Gender and Department Heads: An Empirically-Inspired Literature Review

Dr. Kacey D Beddoes, Oregon State University

Kacey Beddoes is a Research Associate in the School of Civil and Construction Engineering at Oregon State University. She received her PhD in Science and Technology Studies (STS) from Virginia Tech, along with graduate certificates in Engineering Education and Women's and Gender Studies. She serves as Managing Editor of Engineering Studies and Assistant Editor of the Global Engineering Series at Morgan & Claypool Publishers. Her current research interests include gender in engineering education research, interdisciplinarity, peer review, engineers' epistemologies, and global engineering education.

Mr. Corey T Schimpf, Purdue University, West Lafayette
Dr. Alice L. Pawley, Purdue University, West Lafayette

Alice Pawley is an Associate Professor in the School of Engineering Education and an affiliate faculty member in the Gender, Women's and Sexuality Studies Program and the Division of Environmental and Ecological Engineering at Purdue University. She was co-PI of Purdue's ADVANCE program from 2008-2014, focusing on the underrepresentation of women in STEM faculty positions. She runs the Feminist Research in Engineering Education (FREE, formerly RIFE, group), whose diverse projects and group members are described at feministengineering.org. She received a CAREER award in 2010 and a PECASE award in 2012 for her project researching the stories of undergraduate engineering women and men of color and white women. She received ASEE-ERM's best paper award for her CAREER research, and the Denice Denton Emerging Leader award from the Anita Borg Institute, both in 2013. She helped found, fund, and grow the PEER Collaborative, a peer mentoring group of early career and recently tenured faculty and research staff primarily evaluated based on their engineering education research productivity. She can be contacted by email at apawley@purdue.edu.

Gender and Department Heads: An Empirically-Inspired Literature Review

Abstract: Inspired by storytelling circles with female academics, this article examines the role of department heads vis-à-vis gendered career experiences and women's persistent underrepresentation among science and engineering faculty members. It focuses on the level of power heads are afforded, presents new and understudied perspectives on the department head literature, and suggests research horizons and policy recommendations. Five gendered dimensions of department head literature are identified and discussed. Given that department heads play pivotal roles within the academy, their actions warrant further examination, specifically as they pertain to gender biases.

Keywords: department heads, discourse, gender, fairness, training

Introduction

We listen as a female faculty member recounts a story about her maternity leave experience. After giving birth, she was expected to continue teaching four classes. Her department head brought her work and grading to her home to 'help' in this regard. A student complained that he could not defend his dissertation two days after she gave birth. Eventually, the department head convinced her to return to work four and a half weeks after giving birth, only to be told that she was not being a 'team player', 'contributing enough', 'committed enough', or meeting others' needs. She did not feel there was anyone in her department she could go to for help or support. It was not an isolated experience.

This story was told to other female faculty members as part of a series of 'storytelling circles,' which were organized in order to gain insight into the careers and experiences of female faculty members in science and engineering fields. While many stories told during the group interviews reflected a lack of consideration for family-related responsibilities, the one above reveals clearly the influence of a department head. It reveals a significant lack of consideration for the participant immediately after she gave birth to her child.

Time and again, we heard stories detailing the ways in which department heads played significant roles in academics' careers, success, and job satisfaction. Some participants emphasized that significance through a positive story, but more often they told stories of department heads negatively affecting their careers. In both cases, there was agreement that the 'department head is critical' and 'makes or breaks' careers.

The stories thus reflected a common refrain in the literature: the significance of department heads. Department heads play pivotal roles within the academy[1-3]. It is estimated that department heads make 80% of the administrative decisions that are made within universities [4,5]. They have authority over key decisions that affect academics' lives in significant ways, including tenure and promotion, course load and scheduling, and hiring new faculty members. Given the power they have to influence academics' careers and experiences, their roles and actions warrant further examination[4]. Most commonly, studies have explored the experiences of heads[6-10], and ideal characteristics of successful heads[2,4,11,12]. However, significantly less attention has been paid to gendered dimensions of department heads' actions. Moreover, the literature about and for department heads has not yet been adequately examined through a gender lens. This lack of critical examination through a gender lens is problematic because underrepresentation of female faculty, particularly senior faculty,

persists in many fields across the United States as well as other countries[13-15],and is even more pronounced for women of minority racial and ethnic backgrounds[16-18]. Furthermore, foreign female professors can face additional challenges[19].

Gendered dimensions of academic careers, on the other hand, are well documented in a large body of literature that has repeatedly identified numerous challenges for female academics (e.g.,[20]) including lack of professional development and mentoring, gender discrimination and biases related to behavior and competence, and gendered socialization[21-25]. Various lenses have been used to explain women's underrepresentation in academia. For example, human capital, socialization, culture and privilege, and institutional organization explanations have all featured prominently in studies of female faculty members[26,27]. Recruitment and hiring practices have also been identified as contributing factors[28,29]. Additionally, campus climate studies have constituted a significant part of efforts to understand underrepresentation[30,31]. Of particular significance to this analysis is the large body of literature on the challenge of balancing work and family[32,33]. While many academics, men and women alike, struggle with this balance, research has shown that women struggle more and sacrifice more in the struggle than men do[23,34-36]. As Mayer and Tikka (2008) summarize many of the issues:

> …women face greater societal expectation for care giving, yet are penalized professionally for doing so…Female professors in the US are sacrificing relationships and childbearing to acquiesce to the male-centred academic tradition…Those who are in tenure-track positions and have children are less likely to take advantage of options, such as stopping the tenure clock or long maternity leaves, for fear of being seen as less serious about their careers than their male peers…Despite a legal right to a long maternity leave, female graduate students and those in research posts risk losing an extension of their contract if they take a lengthy leave, or they may be pressured into returning to work before the end of the allowed leave period...[37](p. 370)

However, within this literature on female academics, the influence of department heads specifically is often not explicitly addressed. Heads play a key role in many of the issues discussed, but discussions and recommendations largely do not focus specifically on the heads, but rather on mentoring programs, family friendly policies, and unconscious bias training, for instance.

There are thus two distinct bodies of literature (department heads, and gender in academia), neither of which has yet adequately examined the roles that department heads play in perpetuating gender biases and persistent underrepresentation. Therefore, this article identifies and addresses gaps in those two bodies of literature. Inspired by qualitative data from storytelling circles with female academics, it examines the role of department heads vis-à-vis gendered career experiences and women's persistent underrepresentation in most science, technology, engineering, and mathematics departments. In particular, it focuses on the level of power heads are afforded, and presents new and understudied perspectives on the department head literature. Research horizons are identified and policy recommendations put forth. It should be noted that we use the term 'head' to refer to both department heads and chairs, as those terms are used interchangeably in the literature and vary by institution and county, and some institutions have both chairs and heads, with the former voted in by the department and the latter appointed by a dean.

The paper begins with a description of the path that led us to this analysis, which is important for understanding the structure of the paper. Next, we identify five gendered dimensions of the department head literature, explaining why each is problematic. We then discuss the relationship between our data and the literature, and put forth recommendations.

Background: An empirically-inspired critical literature review

The storytelling circles were one part of a larger research project, and the study's methods have been described in detail elsewhere[38,39]. The circles took place at a large, public, research-intensive university in the United States, which, like most higher education institutions in the United States, employs a tenure system in which tenure-track professors are hired as Assistant Professors and reviewed for tenure and promotion to Associate Professor after typically five years. Most new department heads at this university receive some kind of training. Participants were both tenure-track and tenured female faculty members who represented seven different departments, all in the general classification of science, engineering and technology fields. While analyzing the data employing open coding[40], the importance of department heads emerged as a leading theme.

Throughout the stories, department heads were portrayed as pivotal actors. Positive stories recounted instances when a department head had been 'supportive' in a way that had significant career implications. The stories highlighted the fact that department heads influence not only day-to-day job satisfaction but significant career outcomes such as tenure and promotion as well. Unfortunately, negative stories were more common than positive stories. Often the stories featuring department heads centered on how a change in department head had been significant, thus further highlighting their power. One participant stated, 'That previous department head has actually stood in the way of me advancing. It wasn't until he actually left that I could advance.' Others reflected on how department heads' philosophies can affect the work load of everyone in a department, explaining that when she was first hired, the head did not believe in protecting new assistant professors from heavy teaching loads and other non-research duties, but her current head very much believes in that and expects senior department members to take on more of that work.

The discussion of department heads led to the subject of how they are hired and trained, with both circles disapproving of the fact that heads are not trained in key areas. One said:

> Department heads here have a lot of power and some of them have vey little experience and they don't seem to get any particular continuing education about being department head and learning all this stuff. [My department head] probably couldn't imagine why he needs such information, but he is very ineffective in many many ways, and the sad thing is he is clueless, but in the department, what do you do with that?

Likewise, in the other circle, a participant commented on the inefficacy of her department head saying, 'Not training department heads I think is the other issue that we don't do at [this institution]. There's no leadership training class. They just appoint a department head.' She went on to say that her head had just been appointed by the Dean without any opportunity for department members to weigh in or for him to present his vision for the department. She believed deans needed to take responsibility for that training. In contrast, another participant spoke highly of her Dean's 'strict' and 'elaborate' evaluation of department heads every few years, thus highlighting significant variability across departments. In actuality, this university

does have some training for department heads. However, as we discuss below, there are reasons to question the assumption that training is the answer.

Originally, we set out to write a traditional higher education article based on our findings from the storytelling circles, focusing on the ways in which heads had shaped the careers of our participants. While conducting research for the literature review however, the literature itself emerged as a significant topic that warranted analysis in its own right. The structure of this paper is therefore non-traditional. In essence, we found that the most significant contribution of the work lay not in the data from the storytelling circles, but rather in a critical and novel analysis of the department head literature. Therefore, we have 'flipped' the traditional structure in some sense in order to focus the paper on the research landscape and the problems we found while attempting to write a literature review for a more traditionally-structured paper. Because our data emphasizing the significance of department heads led us to the critical analysis of the literature, we consider it an empirically-inspired literature review.

Methodology: Content Analysis

The methodology used for this literature review is content analysis. Content analysis is primarily used for existing data sources, such as institutional documents, articles or books[40]. Analysis of existing data sources proceeds by reading all the compiled documents and identifying themes and patterns across sources, similar to thematic analysis[41]. We used a constant comparative approach[42] to develop themes as they emerged from the documents. The results of this analysis are described below.

Gendered Dimensions of Department Head Literature

The role of department head is complex and multi-faceted. They are accountable to multiple constituencies[12,43-46], but faculty members represent one of the primary constituencies. Helping faculty members and increasing their satisfaction is cited as a core duty of department heads [1,11]. For instance, heads should take responsibility for establishing and maintaining departmental cultures[4]. They should 'develop trusting, close, and supportive relationships with their faculty members' ([2], p. 55), and they should have 'a genuine concern for the department and its members…loyalty toward academic colleagues…personal integrity for maintaining trust and credibility' ([11], p. 42). Effective heads are able to reduce, resolve and prevent conflict, 'foster the development of individual faculty members' talents and interests', and 'maintain faculty morale' ([1], p. 581). Successful heads serve as role models and mentors, and encourage and support their faculty ([6], p. 496).

Despite these normative assertions of how things should be, however, the body of literature on department heads and their training is limited in ways that inhibit heads' abilities to create those supportive and trusting relationships with all faculty members and also cause them to perpetuate challenges for female academics. Through a review of the literature on department heads, we identified five gendered dimensions that warrant critique: they are summarized in Table 1.

Table 1. Gendered dimensions of the department head literature

Gendered Dimension	Critique
Emphasis almost exclusively on training	Training cannot correct all problems
Most literature gender-blind	Perpetuates androcentric norms

Most gender literature limited or problematic	Focuses on sexual harassment and portrays female academics as a problem
Discourse of fairness	Fairness is not a universal or objective concept
Ideology of collective good	Disadvantages women because of gendered social expectations

First, aside from commenting on the fact that department heads must play multiple roles, the other most noted fact about heads is that they receive little or no training for carrying out those duties. Article after article laments this dearth of training[1,43,45,47,48]. Others critique the training programs and advice books that do exist for being too general or unrealistic[3,44,48,49]. While the lack of training is certainly a problem, it must also be recognized that training alone will not address the biases and personal agendas of heads, including gender biases. Calls for training should be more reflective and critical about the problems that training can address, and the ones that it cannot. The issues that emerged in our storytelling circles likely would not have been ameliorated solely through further training.

Training is typically conceived as having an impact on knowledge, skills, behaviors and attitudes[50,51]. Of these, only attitude may get at underlying values or beliefs behind biases; however, attitudes have been repeatedly found to be unstable (and thus not easily amenable to training) across contexts[52]. Additionally, training may be systematically devalued within an organizational culture or by subcultures (e.g., department heads or faculty)[53]. Perhaps most crucially, training often cannot override past or outside socialization[54,55]. While training focused specifically on diversity[56] and empathy[57] may come closer to addressing bias and ingrained beliefs, results on such training are mixed at best[57-59] and remain unlikely to override deeply held beliefs.

Second, with a few notable exceptions[3,60-63], the department head literature is gender-blind; that is, it is written without any mention of differences between male and female academics that a head should be aware of. Such gender-blindness is a problem because most heads (in the U.S.) are still white men[4,64], and they may be unaware of, or unsympathetic to, how gender privileges function in society and academia. Additionally, as discussed in the Introduction, it is well documented that female academics face many challenges that men do not face and that men are not always aware of or sympathetic to. As Armenti (2004) explains, 'Department chairs, who tend to be men, make discretionary decisions about a woman's leave time, and women's requests are not necessarily accommodated. Indeed, due to fear of reprisal, untenured women seem particularly vulnerable in their ability to seek and receive parental leave.'[65] This means that in practice, 'gender-blind' tends to equate to androcentric, or male-centered.

Third, much of the literature that does address gender is limited and problematic, focusing on formalistic and individual behaviors rather than larger structural issues. For example, much is limited to sexual harassment issues and legal issues surrounding discrimination[1,66]. While undoubtedly important, limiting gender discussions to sexual harassment and legal issues ignores the more day-to-day, less overt problems female academics face. Furthermore, some literature is problematic in that it paints women's presence in a negative light, as an 'abnormality'(read problem) that heads will need to handle. Hecht (2004), for example, notes that the increasing numbers of women and people of color in academia can cause 'challenges of varying values and assumptions ranging from behavior to pedagogy to the very purposes of the department's discipline' ([67], p. 30). The title of Waerdt's (1993) chapter is 'Women in Academic Departments: Uneasy Roles, Complex Relationships.' These pieces of scholarship

serve as evidence that women are still an anomaly in an academy that remains androcentric, and their wording subtly portray women's presence as a problem. Perhaps most strikingly, in a chapter published in 1993, Hurtubise wrote that the 'real challenge for a department is the pregnancy of an unwed faculty member' ([66], p. 159). Without elaborating on what he means by this, he directly proceeds to discuss court cases in which it was ruled that unwed mothers could not be discriminated against because they were 'per se immoral' (160). While it might be tempting to write this off as an historical relic, statements such as these have gone un-critiqued in the last 20 years. It should also be noted that another kind of study exists: those that compare and contrast male and female department heads or examine women in academic leadership positions[12,64,68-71]. While presenting another important approach to studying relationships between gender and department heads, such studies are not central to the analysis at hand.

Fourth, a discourse of *fairness* permeates the literature. As the following quotations demonstrate, many publications emphasize that the head has an obligation to act 'fairly' and that (s)he will be most successful if (s)he makes 'fair' decisions. Several of the numerous examples include:

- One of the head's jobs is to delegate the workload in a manner that is 'fair' and 'appropriate' ([72], p. 220).
- Heads are expected to assign 'teaching schedules fairly' ([11], p. 47).
- 'The safest way for a department chair to avoid a fracas is to establish a sense of fair play…' ([66], p. 160).
- Heads should review evaluation processes to ensure that they are 'both non-sexist and fair' ([63], p. 62).
- The workload should be distributed 'equitably among all the faculty' ([61], p. 81)
- "Treat everyone fairly" ([73], p. 59)

These statements are made without elaboration, as if the notions of fairness and equitability were universal and objective concepts that do not warrant further exploration. Concepts of fairness are subjective and often gendered: what is fair for women is often perceived as unfair for men or the department as a whole[74,75]. Indeed, data from the larger study of which the storytelling circles were but one part revealed that parental leave and associated course release were perceived as unfair by other members of a department[76]. While faculty and heads may openly debate the fairness of different organizational decisions or actions, as a function of their more powerful position, heads have significantly greater ability and leeway to define what counts as 'fairness' in the organization, as well as exclude items from the discourse. Similar arguments have been made about other work place settings (e.g., [77,78]). As a result of power differences and subsequent framing of notions of fairness, faculty members may be unwilling or unable to change the organizational conceptualization of fairness.

Fifth, the literature emphasizes that the head has a responsibility to focus on and promote the good of the department as a whole, which we will refer to as 'collective good.' For example, Hecht et al. (1999) emphasize 'collective success' ([61], p. 30). They assert that issues such as course scheduling should begin with 'collective considerations' (p. 78), and that heads should develop a 'shared culture within the department concerning how work will be distributed and how individuals will support the mission and goals of the department' (p. 82). More specifically, for instance, Hecht et al. (1999) and Buller (2006) in their discussions of course scheduling, focus on meeting the needs of students and do not mention any issues related to the challenges of work-family balance for women. This focus on the collective good of the

department can work to disadvantage women when it is assumed that the collective good is gender-neutral. If, for example, a woman takes parental leave and gets course release one semester, she may be perceived as not working toward the collective good, or not being a team player, because a class either will not be taught (inconveniencing students) or will need to be taught by someone else (burdening colleagues), on top of the fact that less research or graduate student progress may be made that semester. In this way, the needs of female academics, owing to gendered social expectations for family responsibilities, may be perceived by colleagues to work against the collective good. As Bensimon et al. (2000) explain, 'good citizenship' is subjective and can be used against people who are not liked because they do not conform to expectations ([3], p. 42). 'Collective good' in this context becomes similar to a discourse of fairness where everyone is held to the same, ostensibly gender-neutral standard. Yet, the gender-neutrality of academia has been severely challenged[79-82]. Collective good by one standard does not preclude the possibility of an alternate view of the collective good that takes into account family responsibilities of men and women as well as the ongoing barriers women face in academia. Unfortunately, as our literature review revealed, such an alternative is not easily achieved.

Discussion: New Directions for Research and Policy

As summarized in Table 2, the majority of current literature for and about department heads and the policy recommendations therein do not adequately address, and in fact perpetuate, many of the problems highlighted in our storytelling circles.

Table 2. Summary of interviews, discussion, and recommendations

Theme from interviews	Relationship to literature	Recommendation
Heads have significant power	Not problematized in the literature	Power structure should not be so concentrated
Heads can act on biases without accountability	Not problematized in the literature	Accountability mechanisms
Heads perpetuate gendered notions of fairness and collective good	Actively encouraged in the literature	Scholars and trainers need to be cognizant of the gendered facets of their discourses
Heads do not receive sufficient training	Issue most emphasized in the literature	The limitations of training also need to be recognized and gender training should be broadened

In light of the problematic relationship between our findings and the literature, we suggest that greater reflection on the literature and the power afforded heads is needed. Three issues in particular warrant further discussion. First, the literature paints role-ambiguity and a lack of training as the key problems related to department heads, but our research suggests that training may not have helped, and indeed could have made things worse if, like the literature, it emphasized fairness and collective good in a gender-blind manner. We want to raise critical questions about the assumption present in the literature that training is inherently good or helpful. Training will likely be based on the available literature, and training to emphasize fairness and collective good could be more damaging than helpful. It is worth noting that most new department heads at our institution do attend some kind of training when they begin their positions, but that clearly did not prevent them from perpetuating the gender biases discussed in our storytelling circles.

In addition to a lack of training, our findings suggest that the amount of power accorded to department heads is a problem that needs to be addressed. The ability of one person to make or break a career is a problem, particularly given the significance of outcomes for tenure and promotion. In fact, as we have reported elsewhere[39] department heads readily admit that they have the power to sway tenure and promotion decisions one way or the other, due to the ambiguity that surrounds the criteria.

Second, highly related to the amount of power they have, is that their actions are highly unaccountable, with too much leeway for personal agendas and biases. Given that evaluation criteria for heads are limited or non-existent (depending on the institution), heads often do not know how they will be evaluated[4,11,70,83]. Thus, the lack of accountability for objectivity is perhaps not surprising. Participants' stories revealed that when a head liked them he (they were all men) helped them and when not, he created difficulties for them.

Such subjectivity is problematic because empirical research from social and organizational psychology fields, among others, reveals that women are expected to be nice, communal, and non-self-interested, while men are expected and perceived to be competent, agentic, dominant, and influential[84-87]. These associations are descriptive (relating to how men and women actually do behave), prescriptive (influencing how we believe men and women *should* behave), and injunctive (carrying social sanctions for those who transgress them)[87,88]. Gender roles prescribing that men are more competent and that women need to be nice mean that women and their work products are evaluated less favorably, particularly when they do not conform to roles, e.g., if they are too assertive. Contrary to popular myth, academia is not immune from gender-biased evaluations and assumptions about incompetency based on race or gender[21,22,24]. However, gender biases of this sort are difficult to detect and prove because they are subtle, indirect, and implicit. Often people are not aware of how their judgments are shaped by gender roles and consider themselves unbiased[24,87,89]. Therefore, "Although women may suspect that they've been the victims of negative attitudes toward women, they can rarely prove it and often have no recourse" ([84], p. 94). The current systems and processes for evaluating faculty, including for tenure and promotion, are set up in ways that promote the operation of often subtle and unconscious gender biases[22,24,79,90], and the amount of power coupled with a lack for accountability afforded department heads contributes to that gendered system.

Therefore, in positions of power with limited oversight and accountability measures, we find gender biased behavior in the promotion and tenure process, policy uptake, and day-to-day academic life. To counter this, we suggest that there is a need for mandatory training that covers a wide range of gendered facets of academic careers and unconscious bias. Such training should emphatically not be optional. Traditional training, such as didactic methods, are likely to be ineffective here. Instead, while no guarantee can be made that they will change deeply held beliefs, methods such as scenario based discussions[91]and critical incident analysis[92]could expose department heads to the intertwined complexities and critical (read deeply influential) but often unseen biases experienced by women faculty. Given that most department heads are still white males[4,64], novel training methods are needed to reveal gender biases that are institutionally-normalized. Importantly, training methods are likely to have more impact if they are continuing discussions and exposure, rather than one-time sessions[93,94]. Finally, to further promote accountability and reduce one-sided power, universities could designate or establish an office where faculty members could confidentially seek redress—thereby reducing heads' power and increasing accountability.

Third, the discourse of fairness and the ideology of collective good are gendered in that they are more likely to disadvantage women than men, as highlighted by the participant who was expected to keep teaching a heavy load during the semester she had a child. Notions of fairness and collective good can be biased against women through the expectation to keep working through parental leave and the stigma of being seen as not committed or serious enough if you have children. Our storytelling circles revealed that heads can directly perpetuate that expectation and stigma. Clearly, then, simply instructing heads to act fairly is both simplistic and problematic, because people have different notions of what is fair, and, given that STEM departments remain male-dominated, those notions are more likely to disadvantage women than men. Indeed, our prior analyses have revealed that colleagues perceive course-releases associated with parental leave as unfair, and can create expectations that the leave-taker will 'make up' her teaching load in subsequent semester, in order to be 'fair' to others[76].

Therefore, recommendations and advice books (such as those cited throughout this analysis), as well as training for department heads should pay attention to the gendered dimensions of academic careers. Department heads need to be aware of the many ways in which the 'playing field' remains uneven for men and women, and accountability to gender equity should be considered. In particular, the problems with the discourse of fairness and collective good need to be understood. Going forward, scholars who write that department heads should act fairly, should then elaborate on what they think that means and what acting fairly looks like, with consideration for women and other minorities. Reviewers of journal articles and books should take a more critical stance on simplistic instructions to act fairly, and raise questions about gender-blind articles. Finally, it would be valuable for future research to further explore the ways in which notions of fairness and collective good are gendered and affect the careers of female academics.

In summary, while several other scholars have made recommendations on how heads can create more equitable departments[3,61,62] with varying degrees of specificity or utility, our research raises more fundamental questions about the nature of the position and current literature. It highlights important policy and scholarship changes that should be considered in order to mitigate the ways in which department heads perpetuate unjust practices. Because they are more fundamental questions about the nature of the position, they likely cannot quickly or easily be addressed, but they nonetheless warrant further questioning. We also recognize that not all institutions are the same. There is a growing number of non-tenure track, fixed term academics in the United States[95], and while the tenure system has been adopted outside of the United States[96,97], many faculty members are still on fixed term contracts[98]. Nonetheless, inequality from a concentrated position of power remains an issue for those on fixed terms as well, and we contend that the questions raised herein have significance for all members of a department.

Acknowledgments

References

1. Aziz, S., Mullins, M. E., Balzer, W. K., Grauer, E., Burnfield, J. L., Lodato, M. A., & Cohen-Powless, M. A. (2005). Understanding the training needs of department chairs. *Studies in Higher Education*, *30*(5), 571–593.
2. Barge, J. K., & Musambira, G. W. (1992). Turning points in chair-faculty relationships. *Journal of Applied Communication Research*, *20*(1), 54–77.
3. Bensimon, E. M., Ward, K., & Sanders, K. (2000). *Department Chair's Role in Developing New Faculty into Teachers and Scholars*. Bolton, MA: Anker Publishing.
4. Carroll, J. B., &Wolverton, M. (2004). Who Becomes a Chair? *New Directions for Higher Education*, *126*, 3–10.
5. Wolverton, M., Gmelch, W. H., Wolverton, M. L., & Sarros, J. C. (1999b). Stress in Academic Leadership: U.S. and Australian Department Chairs/Heads. *The Review of Higher Education*, *22(2)*, 165-185.
6. Creswell, J. W., Wheeler, D. W., Seagren, A. T., Egly, N. J., & Beyer, K. D. (1990). *The Academic Chairperson's Handbook*. Lincoln, Nebraska: University of Nebraska Press.
7. Hancock, N., & Hellawell, D. E. (2003). Academic Middle Management in Higher Education: A Game of Hide and Seek? *Journal of Higher Education Policy and Management*, *25*(1), 5–12.
8. Floyd, A., & Dimmock, C. (2011). "Jugglers", "copers" and "strugglers": academics' perceptions of being a head of department in a post-1992 UK university and how it influences their future careers. *Journal of Higher Education Policy and Management*, *33*(4), 387–399.
9. Preston, D., & Price, D. (2012). "I see it as a phase: I dont see it as the future": academics as managers in a United Kingdom University. *Journal of Higher Education Policy and Management*, *34*(4), 409–419.
10. Stratford, E. (2012). A genuine career of impossible heroism? Experiencing the role of the head of school: An Australian case study. *Journal of Higher Education Policy and Management*, *34*(3), 225–238.
11. Al-Karni, A. S. (1995). Evaluating the performance of academic department chairpersons. *Higher Education*, *29*(1), 37–57.
12. Murry, J. W., & Stauffacher, K. B. (2001). Department Chair Effectiveness: What Skills and Behaviors Do Deans, Chairs, and Faculty in Research Universities Perceive as Important? *Arkansas Educational Research & Policy Studies Journal*, *1*(1), 62–75.
13. Di Fabio, N. M., Brandi, C., & Frehill, L. M. (2008). *Professional Women and Minorities: A Total Human Resources Data Compendium*. Washington, DC: Commission on Professionals in Science and Technology (CPST).
14. National Science Foundation. (2013). *Women, Minorities, and Persons with Disabilities in Science and Engineering: 2013. Special Report NSF 13-304*. Arlington, VA: National Science Foundation.
15. van den Brink, M.& Benschop, Y. (2012). Slaying the Seven-Headed Dragon: The Quest for Gender Change in Academia. *Gender, Work and Organization, 19*(1), 71-92.
16. AFT Higher Education. (2011). *Promoting Gender Diversity in the Faculty: What Higher Education Unions Can Do*. Washington, DC: American Federation of Teachers.
17. Cooper, J. E., & Stevens, D. D. (2002). The Journey toward Tenure. In J. E. Cooper & D. D. Stevens (Eds.), *Tenure in the Sacred Grove: Issues and Strategies for Women and Minority Faculty* (pp. 3-16). Albany, NY: State University of New York Press.
18. Turner, C. S. V., González, J. C., & Wood, J. L. (2008). Faculty of Color in Academe: What 20 Years of Literature Tells Us. *Journal of Diversity in Higher Education, 1*(3), 139-168.
19. Czarniawska, B. & Sevón G. (2008). The Thin End of the Wedge: Foreign Women Professors as Double Strangers in Academia. *Gender, Work and Organization, 15*(3), 235-287.
20. Pyke, J. (2013). Women, choice and promotion or why women are still a minority in the professoriate. *Journal of Higher Education Policy and Management, 35*(4), 444-454.
21. Bagilhole, B., & Goode, J. (2001). The Contradiction of the Myth of Individual Merit, and the Reality of a Patriarchal Support System in Academic Careers. *The European Journal of Women's Studies*, *8*, 161–180.
22. Moody, J. (2004). *Faculty Diversity: Problems and Solutions*. New York: Routledge Falmer.
23. Philipsen, M. I. (2008). *Challenges of the Faculty Career for Women: Success & Sacrifice*. San Francisco, CA: Jossey-Bass.
24. Shields, S. A., Zawadzki, M. J., & Johnson, R. N. (2011). The Impact of the Workshop Activity for

Gender Equity Simulation in the Academy (WAGES Academic) in Demonstrating Cumulative Effects of Gender Bias. *Journal of Diversity in Higher Education*, *4*, 120–129.

25. Tierney, W. G., & Bensimon, E. M. (1996). *Promotion and Tenure: Community and Socialization in Academe*. Albany: State University of New York Press.

26. Blackwell, L. V., & Mavriplis, C. (2009). Diverse Faculty in STEM Fields: Attitudes, Performance, and Fair Treatment. *Journal of Diversity in Higher Education, 2*(4), 195-205.

27. Marschke, R., Laursen, S. L., Nielsen, J. M., & Dunn-Rankin, P. (2007). Demographic Inertia Revisited: An Immodest Proposal to Achieve Equitable Gender Representation among faculty in Higher Education. *Journal of Higher Education, 78*(1), 1-26.

28. Fraser, G. J., & Hunt, D. E. (2011). Faculty Diversity and Search Committee Training: Learning From a Critical Incident. *Journal of Diversity in Higher Education, 4*(3), 185-198.

29. Glass, C., & Minnotte, K. L. (2010). Recruiting and Hiring Women in STEM Fields. *Journal of Diversity in Higher Education, 3*(4), 218-229.

30. Worthington, R. L. (2008). Measurement and Assessment in Campus Climate Research: A Scientific Imperative. *Journal of Diversity in Higher Education, 1*(4), 201-203.

31. Worthington, R. L. (2012). Advancing Scholarship for the Diversity Imperative in Higher Education: An Editorial. *Journal of Diversity in Higher Education, 5*(1), 1-7.

32. Coronel, J. M., Moreno, E. & Carrasco, M. J. (2010). Work-family Conflicts and the Organizational Work Culture as Barriers to Women Educational Managers. *Gender, Work and Organization, 17*(2), 219-239.

33. Rafnsdóttir, G. L.& Heijstra, T. M. (2013). Balancing Work-family Life in Academia: The Power of Time. *Gender, Work and Organization, 20*(3),283-295.

34. Beddoes, K., & Pawley, A. L. (2014). "Different people have different priorities": Work- family balance, gender, and the discourse of choice. *Studies in Higher Education, 39*(3), 1573-1585.

35. Fox, M. F., Fonseca, C., & Bao, J. (2011). Work and Family Conflict in Academic Science: Patterns and Predictors among Women and Men in Research Universities. *Social Studies of Science*, *41*(5), 715–735.

36. Wolfinger, N. H., Mason, M. A., & Goulden, M. (2008). Problems in the Pipeline: Gender, Marriage, and Fertility in the Ivory Tower. *Journal of Higher Education*, *79*, 388–405.

37. Mayer, A. L., & Tikka, P. M. (2008). Family-friendly policies and gender bias in academia. *Journal of Higher Education Policy and Management*, *30*(4), 363–374.

38. Jones, K., Beddoes, K., Banerjee, D., & Pawley, A.L. (2014). Examining the Flexibility Bind in American Tenure and Promotion Processes: an institutional ethnographic approach. *Ethnography and Education*, 9(3), 328-342.

39. Beddoes, K., & Pawley, A. L. (2014). "Different people have different priorities": Work- family balance, gender, and the discourse of choice. *Studies in Higher Education, 39*(3), 1573-1585.

40. Berg, B., L. (2007). Qualitative Research Methods for the Social Sciences (6th ed.). New York, New York: Pearson Education, Inc.

41. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

42. Strauss, A. C., & Corbin, J. M. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2nd ed.). Thousand Oaks: SAGE.

43. Dyer, B. G., & Miller, M. (1999). *Critical Review of Literature Related to the Department Chair Position*. Department of Education. Retrieved from http://www.eric.ed.gov/PDFS/ED432193.pdf

44. Hubbell, L., & Homer, F. (1997). The Academic Department Chair: The Logic of Appeasement. *PS: Political Science and Politics*, *30*(2), 209–213.

45. Gmelch, W. H. (2004). The Department Chair's Balancing Acts. *New Directions for Higher Education*, *126*, 69–84.

46. Wolverton, M., Gmelch, W. H., Wolverton, M. L., & Sarros, J. C. (1999a).A comparison of department chair tasks in Australia and the United States. *Higher Education*, *38*, 333–350.

47. Nguyen, T. L. H. (2012). Identifying the training needs of heads of department in a newly established university in Vietnam. *Journal of Higher Education Policy and Management*, *34*(3), 309–321.

48. Wolverton, M., & Ackerman, R. (2006). Cultivating Possibilities: Prospective Department Chair Professional Development and Why It Matters. *Planning for Higher Education*, *34*(4), 14–23.

49. Buller, J. L. (2006).*The Essential Department Chair: A Practical Guide to College Administration*. Bolton, MA: Anker Publishing.

50. Coultas, C., W., Grossman, R., & Salas, E. (2012).Design, Delivery, Evaluation and Transfer of Training Systems.In *Handbook of Human Factors and Ergonomics* (4th ed., pp. 490–533). Hoboken, NJ: Wiley.

51. Casio, W. F. (1988). *Applied psychology in personnel management.* Englewood Cliffs, NJ: Prentice Hall.
52. Ajzen, I. & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.
53. Bunch, K. J. (2007). Training Failure as a Consequence of Organizational Culture. *Human Resource Development Review*, *6*(2), 142–163.
54. Hassi, A., & Storti, G. (2011). Organizational training across cultures: variations in practices and attitudes. *Journal of European Industrial Training*, *35*(1), 45–70.
55. Hofstede, G. and Peterson, M.F. (2000), "National values and organizational practices", in Askanasy, N.M., Wilderton, C.P.M. and Peterson, M.F. (Eds), Handbook of Organizational Culture and Climate, Sage, Thousand Oaks, CA, pp. 401-15.
56. Badhesha, R. S., Schmidtke, J. M., Cummings, A., & Moore, S. D. (2008). The effects of diversity training on specific and general attitudes toward diversity. *Multicultural Education & Technology Journal*, *2*(2), 87–106.
57. Lam, T., C.M., Kolomitro, K., & Alamparambil, F., C. (2011). Empathy Training: Methods, Evaluation Practices and Validity. *Journal of Multidisciplinary Evaluation*, *7*(16), 162 – 200.
58. King, E. B., Gulick, L. M. V., & Avery, D. R. (2010). The Divide Between Diversity Training and Diversity Education: Integrating Best Practices. *Journal of Management Education*, *34*(6), 891–906.
59. Hemphill, H. & Haines, R. (1997). *Discrimination, Harassment and the Failure of Diversity Training: What to Do Now.* Westport, CT: Quorum Books.
60. Deem, R. (2003). Gender, Organizational Cultures and the Practices of Manager-Academics in UK Universities. *Gender, Work and Organization, 10*(2), 239-259.
61. Hecht, I. W. D., Higgerson, M. L., Gmelch, W. H., & Tucker, A. (1999). *The Department Chair as Academic Leader*. Phoenix, AZ: American Council on Education and Oryx Press.
62. Niemann, Y. F. (2012). Lessons from the Experiences of Women of Color Working in Academia. In G. Gutiérrez y Muhs, Y. F. Niemann, C. G. González, & A. P. Harris (Eds.), *Presumed Incompetent: The Intersections of Race and Class for Women in Academia* (pp. 446–499). Boulder, CO: The University Press of Colorado.
63. Waerdt, L. V. (1993). Women in Academic Departments: Uneasy Roles, Complex Relationships. In J. B. Bennett & D. J. Figuli (Eds.), *Enhancing Departmental Leadership: The Roles of the Chairperson*(pp. 61–71). Phoenix, AZ: American Council on Education and Oryx Press.
64. Bozeman, B., Fay, D., &Gaughan, M. (2013). Power to Do…What? Department Heads' Decision Autonomy and Strategic Priorities. *Research in Higher Education*, *54*(3), 303–328.
65. Armenti, C. (2004). May Babies and Posttenure Babies: Maternal Decisions of Women Professors. *The Review of Higher Education, 27*(2), 211-231.
66. Hurtubise, M. (1993). Sex in the Department. In J. B. Bennett & Figuli (Eds.), *Enhancing Departmental Leadership: The Roles of the Chairperson* (pp. 151–163). Phoenix, AZ: American Council on Education and Oryx Press.
67. Hecht, I. W. D. (2004). The Professional Development of Department Chairs. *New Directions for Higher Education*, *126*, 27–44.
68. Goode, J. &Bagilhole, B. (1998). Gendering the Management of Change in Higher Education: A Case Study. *Gender, Work and Organization, 5*(3), 148-164.
69. Odhiambo, G. (2011). Women and higher education leadership in Kenya: a critical analysis. *Journal of Higher Education Policy and Management*, *33*(6), 667–678.
70. Peterson, H. (2011). The gender mix policy - addressing gender inequality in higher education management. *Journal of Higher Education Policy and Management*, *33*(6), 619–628.
71. White, K., Carvalho, T., & Riordan, S. (2011).Gender, power and managerialism in universities. *Journal of Higher Education Policy and Management*, *33*(2), 179–188.
72. Jacobs, K. W. (1989). Evaluating the department chairperson. *Teaching of Psychology*, *16*(4), 219–221.
73. Leaming, Deryl R. (2003). Creating Consensus Among Faculty. In Leaming, Deryl R. (ed). *ManagingPeople: A Guide for Department Chairs and Deans (*pp. 43-64). Bolton, MA: Anker Publishing.
74. Beddoes, K., Schimpf, C., & Pawley, A. L. (2013). Engaging Foucault to Better Understand Underrepresentation of Female STEM Faculty. Presented at the American Society for Engineering Education Annual Conference, Atlanta, GA.
75. Weststar, J. (2012). Negotiating in Silence: Experiences with Parental Leave in Academia. *Industrial Relations*, 67(3), 352–374.
76. Beddoes, K., Schimpf, C., & Pawley, A. L. (2013). Engaging Foucault to Better Understand

Underrepresentation of Female STEM Faculty. Presented at the American Society for Engineering Education Annual Conference, Atlanta, GA.

77. Fortin, M., & Fellenz, M. R. (2008). Hypocrisies of fairness: Towards a more reflexive ethical base in organizational justice research and practice. *Journal of Business Ethics*, *78*(3), 415–433.
78. Watson, G. W. (2003). Ideology and the symbolic construction of fairness in organizational change. *Journal of Organizational Change Management*, *16*(2), 154–168.
79. Benschop, Y. & Brouns, M. (2003). Crumbling Ivory Towers: Academic Organizing and its Gender Effects. *Gender, Work and Organization, 10*(2), 194-212.
80. Ecklund, E. H., Lincoln, A. E., & Tansey, C. (2012). Gender Segregation in Elite Academic Science. *Gender & Society*, *26*(5), 693–717.
81. Määttä, S., & Lyckhage, E. D. (2011). The influence of gender in academia: a case study of a university college in Sweden. *Equality, Diversity and Inclusion: An International Journal*, *30*(5), 379–393.
82. Kjeldal, S.-E., Rindfleish, J., & Sheridan, A. (2005). Deal-making and rule-breaking: behind the facade of equity in academia. *Gender and Education*, *17*(4), 431–447.
83. Mitchell, J. N. (2004). Measuring the Performance of the Chair. *New Directions for Higher Education*, *126*, 55–68.
84. Babcock, L., & Laschever, S. (2003). *Women Don't Ask: Negotiation and the Gender Divide*. Princeton, NJ: Princeton University Press.
85. Biernat, M., & Fuegen, K. (2001). Shifting Standards and the Evaluation of Competence: Complexity in Gender-Based Judgment and Decision Making. *Journal of Social Issues, 57*(4), 707-724.
86. Carli, L. L. (2001). Gender and Social Influence. *Journal of Social Issues, 57*(4), 725-741.
87. Heilman, M. E. (2001). Description and Prescription: How Gender Stereotypes Prevent Women's Ascent Up the Organizational Ladder. *Journal of Social Issues, 57*(4), 657-674.
88. Eagly, A. H., & Karau, S. J. (2002). Role Congruity Theory of Prejudice Toward Female Leaders. *Psychological Review, 109*(3), 573-598.
89. Dovidio, J. F., Kawakami, K., & Beach, K. (2001). Implicit and explicit attitudes: Examination of the relationship between measures of intergroup bias. In R. Brown & S. L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 175-197). Oxford, UK: Blackwell.
90. Poulsen, C. (2005). *Prestige in Academia: A Glance at the Gender Distribution*. Stuttgart: Ibidem.
91. Norman, M., Ambrose, S. A., & Huston, T. A. (2006). Assessing and Addressing Faculty Morale: Cultivating Consciousness, Empathy, and Empowerment. *The Review of Higher Education*, *29*(3), 347–379.
92. Collins, N. M., & Pieterse, A. L. (2007). Critical incident analysis based training: An approach for developing active racial/cultural awareness. *Journal of Counseling & Development*, *85*(1), 14–23.
93. Bowman, N. (2010). Disequilibrium and Resolution: The Nonlinear Effects of Diversity Courses on Well-Being and Orientations toward Diversity. *The Review of Higher Education*, *33*(4), 543–568.
94. Webster-Wright, A. (2009). Reframing Professional Development Through Understanding Authentic Professional Learning. *Review of Educational Research*, *79*(2), 702–739.
95. Schuster, J., H., & Finkelstein, M., J. (2006).*The Restructuring of Academic Work and Careers: The American Faculty*. Baltimore, MD: John Hopkins University Press.
96. Herbert, A., & Tienari, J. (2013). Transplanting tenure and the (re)construction of academic freedoms. *Studies in Higher Education*, *38*(2), 157–173.
97. Engwall, L. (2007). Universities, the state and the market: Changing patterns of university governance in Sweden and beyond. *Higher Education Management and Policy*, *19*(3), 87–104
98. Cavalli, A., & Moscati, R. (2005). Academic Systems and Professional Conditions in Five European Countries. *European Review*, *18*(1), S35–S53.