the strategy it develops; and this often means offering distinctive features and excellent support services. Industries firms require “raw materials,” and the scholarly book industry needs manuscripts. So, scholarly book firms have a “buyer-supplier” relationship with potential authors.

METHODOLOGY AND ANALYSIS

The objective of this research study is to investigate gender disparity in the scholarly book output in the U.S., specifically in U.S. English Departments. To determine and quantify the nature of this disparity, we looked at the top 50 English Ph.D. Departments in the U.S. based on departmental rankings compiled by *U.S. News and World Report*. We had a team of five student researchers conduct an analysis of web sites at these top 50 English departments. The students searched the websites of these English Departments for 1,633 faculty members, and then tabulate the following information:

University Gender Academic Rank

- Instructor
- Assistant Professor
- Associate Professor
- Professor
- Chaired Professor
- Emeritus
- other

And for each book published
Publication date

Author –Editor

- Author of a Scholarly Book
 - o Year Published
- Co-Author of a Scholarly Book
 - o Year Published
- Editor of a Scholarly Book
 - o Year Published
- Co- Editor of a Scholarly Books
 - o Year Published

Type of Book Type of Book: Sub-Field

- University Press
- Commercial Scholarly Publisher

- American
- British
- other

This information involving 760 women, 873 men and 4,854 scholarly books was aggregated into an EXCEL spreadsheet. It should be noted that this data represents a census of the entire population of the faculty in the top 50 English departments in the U.S. and not a sample from a population. As such the usual techniques of statistical inference such as confidence levels and hypothesis testing do not apply. Since we have the data for the entire population under consideration and are not viewing this data set as a sample from a larger population about which we wish to make inferences our analysis consists of structuring the data in such a way as to clarify relationships of interest.

The first interesting observation is that, despite the fact that since 1987 substantially more English Ph.D.'s have been granted to women than men, the faculties of the top 50 English Department in the U.S. none the less consist of 53.5% men.

Table 2. provides a breakdown of the data by gender and rank. A breakdown of the data by gender, rank, books published, and books per person which is presented in

TABLE 2. Rank and Gender

Rank	Male	Female	Total
Instructor	15	8	23
Asst. Prof	42	42	84
Assoc. Prof	252	303	556
Professor	507	381	888
Chaired Prof	37	19	56
Other	20	7	27
Total	873	760	1633

Table 3 is consistent with other analyses cited in the Introduction in that it shows that male faculty on average publish more books than female faculty, based on mean number of books published per person. The range of year of publication ranged from 1968 to 2016.

TABLE 3. Books Published by Gender and Rank

Rank	MALE		FEMALE	
	Books	Books per person	Books	Books per person
Instructor	30	2.00	12	1.50
Asst. Prof	45	1.07	36	0.86
Assoc. Prof	443	1.51	380	1.46
Professor	2170	4.28	1418	3.72
Chaired Prof.	203	5.47	66	3.47
Other	26	1.30	6	0.86
Over all	2854	3.27	1981	2.61

Given the difference in productivity in books published between male and female faculty, we were interested to investigate the impact of university resources on relative productivity. To that end we decided to use the *U.S. News and World Report* rankings as a surrogate for resources based on the assumption that, for the most part, rank and resources are highly correlated. So, we looked at “books published” and “book published per person” for the top 10 ranked Universities among the top fifty and the bottom 10 ranked among the top 50 Universities. The results of this analysis can be found in Tables 4 and 5 respectively.

TABLE 4. Books Published by Gender and Rank – Top 10

Rank	MALE		FEMALE	
	Books	Books per person	Books	Books per person
Instructor	22	2.20	6	1.20
Asst. Prof	13	1.18	7	1.17
Assoc. Prof	63	1.85	57	1.24
Professor	527	4.93	389	4.47
Chaired Prof.	46	.540	18	2.57
Other	0	0	0	0
Over all	671	3.83	477	3.16

TABLE 5. Books Published by Gender and Rank – Bottom 10

Rank	MALE		FEMALE	
	Books	Books per person	Books	Books per person
Instructor	0	0	0	0
Asst. Prof	13	1.44	12	1.33
Assoc. Prof	42	1.14	77	1.67
Professor	255	3.54	152	3.62

Chaired Prof.	25	3.54	152	3.62
Other	26	2.36	6	1.50
Over all	361	2.65	262	2.50

Originally, we chose to look at the data in this way because we hypothesized that the additional resources available at the top schools might mitigate the disparity in productivity based on gender. The underlying assumption was that these additional resources might be used to offset the work/life balance issues which tend to effect women more than men. As we see from tables 4 and 5 just the opposite was the case with gender disparity being more pronounced at the top 10 universities than in total population of 50 and considerably more pronounced as opposed to the bottom 10. It was of interest, however, that “books per person” was greater for female professors for the ranks of Associate Professor, Professor and Chaired Professor among the bottom ten universities in our study.

Although all of our initial analysis indicated that men were more productive than women regarding book publication, a second question that we wished to investigate was: to what extent did this pattern change for younger faculty members?

In order to try to answer this question, we observed that the median year in which a faculty member published their first book was 1998. We therefore partitioned the data into two data sets, one consisting of faculty who published their first book on or before 1998 and the second set consisting of those who published their first book after 1998.

For each of these data sets we determined “number of professors,” “number of books published,” and “books per person” differentiated by gender. These results are presented in tables 6 and 7 below.

TABLE 6. First book Published on or Before 1998

	Number	Books Published	Books per Person
Male	400	1424	3.56
Female	301	610	.03

TABLE 7. First book Published After 1998

	Number	Books Published	Books per Person
Male	473	1418	3.00
Female	459	1383	3.02

For the cohort of faculty who published their first book after 1998, women are slightly more productive than men. For the cohort of faculty who published their first book before 1998, the differential between men and women for the category “Books per Person” is 1.53 books and for the after 1998 cohort the differential is -.02 books. Thus, it appears that for this population of scholars, young women have achieved parity (or better) in terms of productivity of books published.

COMMENTS, RECOMMENDATIONS, AND CONCLUSION

Study Limitations

Although to our knowledge, this is the first study of its kind, and its findings highlight some important historical, as well as recent patterns in male-female faculty differences about book publishing in the top 50 English departments in the U.S., the limitations of the study must also be acknowledged. Since this was a complete

census of the departments, based on information gathered from their websites in 2016, we do not know how many women were tenured, but went on to other departments; or, how many (and who) was denied tenure and may have gone elsewhere.

We also do not know the dates that both male and female faculty members joined the departments. In addition, it is possible that the fact that women were publishing more books than men in the post-1998 period may have been due to other factors some of which need to be researched through more ethnographic methods.

For example, it is impossible to tell how the intersectionality of race, class, sexual identity, and disability impact publishing outcomes. Certainly, there is a record of minority-identified scholars having difficulty in the tenure process, recorded in books like Gutiérrez y Muhs, Flores Niemann, González, and Harris (2012) in *Presumed Incompetent and Written/Unwritten: Diversity and the Hidden Truths of Tenure*, where women of color and queer people of color experience barriers to advancement in the academy, even when they have publishing records.

Other questions that would be important to research, and that would shed more light on these results, include the following. In terms of the post-1998 shift, have these departments become more hospitable to women in general and have they prioritized, to a greater degree, mentoring of new female faculty? Have these departments made expectations for research clearer to women? Have the universities reviewed here facilitated better childcare arrangements, to facilitate more productivity on the part of women with regard to book publishing? Have changes in family and work-life policies impacted women differently than men? Have men taken over more of the child care duties? Finally, are women, who published in the post 1998 period, having fewer children or no children?

Recommendations: Strategy and Structure

It is possible that the “gender gap” in the publication of English language and literature scholarly books by females is due to hiring issues. This is beyond the scope of this research.

However, drawing on the strategic theories of Mintzberg, Chandler, Levitt, Hayes and Abernathy, and Porter, as well as research on the scholarly book publishing sector,³⁴ it seems prudent for the university press community to address the “gender gap” in the English language and literature publication process. Accordingly, we present the following strategy recommendations.

First, for many female faculty members, as well as female doctoral students, the scholarly book publishing process is often rather opaque and clouded in mystery. To address this, perhaps during the annual November “university press week,” a systematic marketing outreach and mentoring program could be implemented to reach this “branded community.” This means using Porter’s ideas regarding offering distinctive features and excellent support services to potential authors.

The marketing outreach program, drawing on Mintzberg’s “planners [i.e., authors] as strategy finders,” could address a series of presentations substantive issues, including: (a) What exactly is covered in the copyright law of the United States? (b) What is “fair use”? (c) Can the author of a book keep the copyright? (d) Is the copyright always transferred to the publisher? (e) Can a book that had the copyright transferred to a publisher be posted on the author’s personal web site or a university web site? (f) Does posting part or all of a dissertation jeopardize the author’s chances of finding a publisher? (g) What do editors look for in a book proposal? Do editors only want to see a complete book manuscript? (h) Can a dissertation be turned into a scholarly monograph? (i) What is Open Access (OA)? Are OA books free to the author? Who pays for an OA book? Will tenure and promotion committees view an OA scholarly book the same way they viewed traditionally printed scholarly books? (j) What is “print on demand” (POD)? What is litho? (k) Do libraries still buy printed scholarly books? Or are books made available primarily to libraries via a license agreement? (l) How does the publisher publicize a scholarly book? Will the publisher pay for an author’s tour? How does an author get booked on television to discuss the book’s findings? (m) Will a major newspaper interview the author about his or her scholarly book? (n) What are the terms and conditions of a typical contract for a scholarly book? What is an advance or a royalty? Do

university presses pay advances and royalties? If the book is successful, how much money can an author earn? (o) What is the North American market for scholarly books versus the global market for scholarly books? (p) How many books are published annually in a specific book category (perhaps American literature) and in sub-categories (perhaps American Literature to 1900) or slivers of a sub-category (perhaps American literature before the American Revolution)? (q) Does a scholarly book published by a commercial scholarly book house have the same importance and prestige to tenure and promotion committees as a book published by a university press? (r) Can the author design the book's cover, determine the price of the book, and craft the publicity campaign?

Second, university press editors can mentor small groups, perhaps three or four individuals, reviewing the following: (a) a dissertation is not a book; (b) how can the research in a dissertation be made more relevant to a broader audience than a small dissertation committee; and (c) a book proposal.

Third, a university press editor, drawing on Porter's statements concerning having "unique value proposition" and understanding and coping with barriers to entry, can help an individual prepare a proposal and/ or manuscript for submission to a scholarly book publisher. And then outline clearly substantive marketing issues an author needs to understand when dealing with an editor. In essence, using: Hayes & Abernathy's ideas regarding an organizational commitment to compete in the marketplace over the long run by offering superior products; and Chandler's statements regarding an editor's quest for new markets and sources of supplies; key issues an editor will use to evaluate the potential costs and market for a specific title, including: a review of a typical profit and loss (P & L) statement (e.g., plant; printing, paper, and binding; warehousing; distribution; etc.); new title output in English language and literature as well as sub-fields (e.g., American literature; 19th century American literature; 19th century poetry in New England); competition in the U.S. higher education market for scholarly books; the declining library market for scholarly books; the class adoption market; the export market; etc.

These outreach and mentoring programs could help: (1) potential authors understand the market for English language and literature scholarly books, drawing on the ideas developed by Levitt regarding being product-oriented instead of customer-oriented; (2) ameliorate the "gender gap" the scholarly book output of female faculty members; (3) university presses discover authors with titles that fit a press list; and (4) strengthen the visibility of a university press on a campus.

Conclusions

As we noted at the start, numerous research studies have found gender disparity in scholarly and academic writings, with a greater number of male authors published. However, gender disparity in the scholarly book market in the U.S. has not been extensively investigated.

To address gender disparity in scholarly book publishing, in 2016 we collected, aggregated, and analyzed data on faculty members who had authored or edited scholarly books in the top 50 English Ph.D. departments in the U.S. We chose English departments because English is one of the more gender-balanced academic fields in the humanities; and because almost all university students are required to take courses in these departments. Our over-arching question was: Do women publish as many books as men in the top 50 English departments? We proceeded in this analysis by investigating a number of related questions.

First, given the greater number of women receiving Ph.Ds. in English since 1987, we asked if there are more female English professors in the top 50 departments? We found this was not the case. Men still make up 53.5% of the 1,633 faculty in the U.S.'s top 50 English departments in 2016. In other words, gender imbalance still exists at the top departments in a field that has been producing more female Ph.Ds. since 1987. There is also clearly either lack of advancement or attrition of women in the field over time. At the Assistant Professor level, the gender split is 50/50, but women make up 42.9% of Full Professors and 33.9% of Chaired Professors. In addition, we found that, at every level, Instructor to Full Professor, male faculty published more books than female faculty in these departments. Overall, this was 3.27 books per male faculty versus 2.61 books for female faculty. This finding was consistent with the work cited earlier.

Our second question was: assuming that the top departments provided greater resources to facilitate publication, did female professors in the top departments publish more books per capita than male professors? Somewhat to our surprise, and contrary to our assumptions, we found that, in the top 10 departments, the gender disparity was more pronounced than in all 50 departments, and more discernible than in the bottom 10 departments. The departments in the middle group, (those ranked in the 20-30 range) had the least gender disparity in terms of the number of books produced per male and female faculty member. We did note, however, that in the bottom 10 departments, women in higher ranks (Associate Professor, Professor, and Chaired Professor) had more books per person than men.

Our third question was: To what extent have these patterns changed for newer faculty cohorts entering the top English departments in the U.S.? Here we noted an interesting turnaround. We divided our sample into those who published their first book before 1998 – this was the median year in which faculty published their first book – and after 1998; and we examined how many books had been published by male and faculty members before 1998 on a per capita basis; and how many had been published after 1998. We found that, before 1998, the differential was 1.53 with male faculty publishing more books on average (and on a per capita basis) than women. After 1998, however, this was reversed with more women producing more books per capita than men – with a gender differential of -.02. Looking at this difference pre- and post-1998, and the more equivalently distributed gender percentages in the lower rankings of Professors in Table 2, it is possible that women entering the profession more recently are publishing more books than men? It is hoped that the increase in published books by women after 1998 has led to more equal gender representation in the lower ranks, but we cannot definitively conclude this, for we could not determine from our data when individuals were hired or received tenure. For example, it might be also possible that women have published more after 1998 but have not been promoted at the rate of men.

Unfortunately, the data available is limited, and it may also be that some of the variables that have been found to influence women's lack of advancement in the academy have attenuated somewhat. For more on what these variables are, see Hancock, Baum and Breuning (2013), Teele and Thelen (2017), Matthew (2016), and, Voeten (2013).

Clearly, more research is needed to determine this.

References

- Bohannon, J. 2016. Female engineers publish in better journals, but receive fewer citations;” from: <http://news.sciencemag.org/scientific-community/2016/01/female-engineers-publish-better-journals-receive-fewer-citations>.
- Chace, W.M. 2009. The Decline of the English department: How it happened and what could be done to reverse it. *American Scholar*; from: <https://theamericanscholar.org/the-decline-of-the-english-department/-and-what-could-be-done-to-reverse-it>.
- Chandler, A.D. 1995. *Strategy and structure: Chapters in the history of the American industrial enterprise* (Cambridge, MA: MIT Press), page 42; also see pages 1-13.
- Chu, Y-H. 2001. Women editors of the astrophysical journal; from: <http://www.aas.org/cswa/status/2001/January2001/womeneditors.html>.
- Filardo, G., B. da Graca, D.M. Sass, B.D. Pollock, E.B. Smith, and M.A-M. Martinez. (2016). Trends and comparison of female first authorship in high impact medical journals: Observational study (1994-2014). *BJM* 2016: 352: 1847: 1-8.
- Greco, A. N. 2015. Academic Libraries and the Economics of Scholarly Publishing in the Twentieth-First

- Century: Portfolio Theory, Product Differentiation, Economic Rent, Perfect Price Discrimination, and the Cost of Prestige. *Journal of Scholarly Publishing* 47, 1(October): 1-43.
- Helmer, M., M. Schottdorf, A. Neef, and D. Battaglia. 2017. Gender bias in scholarly peer review; from: *eLife* 2017; 6:e21718.
- Gutiérrez y Muhs, G., Y. Flores Niemann, C. G. González, and A. P. Harris. Presumed incompetent: The intersections of race and class for women in academia. Boulder, CO: Utah State University Press; 2012.
- Hancock, K. J., M.A. Baum, and M. Breuning. 2013. Women and pre-tenure scholarly productivity in international studies: An investigation into the leaky career pipeline. *International Studies Perspectives*, (2013): 1-21; from: <https://www.hks.harvard.edu/fs/mbaum/documents/IntStudPers2013.pdf>.
- Hayes, R.H. and W. J. Abernathy. 1980. "Managing our way to economic decline," *Harvard Business Review* 58, 4(July-August): 68.
- Humanities Indicators. 2016. Number of faculty members in humanities disciplines; from: <http://www.humanitiesindicators.org/content/indicatordoc.aspx?1=11037>.
- Ioannidou, E. and A. Rosania. 2015. Under-representation of women on dental journal editorial boards; from: *PloS One* 10, 1: e0116630.
- Jagsi, R., E.A. Guancial, C.C. Worobey, L.E. Henault, Y. Chang, R. Starr, N.J. Tarbell, and E.M. Hylek. 2006. The 'gender gap' in authorship of academic medical literature—A 35-year perspective. *New England Journal of Medicine*, 355: 281-287; from: <http://www.nejm.org/doi/full/10.1056/NEJMsa053910#article>.
- Lerback, J. and B. Hanson. 2017. Journals invite too few women to referee. *Nature* 541 (January 26): 455-457.
- Levitt, T. 1975. "Marketing myopia," *Harvard Business Review* 53, 5 (September-October): 26.
- Matthew, P.A. (Ed.). *Written/Unwritten: Diversity and the hidden truths of tenure*. Chapel Hill: University of North Carolina Press. 2016
- Mihaljevis-Brandt, H., L. Santamaria, and M. Tullney. 2016. The effect of gender in the publication patterns in mathematics; from: *PloS One* 11, 10:e1165367. Doi: 10:1371/journal.pone.0165367.
- Mintzberg, H. 1994. The fall and rise of strategic planning," *Harvard Business Review* 72, 1(January-February 1994): 113.
- Modern Language Association (MLA). 2008. Education in the balance: A report on the academic workforce in English; from: https://www.mla.org/content/download/3255/81374/workforce_rpt03.pdf.
- Modern Language Association (MLA): MLA Office of Research. 2010. Report on the survey of earned doctorates, 2007-2008; from: https://www.mla.org/content/download/3208/81186/sed_0708.pdf.
- Modern Language Association (MLA): MLA Office of Research. 2011. Report on the survey of earned doctorates, 2008-2009; from: https://www.mla.org/content/download/2980/80274/sed_0809.pdf.
- Modern Language Association (MLA): MLA Office of Research. 2012. Report on the survey of earned doctorates, 2009-2010; from: https://www.mla.org/content/download/2781/79478/sed_report_2010.pdf.
- Modern Language Association (MLA): MLA Office of Research. 2014. Report on the survey of earned

- doctorates, 2010-2011 and 2011-2012; from <https://www.mla.org/content/download/25440/1164378/webbrptsurvearnedddocs1012.pdf>.
- Modern Language Association (MLA): MLA Office of Research. 2016. Report on the survey of earned doctorates, 2012-2013; from: <https://www.mla.org/content/download/40535/1747214/rpfSurvEarnedDocs12-13.pdf>.
- Mole, B.M. 2012. Publishing's gender gap. *The Scientist*, October 23; from: <http://www.the-scientist.com/?articles.view/articleNo/32947/title/publishing-s-gender-gap/>
- Pezzoni, M., J. Mairesse, P. Stephen, and J. Lane. 2016. Gender the publication output of graduate students: A case study; from: *PloS One* 11,1: e0145146. Doi: 10.1371/journal.pone.0145146.
- Porter, M.E. 2008. "The five competitive forces that shape strategy," *Harvard Business Review* 86, 1: 79-93.
- Porter, M.E. 1998. *Competitive Strategy: Techniques for Analyzing Industries and Competitors* (New York: The Free Press).
- Roh, C. 2016. Library publishing and diversity values: Changing scholarly publishing through policy and scholarly communications education. *College and Library Research News* 77, 2: 82-85.
- Teele, L., and D. and K. Thelen. 2017. Some of the top political science journals are biased against women. Here's the evidence." *Washington Post*, May 30, 2017; from: <https://www.washingtonpost.com/.../2017/.../30/some-of-the-top-political-science-journals-are-biased-against-women>.
- Topaz, C.M. and S. Sen. 2016. Gender representation on journal boards in the mathematical sciences; from: *PloS One* 11, 8:e0161357. Doi: 10.1371/journal.pone.0161357.
- U.S. Department of Education, National Center for Education Statistics. 2017a. Table 315.20; from: https://nces.ed.gov/programs/digest/d15/tables/dt15_315.10.asp.
- U.S. Department of Education, National Center for Education Statistics. 2017b. Table 105.20; from: https://nces.ed.gov/programs/digest/d15/tables/dt15_105.20.asp?current=yes.
- U.S. Department of Education, National Center for Education Statistics. 2017c. Table 325.50; from: <https://nces.ed.gov/pubs2016/2016014.odf>.
- U.S. Department of Labor, Bureau of Labor Statistics. 2016. Table 25-1123; from: <https://www.bls.gov/oes/current/oes251123.htm#st>.
- Voeten, Erik. 2013. Explaining the gender gap. *Washington Post*, September 30, 2013; from: <https://www.washingtonpost.com/news/monkey.../2013/.../30/explaining-the-gender-gap>.
- West J.D., J. Jacquet, M.M. King, S.J. Correll, and C.T. Bergstrom. 2013. The Role of Gender in Scholarly Authorship; from: *PLOS ONE* 8(7): e66212. <https://doi.org/10.1371/journal.pone.0066212>