DEPARTMENT CHAIRS' RESEARCH-RELATED ROLES AND RESPONSIBILITIES AT A PUBLIC RESEARCH UNIVERSITY

by

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ABSTRACT

The purpose of this qualitative explanatory case study is to explain how academic department chairs enact research-related roles and responsibilities at one public research university to support faculty research productivity. For this study, I interviewed 22 department chairs at one public research university in the Southeastern United States undergoing striving to advance its research prestige. Participant responses indicated that chairs' research-related roles and responsibilities generally fall into four categories: (1) assessing departmental productivity, (2) fostering an environment conducive to research, (3) assessing faculty for tenure and promotion, and (4) supporting faculty research careers. Three major themes emerged from the participants' responses regarding how they negotiate the department leader and career researcher roles: (1) maintaining research productivity, (2) perceiving administrative value to research, and (3) growing professional identity and career aspirations. The finding suggest that chairs serve as change agents to help create a culture of research assessment in support of one public research institution's striving efforts.

Keywords: higher education, department chairs, faculty research, productivity, role theory, leadership

DEDICATION

I dedicate this dissertation to my children, Amelia, Sylvia, and Mira.

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CHAPTER 1

INTRODUCTION

The purpose of this qualitative explanatory case study was to explain how academic department chairs enact research-related roles and responsibilities to support faculty productivity at one public research university. Along with teaching and service, research stands as one of most commonly articulated central pillars of higher education (Birnbaum, 1988). The creation of knowledge is one factor that drives public perceptions of the value of higher education (Tilak, 2008). Through this study, I sought to contribute to the scholarship of the department chair as a key facilitator of faculty research productivity and mediator of administration's efforts to advance the institution's research reputation. Organizational role theory served as the study's theoretical framework. Role theory provides one method to make sense of chairs' experiences as they navigate the dual roles of department leader and career researcher.

The importance of the research mission to the finances and prestige of public institutions surges as state funding of higher education declines. Between 2005 and 2014, research and development expenditures in higher education increased from $47.5 billion to $67.2 billion (Chronicle, 2016, August 19, p. 56). For the period of 2011-2014, research at public institutions accounted for 11.1% ($27 billion) of all expenditures (Chronicle, 2016, August 19, p.58). As a point of comparison, academic support associated with teaching accounted for 7.0% ($17 billion) during the same time. Increases in federal and private sector funding for research further compels public universities to compete against other research institutions in a prestige research economy (Cantwell & Mathies, 2012). Public research universities sense an urgency to improve their research reputation in order to compete for researchers capable of drawing external sponsored funding to the institution.

As public research universities endeavor to improve research prestige, the productivity of faculty assumes greater importance to institutions' research missions. Efforts to improve research prestige drive institutions to transform traditional support for faculty research productivity. Reallocating resources to facilitate faculty research activities, hiring research-oriented faculty, and rewarding productive faculty enable institutions to improve research prestige (O'Meara, 2007). Rusch and Wilber (2007) further contended that the push for prestige transforms institutional culture by increasing expectations of research productivity in publishing, grant writing, and attending conferences. These new expectations often change the tenure and promotion requirements for faculty. For instance, Gonzales & Núñez (2014) found that institutions might require faculty to reach particular levels of grant funding or publish in prestigious journals in order to meet tenure and promotion requirements. Consequently, faculty members attempting to keep pace with productivity demands may publish in less prestigious predatory and vanity "pay to publish" journals (Schmidt, 2017, May 30). While these lesser quality journals increase raw publication numbers, they reduce the perceptions of research quality at the institution. According to Gonzales & Núñez (2014), faculty that fail to maintain expected publication quotas may experience disillusionment with the institution and leave. Compounding the dilemma, Ryan, et al. (2012) found that highly productive faculty members with well-known research at public research universities were more likely to leave their institution for a research institution with greater prestige than faculty members who were less productive. These findings suggest that institutions must invest in the infrastructure to support the research productivity of faculty while rewarding productive faculty members in order to retain them. Responsiveness to faculty research needs becomes an essential criterion to improving the institution's research posture.

Improving research posture in a prestige research economy also compels institutions to measure productivity against peer and aspirational institutions. Bibliometric methods to measure productivity, such as citation indices, journal impact factors, and *h-index* allow for quantitative comparisons between individual faculty members, departments within the institution, and the institution against its aspirational and peer institutions. New companies offering business analytics for academics, such as Academic Analytics®, compile and compare institutional metrics about book and article publications, grant awards, and citations. These analytic services further problematize a department's understanding of research productivity. Institutions may use bibliographic analytics to compare productivity between dissimilar disciplines within the same institution (Gervits & Orcutt, 2016). These comparisons create perceptions that a department with fewer citations, awards, or publications may be less productive. For example, raw counts of journal publications favor science, technology, engineering, and math (STEM) fields over book-centric fields such as the humanities. Bibliographic analytics may therefore disadvantage disciplines that favor book-based scholarship and creative activity in institutional resource allocation and tenure and promotion processes.

At the request of deans, chairs put into practice administration's directives to improve faculty productivity at the departmental level. Chairs serve in the role of the department leader while maintaining their researcher identity (Gmelch, 2016). This dual identity potentially problematizes the chair's effectiveness enacting research-related roles and responsibilities. Chairs must navigate the demands of multiple roles as they operationalize institutional efforts to improve individual faculty member and departmental research productivity. Accommodating multiple roles may lead to conflict around time for personal research agendas, authority to enact change on behalf of the faculty and administration, use of research networks to support productivity, and career aspirations. Research into how these two identities inform one another may contribute to an understanding of the challenges, obstacles, and conditions that influence the effectiveness of chairs as they support faculty research productivity.

This study focused on how department chairs enact research-related roles and responsibilities as departmental leaders and as career researchers. I investigated how chairs facilitate faculty research productivity within departments and across boundaries into environments external to departments. I designed my research questions to capture how chairs support faculty research throughout the research process as well as throughout the stages of the faculty career lifecycle. I considered how chairs foster a departmental environment conducive to research productivity, assess individual faculty member productivity, manage resources, and address changing expectations of departmental productivity from administration within and outside the department. I then examined how faculty members negotiate their dual roles as career researchers and department leaders. I further examined how this negotiation informs their support of faculty research productivity. My research question and sub-questions examined how faculty members maintain or fail to maintain their productivity and research agenda as chairs, how they perceive the administrative value of their research reputation and agenda, and how their career aspirations and professional identities develop as they serve as chair.

I expected the answers to these research questions to shed light on how chairs' experiences and perceptions as researchers and departmental leaders inform their facilitation of faculty research productivity. Evidence suggests that department chairs' personal experiences, attitudes, and values affect their support of faculty activities such as teaching as well as departmental processes such as tenure and promotion (Sobrero & Jayaratne, 2014; Stringer, MacGregor, & Watson, 2009; Taggart, 2015; Virick & Strange, 2016). An understanding of chairs' research-related roles and responsibilities therefore has implications for faculty research productivity, chair leadership development, and ultimately the ability of institutions to achieve their research mission.

Background to the Study

Department chairs serve as operational and personnel managers responsible for the faculty in their charge. According to sociologist C. Wright Mills, managers in bureaucracies function as the "assistants of authority" to "power elites" at the top of the bureaucracy (Mills, 1951, p. 74). Mills suggested that power, as authority, is a characteristic derived from particular social positions. Worker obedience affirms the authority of the position. The power elite grant managers autonomy to make some decisions about work processes and procedures. The power elite also limits the scope of that autonomy and authority. By way of example, chairs may have the authority to hire new faculty but may require approval from the dean to offer particular starting resources such as additional salary, research money, or spousal hiring assistance (Bozeman, Fay, & Gaughan, 2011). According to Gappa and Trice (2010), the faculty also set boundaries to this authority as peers of the chair.

Gmelch (2016) contended that faculty members serve as chairs for extrinsic and intrinsic reasons. Salary raises, increased reputation, or a desire to participate in a larger political arena serve as extrinsic reasons for accepting chair nominations. A faculty member may also have no choice to serve if the department elects the chair or the dean appoints the chair. Appointment often occurs when no other viable option exists, such as a willing faculty member or an external hire. Glemch (2016) also suggested that faculty members seek out service for intrinsic reasons, such as helping other faculty or a desire to build a strong vision for the department. How a faculty member comes to the chair role may inform the chair's approach to supporting faculty research. A reluctant chair with a strong allegiance to his or her role as a researcher may not invest as much effort in the position as a chair who is intrinsically motivated to improve the department's research productivity. Chairs without intrinsic motivation may also avoid committing long-term to the position or pursue further leadership opportunities in administration.

Chairs oversee the day-to-day operational activities of departments such as budgets, personnel, reporting, resources, communication, and student administration (Berdrow, 2010). Chairs also manage the departmental climate. In this capacity, Cipriano and Riccardi (2017) found that chairs rated conflict management as the second most important skill necessary to be effective in the position. Chairs rated communicating effectively first. The types of conflicts chairs manage generally align with departmental responsibilities such as hiring decisions, personality conflicts, and resource conflicts (Stanley & Algert, 2007). As front-line managers, Gmelch and Miskin (2011) claimed that department chairs make more than 80% of an institution's decisions affecting faculty, including appointments, scholarship, curricula, tenure and promotion, pedagogy, and student outcomes.

Chairs also serve as department leaders responsible for putting into practice the goals and mission of the institution at the departmental level. In order to lead the department effectively, Riley and Russell (2013) asserted that chairs must understand their leadership style as well as leadership roles and responsibilities. In his meta-analysis of higher education leadership, Bryman (2009, p. 697) identified thirteen behaviors of effective leaders. These behaviors demonstrate the diversity of chairs' roles and responsibilities. For example, Bryman found that effective departmental leaders should provide a clear sense of direction for the department, expertly communicate to faculty and administration, advance the department's cause to institutional and external stakeholders, and enhance the department's prestige through academic hires and appointments. Effective leaders also demonstrate personal characteristics that faculty favor, such as being trustworthy and considerate. In categorizing these behaviors, Bryman contended that, as department leaders, chairs ought to demonstrate "influence and/or motivating others towards the accomplishment of departmental goals" (p. 696). Riley and Russell (2013) further asserted that chairs show leadership when the when they evaluate, assess, mentor, and support faculty. Despite evidence that chairs' planning and leadership decisions shape a department's future, Gmelch and Miskin (2011) suggested that the department chair is the least investigated management position in America.

The Chair as Department Leader

Positioned between faculty and administration, the chair as department leader possesses an ideal vantage point from which to enact research-related roles and responsibilities. Of the chair, Gappa and Trice (2010) contended:

> They are the pivotal midpoints of the administrative and communications systems as information and instructions flow up and down, and to and from, individual faculty members, faculty governance bodies, deans, provosts, and, ultimately, presidents and governing boards. Thus, chairs are simultaneously respected peers in the senior faculty where they serve as spokespersons for their concerns, and front-line administrators responsible for implementation of campus missions and policies within their departments. (p. 1)

Holding a leadership position at the boundary of the department and institutional administration subjects chairs to demands from multiple stakeholders (Berdrow, 2010). Accordingly, chairs contend with an increased volume, variety, and complexity of communications and communication channels (Armstrong & Woloshyn, 2017; Feuerstein, 2015). These conditions contribute to chairs' perceptions of the role as complex and removed from the security of their personal research activities (Morris & Laipple, 2015).

Mediating between faculty and administration also creates conditions for chairs to spearhead departmental change. Chun and Evans (2015) argued that chairs' structural location within organizations positions them to lead innovation. In this capacity, chairs help to build faculty consensus for change. For example, institutions are turning to new technology to track faculty research productivity, such as commercial Academic Analytics® software (AAUP, 2016, March 28). However, Haviland, Turley, & Shin, (2011) demonstrated that U.S. faculty failed to engage in program quality assessment primarily for fear of changes to their routines, lack of knowledge in the assessment process, and lack of confidence in the process. These innovations are critical to market-based research productivity in higher education according to Cantwell and Mathies (2012). How chairs enact research-related roles and responsibilities may therefore affect faculty support for innovation.

Chairs' research-related roles and responsibilities further extend outside of the department as they engage research stakeholders across the institution and into the institution's external environments. Gmelch (2016, p. 9) argued that chairs' external responsibilities include coordinating department activities, representing their departments at professional meetings, participating in institutional committees, and keeping faculty informed of external affairs. According to Feuerstein (2015), department chairs also reframe and redefine issues for faculty and administration in order to address institutional goals. Those chairs who are successful at this responsibility are capable of improving the department climate, reputation, and the quality of the department's teaching and research output. Those who are unsuccessful are detrimental to their departments and the institution. Enacting research-related roles and responsibilities therefore requires chairs to demonstrate the skills to engage in social environments through communication, collaboration, and networking (Riley & Russell, 2013; Armstrong & Woloshyn, 2017; Feuerstein, 2015).

The Chair as Researcher

Chair's experiences, attitudes, and values as career faculty researchers may inform how they negotiate research-related roles and responsibilities as department leaders. Armstrong and Woloshyn (2017) suggested that faculty enter a larger social and political landscape that transforms perceptions of their identity, their department, and the institution when they serve as chairs. Berdrow (2010, p. 500) argued that chairs conceptualize the role in part through the development of new cognitive frameworks, which inform their decision making behaviors. These cognitive models shape the "dynamic managerial capabilities by which the actor functions in his or her role". By experiencing ideas of the self beyond their role as scholars, chairs have the opportunity to increase the diversity of their experiences, attitudes, and values towards faculty research and their careers as researchers.

Despite exposure to administration, faculty who serve as chairs continue to affix their identities to their faculty researcher role. Gmelch (2016) found that department chairs perceive themselves as faculty who have only temporarily assumed the role out of a sense of duty to the department. He discovered that 96% of chairs identified themselves as faculty before administrators. This allegiance to the faculty identity often affects the career path of the chair. According to Cipriano and Riccardi's (2017) 9-year study of department chairs, the tenure of the average chair is only five years. However, nearly 50% (47.6%) of chairs expressed a desire to continue a career trajectory into administration. Whether returning to the professorate or entering administration, chairs' perceptions of the temporal nature to the position have the potential to complicate enactment of research-related roles and responsibilities that require long-term commitment to the chair position.

At research institutions, the status of chairs as faculty researchers suggests that maintaining active research credentials is important to the chair's negotiation of research-related roles and responsibilities. Buller (2007) observed that department chairs often rise to their position because they have demonstrated administrative skills, have the respect of faculty, and are willing to continue to role model scholarship while serving as administrators. Olson (2008) found that effective department leaders role model behavior that they desire from faculty. Bryman (2009) further found that existing credibility as an academic, and continued role modeling of academic behaviors, were positively associated with effective departmental leadership. Furthermore, deans expect chairs to employ their skills and experience as researchers to facilitate faculty research (Rhodes & Lees, 2016). For example, chairs are often expected to facilitate collaborate research initiatives among researchers in different disciplines on focus topics. Chairs who do not maintain active research credentials may disadvantage their department by being out of touch with contemporary research practices, professional networks, and funding opportunities. They may also fail to maintain their dean's trust.

Statement of the Problem

Negotiating the dual roles of department leader and career researcher potentially problematizes the chair's effectiveness supporting faculty research productivity. Lack of preparation and credentials as front-line managers, limitations on the chair's power and authority, and faculty aversion to engaging in political environments challenge chairs as they respond to faculty research needs. Furthermore, the responsibility of serving as a department leader potentially complicates a faculty member's active research agenda. Faculty members' experiences, attitudes, and values as researchers may inform how they serve as chairs. Therefore, challenges to a faculty member's active research agenda may influence how he or she enacts research-related roles and responsibilities as a department leader. Understanding how chairs support research has implications for faculty research productivity, institutional leadership development, and potentially the ability of a public research university to improve its research prestige ranking.

Despite the extensive academic credentials of many chairs, faculty are seldom prepared to assume the roles and responsibilities of department leaders. According to Delener (2013), the role of the department chair is complex and ambiguous. Most incoming chairs have little understanding of these role expectations, task complexities, time demands, and the potential negative effect of the role on their professional and personal relationships and identities (Aziz et al., 2005; Czech & Forward, 2010; Armstrong & Woloshyn, 2017). Cipriano and Riccardi (2017) asserted that the typical department chair rarely claimed formal training for the responsibilities of the position. Correspondingly, chairs also possessed little or no formal personnel management training prior to assuming department leader responsibilities (Cipriano & Riccardi, 2017). According to Whitsett (2007), while chairs have the authority to make most departmental decisions, they have little experience in the training necessary to make informed decisions. This lack of formal training complicates individual perceptions of the roles and responsibilities associated with the position. Handbooks and descriptive studies exist to assist department chairs transition to the role and understand the responsibilities of the position from an operational perspective (e.g. Foster, 2006; Wolverton, M., Ackerman, R. & Holt, S. 2005; Hecht, Higgerson, Gmelch & Tucker, 1999). While these handbooks provide one source for advice, they do not contribute to the empirical evidence of faculty's lived experiences, attitudes, and values as they perform the roles and responsibilities of the position. As a result, a chair's lack of preparation and training may diminish the value of the faculty member's prior research and administrative experiences to serving as department leader.

The dual identity of the chair as department leader and faculty researcher challenges chairs to negotiate the needs of faculty and administration. Gmelch (2004) captured the essence of this split identity in the classic analogy of the chair as Janus, the two-headed Roman deity who is "Caught between conflicting interests of faculty and administration, trying to look in two directions, chairs often experience conflict assessing which way to turn their attention" (p. 36). Berdrow (2010) reified this conflict in his study on department chair prioritization of roles and responsibilities. Berdrow argued that chairs prioritize tasks associated with front-line administrator responsibilities and the creation of a positive workplace environment. In contrast, deans and provosts believed that chairs ought to focus more on the role of innovator. These differences in prioritization between faculty and administration may challenge chairs to support faculty research productivity effectively.

Pressured from faculty and administration, the department chair holds only contested power and authority. Chun and Evans (2015) contended that the chair's authority derives from the faculty's respect for the chair's career accomplishments or ability as an administrator. The collegial culture of institutions further limits the chair's power and influence. According to Bergquist and Pawlak (2008), the collegial culture of faculty favors autonomy, academic freedom, and expectations of collaborative decision-making. Chairs that assume too much power, or assume decision-making authority over the wrong responsibilities, run the risk of alienating faculty or administration from departmental decision-making. Chun and Evans (2015) claimed that chairs who continually represent administration's interests over faculty interests, further risk backlash from faculty. In these instances, faculty may view the chair's efforts to support institutional interests as betraying their faculty identity. Meehan and Wright (2011) further asserted that the level of power and influence of the chair varies depending upon cultural norms, organizational policies, and the personality, capability, and political shrewdness of the chair. Nevertheless, without the power to enact certain research-related roles and responsibilities, the chair's vision and planning for research in the department may remain unrealized.

Research-related roles and responsibilities are also inherently political. According to Block (2014), the complexities of contemporary higher education compel chairs to navigate the political environments of the institution in order to serve as effective advocates for their departments. Supporting faculty research productivity may therefore require chairs to build coalitions, to navigate the relations of power and authority, and to earn and spend political capital in order to keep faculty productive and happy (p. 331). However, Clark and Lindahl's (2014) study of department chairs' self-reported Bolman and Deal leadership orientation found that chairs' least preferred leadership orientation was the Political Frame. According to Bolman and Deal (2003), this frame for understanding organizations centers on resource competition, conflict, bargaining, negotiation, and power. This finding confirmed Lawrence and Ott's (2012) quantitative study that examined faculty perceptions of organizational politics as they related to levels of reluctance to participation in governance. The researchers discovered that faculty perceptions of organizational politics influenced their sense of authority in decision-making. An aversion to engaging political environments therefore reduces the effectiveness of chairs as they support faculty research productivity.

Finally, chairs often discover that the roles and responsibilities of departmental leadership challenge their personal research agendas and careers as faculty researchers. Chairs struggle with the time needed to accomplish all their required administrative role expectations (Berdrow, 2010). Furthermore, administrative work is often far removed from the chair's attraction to his or her chosen field of study and research interests (Morris & Liapple, 2015). Failure to meet the expectations of maintaining personal research agendas exacerbate department chairs' tensions as front-line managers (Armstrong & Woloshyn, 2017). The loss of research productivity during service is also a concern of department chairs as they return to the professorate. According to Smith, Rollins, and Smith (2012), chairs fear an inability to reconstruct lost research agendas and secure new research funding upon returning to the faculty. Delaying personal research agendas while serving as chair ultimately risks affecting the career trajectory of the faculty member.

According to Wheeler, el al. (2008), the contemporary environment of higher education presents department chairs with more complexity to navigate than encountered by their predecessors. Chairs experience challenges as they negotiate the dual roles of department leader and career faculty researcher. An understanding of chairs' attitudes, values, and beliefs as they approach these roles may therefore illuminate how they support faculty research. The scholarship provides ample quantitative evidence that department chairs enact research-related roles and responsibilities to support faculty research productivity. However, we do not know qualitatively how chairs experience these roles and responsibilities as they support faculty research within departments and engage in political environments outside the departments. Furthermore, we do not know how serving as department leaders informs chairs' personal research practices, the perceived administrative value of their research, and their career aspirations. Similarly, we do not know how department chairs' experiences, attitudes, and beliefs as researchers inform their support of faculty research. Given the critical importance of faculty research productivity to a university's ability to compete in a prestige research economy, these central questions require investigation.

Purpose of the Study

The purpose of this qualitative case study was to explain how department chairs enact research-related roles and responsibilities at one public research university engaged in institutional striving for increased research prestige. This study examined how academic department faculty members negotiate the dual roles of department leader and career faculty researcher while serving as chairs. By applying organizational role theory as a theoretical framework, I hoped to contribute to study of academic department chairs as they enact research-related roles and responsibilities in support of faculty research productivity.

Two main research questions emerged as central to this study:

Q1: What are department chairs' research roles and responsibilities as department leaders?

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

Q2: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders?

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty members' professional identities and career aspirations as researchers change or develop during their tenure as chair?

I designed the research questions in order to limit the scope of the study while allowing for an emergent research design and flexibility of data collection. Instead of narrowly defining research-related roles and responsibilities prior to the study, I anticipated that interviews with academic department chairs would shape the specifics of these activities at one public research university. I designed the research questions to be gender-neutral.

I developed my study using organizational role theory as the theoretical framework. The scholarship of Merton (1968), Mintzberg (1993), Van Maanan and Schien (1979) and others informed my research. Foundational works by these researchers helped to reveal the underlying organizational role structures and role relationships that mediate the behaviors and actions available to the chairs as they support faculty research and pursue their own research agendas. Updates to organizational role theory by Örtqvist and Wincent (2006), Bess and Dee (2008a), Posig and Kickul (2003), and Prysor and Henley (2017) addressed how role stressors influence a faculty member's experiences as chair. The effects of role stressors on job satisfaction are important to understanding chairs' motivations to facilitate faculty research productivity. The presence of role stressors negatively affects job satisfaction (Örtqvist & Wincent, 2006). Individuals who endure low levels of job satisfaction are less likely to be productive or effective workers (Cranny, Smith, & Stone, 1992). During coding, I used role concepts such as negotiated role functions and behaviors, role socialization, role conflict, role ambiguity, role overload, and boundary spanning to understand the experiences of chairs. These concepts further helped to differentiate between observations that centered upon the department chair as a role and observations that centered upon the department chair as an individual administrator and researcher within a role.

I intended the first research question and its sub-questions to evince chairs' experiences and understandings of the research-related roles and responsibilities as department leaders. In particular, I examined how department chairs facilitate faculty research productivity by enacting research-related roles and responsibilities within the department and by spanning boundaries to environments outside of the department. The purpose of these questions was to build a profile of chairs' experiences. Through these questions, I anticipated evidence to emerge of organizational role-based, individual-based, or environmental-based factors that contest a chair's ability to facilitate faculty research effectively, such as limitations on power and authority, institutional pressures, and threats and opportunities in the external environment.

The purpose of the second research question was to explore how chairs negotiate dual roles as career researchers and department leaders. In particular, I desired to understand how the chair's experiences, values, and attitudes as faculty researchers and department chairs interact as they facilitate faculty research. Sub-questions addressed how faculty engage in personal research agendas while serving as chairs, the perceived value of maintaining research productivity and a research reputation while serving as chair, and how faculty members' professional identities develop by serving as chair. Through these questions, I attempted to capture chairs' interactions with other roles within the institution, such as faculty, administration, peer department leaders, mentors, and other research facilitators as influences on their role negotiations.

Significance of the Study

This study has practical implications for public research university administrators and academic department chairs as they address faculty research productivity. Czech and Forward (2010) identified that faculty productivity strongly correlates with workplace satisfaction and the culture created and maintained by academic administrators such as department chairs. Chairs actions affect the work satisfaction of faculty. For example, chairs who fail to step outside the department to facilitate faculty research may isolate or disadvantage their departments in an institutional prestige economy (Knight, Folkins, Hakel, & Kennell, 2011; Bozeman, Fay, & Gaughan, 2013). Likewise, chairs' experiences, attitudes, and values towards research may influence their r commitment to support faculty research productivity or the strategies they use to support faculty. For example, a chair's attitude towards community engagement research informs how they prioritize community research within the tenure and promotion process (Sobrero & Jayaratne, 2014). Chairs who perceived this research negatively were less likely to value faculty publications about community engagement research during tenure and promotion decisions.

Without efforts to foster an environment conducive to research, faculty research productivity is at risk. A drop in productivity may affect the availability of future departmental resources from administration (Knight, Folkins, Hakel, & Kennell, 2011). A better understanding of the challenges chairs face as they facilitate faculty research may lead to workplace improvements that foster faculty job satisfaction and therefore research productivity. Similarly, understanding how department chairs negotiate research-related roles and responsibilities may expose strategies for institutions to support chairs as researchers.

This study also has practical implications for leadership development in higher education. Deans often emerge from the ranks of department chairs (Buller, 2007). Casting light on obstacles to chairs' negotiation of research roles and responsibilities may lead to improved training and preparation for future institutional leaders. For example, Wheeler et al. (2008) proposed that assertive chairs position their department to take advantage of one time funding sources from administration to support initiatives or foster growth. However, not every chair will have experience building the institutional social networks necessary to take advantage of such opportunities. Understanding how department chairs enact research-related roles and responsibilities sheds light on these experience gaps and enables institutions to develop programs to improve chairs' understanding of their organizational role. For example, institutions may train department chairs to improve their awareness of administration-defined research-related roles and responsibilities so that they may better identify which roles are unclear. Addressing these limitations may ultimately make chairs more effective leaders in the research domain.

This qualitative case study fills several gaps in the scholarship regarding the subject of department chairs and the methodology researchers use to study them. While descriptive studies abound in the literature, researchers have commented on the distinct lack of recent qualitative studies (Delener, 2013; Whitsett, 2007; Morris & Laipple, 2015). Echoing these researchers, Bryman (2007) struggled to find adequate empirical studies on leadership roles and responsibilities of department chairs despite evidence in the descriptive literature that chair leadership was an emergent and understudied position. I expect my study to build on his meta-analysis by contributing additional empirical evidence of faculty leadership through research-related roles and responsibilities. Furthermore, Bess & Dee (2012a) argued that practically no theory-building research on role systems in higher education has appeared in recent years. This observation drove my decision to focus on organizational role theory as a theoretical framework for this study.

Ultimately, this study has larger implications for institutions' internal responses to external economic, social, and technological forces that affect research in higher education. According to Bess and Dee (2008a, p. 173), recent upheavals in higher education, including marketplace demands, pressure for accountability, and innovation fuel an emergent interest in organizational design. As a result, institutions require organizational designs that are "flexible and amenable to change” including tasks and responsibilities, reporting relationships, communication, coordination, and integration (p. 174). The findings of this study may help institutions to create agile organizations by contributing to an understanding of why faculty research productivity succeeds or fails from an organizational role perspective. As institutions adapt to external conditions, they look to the role of chair to ensure that operations within the academic department continue to run efficiently and effectively (Wheeler et al., 2008). However, faculty may resist changes to department culture, the curriculum, and accountability requirements (Gonzales & Rincones, 2013; Gonzales, 2014). The ability of the chair to negotiate research-related organizational roles and responsibilities may therefore determine the institution’s responsiveness to change, and ultimately its success meeting institutional goals within the prestige research economy.

Operational Definitions

Department Chairs

Throughout this project, the terms *department chair* or *department leader* reference faculty members who have assumed responsibility for academic department leadership through election or appointment. These terms stand as a proxy for multiple cognates that researchers use in the scholarship such as *department chairperson*, *department head*, *faculty leader*, *academic manager*, and *administrator*. I have omitted other related administrative positions, such as *program director*, from the study due to the consensus omission of these positions from inclusion in the studies of academic department chairs in the literature. I have also excluded deans who serve as interim chairs while a department is in a state of receivership because their primary administrative responsibility is to the school or college.

This study also excludes other types of academic and administrative chairs found in higher education institutions. The *endowed chair* refers to a distinguished faculty research position paid by an endowment. While some endowed chairs may assume a leadership research position within the department, the primary focus of the endowed chair is the chair's own research agenda (Hartlep, Ball, Theodosopoulos, Wells, & Morgan, 2016). Departments may also use the term chair to refer to permanent and ad hoc *committee coordinators*. For example, departments may assign chairs of committees for undergraduate and graduate studies. Faculty members may also serve as the chair of an ad hoc hiring committee for a new tenure-track or tenured faculty position.

Throughout this study, the term faculty references *tenured* and *tenure-track* institutional faculty appointments. Bess and Dee (2008a) described the roles and career stages of faculty. Institutions hire faculty into either *tenure-track* or *non-tenure-track* positions. Tenure-track faculty participate in a tenure and promotion process of career advancement. Three career stages compose this lifecycle: assistant professor, associate professor, and full professor. Assistant professors are generally junior faculty on a tenure-track who have not yet earned the assurances of a tenured position on the faculty. Assistant professors must meet the research, teaching, and service requirements of the academic department within an agreed-upon timeframe in order to advance beyond this probationary rank. Associate professors are faculty who have earned tenure. Associate professors further earn the rank of full professor when they have collected enough research, service, and teaching achievements to warrant advancement. *Non-tenure-track faculty*, also known as part-time or clinical faculty, serve primarily in service and teaching positions of academic departments. Researchers do not explicitly exclude non-tenure track faculty from studies of faculty research productivity. However, research suggests that non-tenure-track faculty contribute to the research mission of institutions only nominally (Kezar & Sam, 2010).

Research & Research Productivity

Faculty conceptions of *research* are diverse. In her seminal phenomenographical study, Brew (2001) identified four discipline-neutral conceptions by which faculty in Australia understood research: Domino, Layer, Trading, and Journey. In the *Domino* view, faculty perceive research as a series of "separate tasks, events, things, activities, problems, techniques, experiments, issues, ideas, or questions" (p. 276). Faculty combine these elements in a wide variety of domino-like patterns spreading in a multitude of directions as a means to solve a problem or answer a question. Faculty holding a *Layer* conception see research as the task of uncovering what exists beneath the layers of reality. The *Journey* conception holds that faculty view research as a personal journey that transforms the researcher. In the *Trading* conception, faculty view research as products (publications, grants, etc.), relationships, and other social phenomena. Researchers have added to this model by examining the conceptions of faculty performing at different levels of research productivity (Brew, Bound, Namagung, Lucas, & Crawford, 2016) as well as doctoral students (Boud & Lee, 2009). The diversity of conceptions about *research* demanded that the term remained open-ended in this study. I relied on the chairs, as career researchers within their specific disciplines, to contextualize the term as it applied to research activities. During the interviews, I tested the boundaries of this term by asking chairs to consider support for alternative and cross-discipline research methods, such as community-based participatory research and creative activity.

Kwon (2017) portrayed the research lifecycle in the fine arts, humanities, social sciences, and science, technology, engineering, and math (STEM) fields to be a cyclical model of activities grouped into four general phases of effort: (1) Generating Ideas; (2) Obtaining Funding; (3) Experimenting, Collecting, Creating, and Analyzing; and (4) Disseminating Findings. During the Generating Ideas phase, faculty develop proposals and design the research project. Identifying project resources, such as research equipment, also falls into this phase. Activities during the Obtaining Funding phase include locating funding sources, formalizing the research team, and writing and submitting grant proposals (Kwon, 2017). During the Experimenting, Collecting, Creating, and Analyzing phase, researchers conduct the experiments or collect data and perform the data analysis. During the Disseminate Findings phase, researchers share findings by producing technical reports, journal articles, and other publications. Faculty may perform creative acts with an audience at this time. Presenting conference papers and presentations also fall into this phase. In this study, I use Kwon's model to frame discussions of research-related roles and responsibilities as they intersect with the research process.

I acknowledge the diverse conceptions that department chairs hold of faculty *productivity*. Intensifying competition for research dollars drives academic departments to contain costs while expanding research productivity (O'Meara & Bloomgarden, 2011). Research institutions expect faculty to support the research mission by securing external funding and publishing the results of research (Edgar & Geare, 2013). Underproductive faculty and underperforming departments increase the risk to institutional efforts to improve institutional research performance and meet its research mission.

In order to determine the effectiveness of faculty efforts to secure research funding and publish results, institutions measure research productivity through diverse analytical methods (Brew & Boud, 2009). According to Leech, et al. (2015, p. 1041), typical research activities across disciplines subject to productivity evaluation include funded and unfunded grants awarded, refereed papers presented, invited regional/national/international conference presentations given, and peer reviewed books, journal articles, and chapters published. Measurements of productivity are discipline-specific. Faculty in the hard science disciplines, such as chemistry and biology, often use publication citation metrics, which measure the impact of published research based on citation counts (Leech, et al., 2015). Individual researchers receive an *h-index* score based on the citation impact of their publications (Hirsch, 2005). Some on-line services, such as Google Scholar™, allow institutions, researchers, and the public to track citation data from different perspectives. For example, a researcher may identify the number of citations his or her publication receives or calculate the h-index score.

Institutions also increasingly use proprietary analytics software, such as Academic Analytics®, to compare productivity across departments in all disciplines and with aspirational and peer institutions (Gervit & Orcutt, 2014). Academic Analytics® provides metrics on citations, book publications, journal publications, awards, and grants by individual researcher or department. Critics of productivity analytics argue that no one tool or method is able to capture all categories of research. For example, Gervits and Orcutt (2016) suggested that analytics for the arts and humanities lags behind other disciplines. As a result, productivity data may not paint a full picture of research activities in which faculty engage.

The research-related roles and responsibilities of department chairs are only one set of factors contributing to faculty productivity. The scholarship on research productivity enumerates both individual and institutional characteristics influencing productivity (Brew & Boud, 2009). In a study by Dever and Morrison (2009), women researchers noted that personal motivation and research habits informed researcher productivity. Institutional culture and values, such as support for teaching responsibility waivers to create more time for research, also informed women's experiences of research. Surprisingly, women researchers did not consider family responsibilities to be an obstacle to productivity. Research collaboration also predicts productivity. Lee and Bozeman (2005) discovered that collaboration with colleagues, postdoctoral researchers, and graduate students positively associated with scientific research productivity. O'Meara et al. (2015) also found that changing institutional standards for productivity and lack of resources to meet those new standards challenged faculty members' expectations of their own levels of productivity. For example, faculty who had moved from a lower ranked research institution to a higher one noted that the forms and methodologies of research that the institution expected did not necessarily align with the faculty member's current activities. As a result, faculty were disillusioned about their chances of receiving tenure based on past research productivity. A survey by Edgar and Geare (2013) revealed that levels of researcher autonomy and recognition were important practices related to research productivity. The researchers also reported that belonging to a research team and satisfaction with the appraisal process for research were significant managerial factors influencing faculty research productivity. Edgar and Geare also uncovered characteristics of a department's research culture affecting productivity including reputation, fairness, and alignment of department faculty towards same research goals. The diversity of factors influencing faculty research productivity suggests that only those factors within the sphere of influence of the chair would emerge as research-related roles and responsibilities.

Despite the department chair's prominent organizational role, no defined set of research-related roles and responsibilities exists. Researchers identified that chairs support faculty research productivity through resource distribution and balancing of faculty workloads (Bryman, 2009; Knight, Folkins, Hakel, & Kennell, 2011; Taggart, 2015). According to Berdrow, (2010, p.

500) successful management of workload and resource distribution is one characteristics of an effective research-oriented department. Other findings regarding research productivity suggest that the chair's research-related roles and responsibilities are more diverse. Barner, Holosko, Thyer, and King (2015) argued that departments of psychology and social work that cultivated a culture of research founded on "honesty, openness, and continuous reflection" (p. 6) demonstrated increases in the quantity and quality of faculty research output. Furthermore, Hardré, Beesley, Miller, and Pace (2011) found that limits to faculty time and motivation often thwart institutional efforts to promote cross-disciplinary collaborative research. This finding suggests that the chair, as department leader, serves a role in creating a nurturing research culture within the department as well as mediating between departments to accomplish research objectives. Finally, Taggart (2015) demonstrated that department chairs' personal values towards research influenced their research time allocation recommendations to junior faculty. The diversity of tasks and processes supporting research suggests that chairs' individual experiences, attitudes, and values as researchers and as departmental leaders inform how they enact and negotiate research-related roles and responsibilities.

Personal and Professional Identity

I also reference the *personal identity* and *professional identity* of department chairs as they negotiate multiple professional and organizational roles. I draw on the meta-analysis of Ashforth, Harrison, and Corley (2008) to understand these constructs and interpret chairs' differing identifications. According to the authors, individuals hold multiple layers of identity within organizations. At each individual's core is the personal identity. Referencing Postmes and Jetten (2006), the authors contended that personal identity is an individual's "unique sense of self" (p. 351), which includes the characteristics, attributes, interests, and traits that make the person distinct from others. One part of a person's self-concept is their *social identity*, which derives from their memberships in social groups, such as being a member of a team or department. *Professional identify* references a person's self-conception by way of their occupation. The authors suggest that people prioritize their professional identity over *organizational identity.* Organizational identity refers to a person's multiple roles within a specific organization, such as a corporation or higher education institution. Professional identification also subsumes ideas of *career identity*, which considers how an individual's professional identity changes over the course of a career. The authors contended that incidents in a person's career, such as changing jobs, receiving promotions and awards, adding responsibilities, or learning new skills might serve as "spurs to personal reflection, thereby galvanizing, crystallizing, and socially validating identity change" (p. 351). Ashforth, Harrison, and Corley suggested that a person's professional identity might conflict with their organizational identity at times. For example, Gmelch (2016) contended that faculty members who hold the role of department chair continue to define themselves primarily as researchers and teachers, not administrators.

Institutional Striving

Throughout this study, I used the term *striving* to describe one institutional environment in which department chairs enact their research-related roles and responsibilities. O'Meara (2007, p. 123) defined striving as, "the pursuit of prestige within an academic hierarchy." Striving institutions engage in competitive practices in order to improve their standing in college rankings published yearly by *US News & World Report*, *Money*, and *Business Week* (p. 125). Striving institutions often change or extend their mission, culture, and organizational structures and processes in order to help them compete against other schools and increase their prestige ranking in these publications. An increase in rank ostensibly influences the quality of students and amount of sponsored research funding the institution attracts.

For those institutions attempting to improve their research prestige, striving affects the attention and support administration gives to the institution's research mission. Among the characteristics of research striving institutions are an increase in expectations for faculty research during tenure and promotion, heightened emphasis on the prestige of faculty grants, awards, and fellowships, and a reduction of faculty teaching load with a corresponding increase in discretionary time (O'Meara, 2007, p. 131). Institutions striving for research prestige also demonstrate a shift in emphasis from undergraduate to graduate program development, an increase in resources for infrastructure and administrative support, and an emphasis on hiring faculty with prestigious research reputations.

For this study, I anticipated that institutional striving creates opportunities for department chairs to enact diverse responsibilities that support faculty research. Transformational change at striving institutions ostensibly creates challenges and conflicts for department chairs to overcome as they help faculty make sense of new administrative directives for research productivity. According to one case study of a striving institution, faculty members perceived the changes associated with institutional striving as a crisis of identity (O'Meara & Bloomgarden, 2011). Faculty observed that striving transformed the institution's reward system, hiring practices, and teaching load. In particular, faculty believed that striving changed the nature of "real work" (p. 58) to include a greater emphasis on research tasks. Serving as intermediaries between the faculty and administration, department chairs interpret new research directives and help faculty adjust to the organizational changes associated with striving.

Conclusion

The purpose of this study was to understand department chairs research-related roles and responsibilities at one public research institution. External economic, social, and technological forces shape higher education research performance in the early 21st century. How institutions respond to these forces often determines the competitiveness of the school compared to its peers in the prestige research economy. A critical component of this response is administration's ability to maintain faculty research productivity. Department chairs serve a central role in ensuring that faculty research productivity meets institutional goals. However, a lack of preparation for the position of chair, limitations to chairs' power and authority, aversion to political environments, and role stressors that arise from the dualities inherent in the position challenge the effectiveness of chairs as they support faculty research. A better understanding of how chairs enact research-related roles and responsibilities while maintaining their research agendas may improve how institutions support faculty research productivity.

CHAPTER 2

LITERATURE REVIEW

The purpose of my research is to examine department chairs' research-related roles and responsibilities. I address two research questions regarding department chairs' research-related roles and responsibilities. The first question addressed in this study is: What are department chairs' research roles and responsibilities as department leaders? Two sub-questions arise from this primary question:

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

The second research question addressed is: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders? Three sub-questions arise from this research question.

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

In this chapter, I review the recent literature of department chairs in higher education in order to contextualize my research within the scholarship. I limited my review primarily to literature published later than 2006 except where I note. This year marked the final year of scholarship synthesized in Bryman's (2007) meta-analysis of department chair leadership. The purpose of this literature review is therefore to document the central themes, issues, and tensions that have shaped the role of department chair since that time. I focused my analysis on empirical study research outcomes as a means to extract and categorize the literature's central themes. I have subdivided this literature review into five sections based on the five most prevalent categories of research. These categories include the demographics and career path of department chairs, the experiences of women department chairs, the roles and responsibilities of chairs, leadership styles and traits, and the department chair as change agent. Across these categories, three central themes emerged: (a) the central role of the chair within the contemporary context of higher education, (b) role conflict and ambiguity, and (c) leadership as a multidimensional function of the chair. These themes construct a narrative regarding the developing role of the chair in higher education, in particular as the complexion of the role has changed in response to increasing departmental and external demands. This narrative has informed the research question of this project.

Literature Search Method

An iterative, multi-step validation process composed the literature search. The first step of the process involved identifying articles for inclusion in the synthesis. Thirty-five qualitative and quantitative empirical studies composed this synthesis. The Educational Resource Information Center (ERIC) database served as the primary data source. Education Full Text, Scout, and Google Scholar™ provided additional literature sources. The search terms included *department chair* and its cognates such as *department chairperson*, *department head*, *department leader*, and *administrator*. Additional terms, such as *leadership*, *roles, resources*, *gender*, and *diversity* provided topic intersections. I selected peer reviewed qualitative and quantitative empirical study articles from 2006 to 2017 for inclusion except where I noted. I omitted Delphi studies, articles centrally focused on international higher education institutions, and studies that centered on professional schools such as medical, nursing, and law schools except where I noted. Due to the limited number of articles available regarding the experiences and perceptions of women department chairs, I retained one study on faculty perceptions of an academic medical women chair. I also included one article regarding the experiences of women chairs across Canadian higher education institutions as one of the few qualitative studies that focused on the experiences of women chairs. I also include three studies from the years 2005-06, which capture dimensions of the chair's roles and responsibilities that are relevant to my study and not reproduced in current scholarship. Only twelve of the articles represented qualitative studies. This observation confirmed the conclusions of researchers who remarked on the limited number of qualitative studies available on department chairs (Whitsett, 2007; Bryman, 2007; Morris & Laipple, 2015). The lack of qualitative empirical studies represents a clear gap in the scholarship.

Once selected for inclusion in the synthesis, I sorted articles into five broad categories. These categories provided a basis of comparisons of findings. The categories included the demographics and career path of department chairs, the experiences of women department chairs, the roles and responsibilities of chairs, leadership styles and traits, and finally, the department chair as change agent. I sorted the articles using abstract keywords in order to identify narrative themes in the research. The generalized use of the term *leadership* in article titles, and as defined by the authors in the body of the article, problematized sorting. In some cases, *leadership* referred to the training process for the role of chair. In others, it referred to aspects of management and as an institutional change agent. I evaluated the use of the term *leadership* on a case-by-case basis in order to sort the articles as accurately as possible. Finally, I created a matrix of findings from each article in a category. The matrix provided another method to identify emergent themes in the literature. These themes served as the basis for a narrative regarding academic department chairs. The themes also produced new search terms and categories of literature to investigate. Once completed, I stepped through the process again to ensure accuracy and identify overlooked articles. Across these categories, three central themes emerged: (a) the central role of the chair within the contemporary context of higher education, (b) role conflict and ambiguity, and (c) leadership as a multidimensional function of the chair. These themes construct a narrative regarding the developing role of the chair in higher education.

Department Chair Demographics

While deans often appoint department chairs or hire them from outside the institution, faculty generally recruit the individuals who serve as chairs from the ranks of the department's senior members. According to Cipriano and Riccardi's (2017) landmark 9-year longitudinal study of 2,013 chairs, the typical department chair was 53 years old, assumed the role at 46, held a doctoral degree, was tenured, and considered himself or herself a member of the faculty rather than administration. While Cipriano and Riccardi did not detail race and gender distribution of chairs, other researchers have provided evidence of the overwhelming composition of the position by white males. In a study of 963 department chairs from Carnegie U.S. public research institutions, Morris and Laipple (2015) reported that women composed less than one-third of the 1,515 chairs they surveyed. Morris and Laipple further found that only 10% of department chairs were not European-American. As a temporary appointment, one in five chairs will leave the position each year (Gmelch & Miskin, 2011).

The Career Path of the Chair

Evidence from the literature of department chairs suggests a distinct career arc for faculty aspiring to a leadership position. While administration often appoints department chairs or hires them from outside the institution, faculty generally recruit the individuals who serve as chair from the senior members of their department. The career arc beings with this identification of leadership potential in the prospective chair by peers, deans, or other department chairs.

Faculty transition to the role of chair featured prominently in the literature. In particular, chairs voiced concern regarding preparation for the role. Chairs concluded that they did not receive the preparation or training necessary to succeed in the role. According to Foster (2006), once in the role chairs struggled with the ambiguity of the role as they gained their footing. Finally, as their tenure completes, most chairs transition back to the faculty and resume full-time scholarship activities.

Demonstrating Leadership Potential

According to the literature, the career path of department chair begins with the identification of leadership potential by a dean, other department chair, or peer. Bisbee (2007) investigated the identification and promotion of department chairs and other mid-level managers at land grant institutions. Eighty-three percent of chairs indicated that others had identified them as future leaders during their careers. Nearly half (43%) received a nomination by their peers. Sixty-one percent participated in a selection committee process to become chair. Ninety percent of department chairs first served as faculty. Open-ended responses indicated that department chairs believed exposure to leadership opportunities enabled others to identify leadership potential in the individual. Nevertheless, the researcher concluded that institutions did not effectively identify and train potential chairs. Therefore, institutions should increase efforts to create formal leadership programs to remediate these concerns.

Training and Preparation

Despite the acknowledged critical importance of the role of chair, and an abundance of published handbooks and guides to the position, little empirical research exists on department chairs' training needs. The absence of literature suggests that higher education has yet to address department chair preparation for the role in a systematic manner. For example, Aziz et al. (2005) performed a knowledge, skills, and abilities (KSA) assessment of department chairs at Bowling Green State University (BGSU). The purpose of the assessment was to update previous scholarship regarding chairs, deans, and directors' self-reported needs for and prioritization of training based on assessed KSA areas. Their survey received 56 responses. The respondents identified professional development within the department, such as promotion of high quality teaching and maintaining faculty morale, as the most important KSA for the role. Other highly ranked areas included issues of resources and budgets, such as obtaining internal and external funding and expertise with budget processes, knowledge of faculty recruitment policies, and ability to communicate effectively with the dean. When asked to prioritize training needs, budgeting and resource issues emerged as the top KSAs. The data also affirmed that chairs struggled with role conflict as they managed multiple identities as chairs/directors and researchers. The researchers recommended BGSU implement a comprehensive training program for chairs that included a field manual, classes, and mentoring opportunities.

Morris and Laipple's (2015) quantitative study of 1,515 deans, directors, and department chairs confirmed many of Aziz et al. (2005) findings. Respondents to the survey reported that the three areas in which they felt least prepared included developing entrepreneurial revenue, creating a culture of assessment, and managing faculty grievances. Revenue issues and faculty grievances in particular aligned with the findings of Aziz et al. (2005). The study's findings also suggested gender differences as a factor in administrator perceptions of preparedness for the role of chair. According to the researchers, women reported that they were less prepared than men were to manage finances. However, women also reported having greater skill enacting social behaviors, such as inspiring others and managing faculty discipline, than men. Regardless of gender, most chairs felt capable at meeting commitments, demonstrating honesty, and accepting open feedback. Chairs indicated less competency at inspiring faculty and serving as a leader others would follow. Morris and Laipple also examined the effect of the role on job satisfaction and personal wellness. They discovered that a surprising number of respondents reported that the role interfered with personal wellness factors such as family commitments, social engagements, eating healthy, and exercising. The researchers concluded that chairs perception of a lack of preparation compels institutions consider providing additional professional development in financial stewardship, faculty issues, and assessment.

Wolverton and Ackerman (2006) examined the career path, training needs, professional development, and frustrations of department chairs. In a survey of 56 chairs and deans, the researchers asked respondents to consider categories of knowledge and skills necessary to become an effective departmental leader. Fiscal management expertise and personnel management emerged as primary categories. In particular, chairs struggled with providing faculty sufficient resources to support research and travel. Faculty requirements for technology also outpaced available funds. Chairs also reported that prior experience in conflict resolution, counselling, people management skills, and cultural knowledge aided in executing the responsibilities of the role but were often lacking from professional preparation.

Wolverton and Ackerman's key findings also included chairs frustrations with role conflict and ambiguity. In particular, chairs reported frustration over the challenge of mediating between faculty and administration. They were further unsure where to turn for advice or whose authority to serve in times of conflict. Chairs also experienced a lack of clarity between their role as department leader and as researcher. Chairs reported difficulty in finding time to focus on their own research interests, which contributed to a sense of impasse in their professional development.

Transition Back to Faculty

The single recent study regarding transition back to the faculty highlighted department chair insecurities and concerns. Smith, Rollins, and Smith (2012) studied department chairs' expectations after their tenure as chair concluded. The researchers surveyed 313 chairs from 27 institutions. Chairs expressed anxiety over reconstituting research productivity. In particular, they feared an inability to generate funding after enduring reduced research output during their time as chair. Regardless of their concerns, most chairs expressed a high level of job satisfaction with their tenure. Seventy-one percent indicated they would become chair again. This finding implies that, despite the uncertainties regarding the role, chairs often perceive their tenure as an affirming experience.

The Experiences of Women Department Chairs

The evidence from the literature of department chairs reveals that women are underrepresented in higher education leadership compared to men (Morris and Laipple, 2015), (Cipriano and Riccardi, 2017). Themes of work-life balance and role conflict, lack of institutional support, the implications of the marketization of higher education, and entrenched gender inequality figure prominently in studies of the experiences of women as chairs. These obstacles inform the perceptions of women considering leadership positions or pursuing greater leadership responsibilities. In particular, the consensus view implicates cultural and societal norms as both limiters on the career arc of the woman and as challenges to their responsibilities as chairs.

Demographic data presented in studies across the five thematic categories of department chair literature established underrepresentation of women in higher education leadership. Morris and Laipple (2015) reported that white males composed the predominant demographic of department chairs. In contrast, women composed less than one-third of the 1,515 chairs surveyed. Women in science, technology, engineering, and math (STEM) fields compose a smaller population.

According to the literature, a lack of institutional support for chair work-life balance limits the career options for women aspiring to higher education leadership positions. Acker's (2014) qualitative case study focused upon the implications of academic capitalism on the lived experiences of women leaders in lower-middle management roles in Canadian higher education institutions. The findings of this study confirmed that the cultural change associated with academic capitalism affected the decisions of women in lower-middle management to pursue positions of greater responsibility and leadership. Acker discovered that lower-management leadership positions available to women increased as institutions intensify their emphasis on productivity and managerialism. However, managerialism also contributed to new professional stressors such as increased work hours, a more frenetic pace of work, reduced resources, and less personal time. These cultural changes limited the career trajectory of women academics aspiring to leadership roles by increasing the barriers to work-life balance. Without work-life balance, women chose to exit leadership at the end of their tenure as chair instead of pursuing further positions. Acker labeled this phenomenon a “revolving door” (p. 74). Acker concluded that, as long as institutions fail to provide enabling environments that foster work-life balance and create leadership opportunity, women would continue to reflect an underrepresented population in higher education leadership.

Perrakis and Martinez (2012) presented a similar qualitative study regarding the implications of work-life balance for women aspiring to department chair positions. The researchers examined the coping strategies of 10 female department chairs with young children as they navigated professional and personal responsibilities. They found that most women re-conceptualized their career aspirations after starting a family. Female faculty with children aspiring to leadership positions exist in a state of constant conflict regarding their intersecting work and life roles and expectations. Perrakis and Martinez also affirmed that mentorship, particularly of deans, empowered women chairs to maintain work-life balance and boundaries.

Wharton and Estevez (2014) problematized the findings of Acker (2014) and Perrakis and Martinez (2012) regarding work-life balance as the primary determinant to women chairs’ career path. The researchers examined the cultural attitudes and beliefs influencing department chairs’ conceptualization of gender and gender inequality in their departments. The qualitative study of 52 chairs (11 women) established that department chairs perceived family responsibilities differently depending on their gender. Female chairs more often than male chairs contextualized their work role within a broader scope of family responsibilities, in particular parenthood. Regardless of gender, the department chairs considered work-life balance to be a personal decision and not a professional issue. The chairs believed that faculty possessed the autonomy to construct a work-life balance so long as they meet work responsibilities. Because department chairs considered work-life balance to be a personal decision, they overwhelmingly did not consider gender inequality to be a systemic issue. As such, they made no special concessions for women on departmental business outside of work-life balance. The researchers concluded that cultural attitudes towards gender within the department might help to explain underrepresentation of women in higher education leadership.

Managerial Responsibilities

The chair assumes responsibility for the managerial needs of the department as one formal institutional duty. The literature regarding managerial responsibilities highlighted a broad set of challenges facing department chairs. Distributing resources fairly, balancing increased faculty workloads with scholarship production, and maintaining levels of departmental autonomy emerged as prevalent themes. As expected, these challenges often aligned with chairs' perceptions of the training and preparation necessary to be successful in the role. Researchers further examined the managerial aspects of the position through the lens of efficiency and effectiveness. Efforts to improve efficiency suggest a shift in the interpretation of the role of chair within the current climate of higher education. As departmental resources become further constrained by competing institutional priorities, chairs must demonstrate effectiveness when balancing budgets and prioritizing conflicting needs. Demonstrating competency in addressing these challenges allowed the chair to maintain the productivity of the faculty while addressing external stakeholder needs. In response to these observed deficiencies, researchers often concluded that improvements to department chair training and professional development were necessary to meet new institutional efficiency needs.

Characterization and Prioritization of Responsibilities

Contextualizing the roles and responsibilities of the department chair within the mission and goals of the institution featured prominently in the literature. Cipriano and Riccardi (2017), for instance, exposed the diverse landscape of department chair responsibilities in a landmark 10-year survey of over 2,000 department chairs. Reporting on a subset of the data, the researchers revealed that no one set of responsibilities characterizes all the work that the position entails. Instead, institutional type, discipline, departmental identity, and even politics of the environment inform the position's roles and responsibilities. Based on the data, Cipriano and Riccardi constructed a set of core responsibilities and roles that prioritized the ability to communicate effectively as the skill most important to the role of chair. Other highly rated skills included conflict management skills, the ability to lead, decision-making ability, interpersonal skills, problem-solving skills, character and integrity, and program and course innovation. Correspondingly, chairs identified non-collegial or unmotivated faculty, interaction with bureaucracy, lack of time to devote to personal research, excessive workload and email, stress, and lack of adequate resources as the greatest challenges facing the role. Despite the challenges, nearly 80% of the respondents indicated they remained a chair in order to make a difference (79.6%) or to shape the direction of the department (77.2%). The researchers concluded that the role of department chair serves as a linchpin of the institution and as such were critical to the continued advancement of the institution.

Berdrow's (2010) catalogued the responsibilities of the department chair through multiple institutional lenses in order to create a comprehensive view of the role. This qualitative study included evaluations of the chair as an individual actor, an institutional agent, and a point of contact for stakeholders. The purpose of the study was to understand the role of chair better in order to create professional support programs to improve chair effectiveness. Berdrow interviewed 21 chairs at one small Northeastern business and liberal arts school for the data in order to model the roles and responsibilities of the chair from these vantage points.

Berdrow incorporated several theoretical frameworks to ground her examination of the role including Adner and Helfat's (2003) dynamic managerial capabilities theory, which considers an actor's managerial human capital, social capital, and cognition in the position to understand how an actor functions in a role. In order to contextualize the role within the institution, Berdrow drew from Meyer's (1988) systems theory as well as Bolman and Deal's (2003) four frames of organizational complexity theory. Finally, Stewart and Smith's (1999) theory of role socialization served to understand the stages an individual underwent to transition from one role to another.

Berdrow's key findings framed the role of the department chair within the context of the institution's mission and goals. Berdrow first developed a model of the role of chair based on six categories of managerial and transformational leadership responsibilities identified in the data. Managerial categories of tasks included operational/administration, faculty development, student development, and communication/representation. Transformational leadership skill categories included boundary spanning, catalyst for innovation, and climate enhancement. Berdrow interpreted some categories, such as communication/representation, as evidence of boundary spanning behavior building on Meyer's systems theory. The researcher also noted that chairs did not clearly define leadership and leadership-related tasks. Possibly, as a result, chairs did not prioritize these tasks compared to managerial tasks.

The second major product of the study was a catalogue of the knowledge and skills necessary to execute efficiently the role of department chair. Similar to Aziz et al. (2005)

research into the knowledge, skills, and abilities (KSA) that chairs identified as essential training needs, Berdrow's categories reflected the managerial and leadership responsibilities of the role. Berdrow's category of foundational skills included personal management skills, communication, and personnel management skills. Leadership skills included leading peers, boundary spanning, and mobilizing innovation and change. According to interviewees, time constraints, diverse pressures from stakeholders and the institution, and the servant nature of the position problematized efficiency in the role. In particular, chairs experienced role conflict between the needs of faculty to focus on every day maintenance and the needs of administrators to be innovators.

While Berdrow does not comprehensively engage the study's theoretical frameworks in drawing conclusions from the data, the innovative application of systems theory, academic and social capital, and organizational theory provides a new direction for research into the role. In particular, the boundary spanning concepts from Meyer's systems theory provides a framework for discussing the role of the chair within the contemporary context of higher education's competing demands from stakeholders and shrinking resources. Berdrow concluded that the role of the chair is highly complex in nature due to the number of stakeholders to whom the chair answers.

Acknowledging higher education's failure to prepare faculty adequately for the role of chair, Riley and Russell (2013) investigated chairs' perceptions of the priority of their duties and functions. The results of the study served as the basis for a professional development program directed at newly promoted and hired chairs. The researchers surveyed 27 department chairs across one large (30,000 students) southeastern university regarding the priority of six primary functions and six primary duties of the chair. Participants rated the exhibition of effective leadership of people as the most important function. Possession of the skills and knowledge to execute an effective hiring process ranked second. Chairs rated evaluation of faculty performance towards tenure and promotion as the most important duty. Communicating departmental needs to the dean ranked second. The researchers identified that the institution type and discipline type of the department informed the construction of the role of chair by defining the tasks, concerns, priorities, and the cultural context for the position. Riley and Russell concluded that, even considering success as a faculty member, becoming an effective chair still required good interpersonal and communication skill.

According to the literature, discipline and institution type tended to influence the department chairs' roles, responsibilities, and challenges. Crawford (2012) explored chairs' experiences within the governance structures of schools of journalism and mass communication (SJMC) at Historically Black Colleges and Universities (HBCUs). The researcher posited the view that HBCU chairs face a unique set of challenges compared to chairs at other institutions. Reductions in federal spending on HBCUs, tenuous term limits, and heavy teaching loads complicate the ability of HBCU chairs to participate in governance and focus on the future of their departments effectively. Crawford surveyed 21 department chairs at HBCU schools of journalism and mass communication to determine if they continued to keep the institution's mission while moving towards future accreditation given these institutional challenges. Crawford's findings suggested that SJMC chairs are still navigating the administrative hierarchy. Chairs also believed they held disproportionately less autonomy and authority than chairs in other schools. Crawford concluded that SJMC departments were often a subunit of a larger budgeting entity that controlled resources.

Hancock (2007) explored the role of the business school chair within the context of increased teaching and research workloads and shortages of funding. Hancock calculated the time department chair tasks consumed each week. The findings point to an imbalance between basic administrative responsibilities and those requiring academic credentialing. Chairs dedicated more than three and a half days each week to administrative tasks, which required no specific academic credentials. Office management, faculty management, and financial/facilities management consumed the most time. Hancock concluded that shifting these hours to committees would allow chairs to focus on discipline-specific tasks such as strategic planning.

Similarly, Aggarwal, Rochford, and Vaidyanathan (2009) profiled the marketing department chairs of Association of Advanced Collegiate Schools of Business (AACSB) accredited member institutions. The purpose of their quantitative study was to identify marketing chair roles and responsibilities across a variety of institutional Carnegie Classification institutional types as a means to determine key points of department chair stress. Collected demographic data from 105 survey respondents reflected the gender, race, and age distributions found in other studies. Chairs were overwhelmingly white (87% of responses) and male (84% of responses). Respondents also indicated that the primary reason for becoming a chair was either due to requests from the dean or fellow faculty (52%) or for personal development (48%). When asked to rate the importance of department chair tasks, respondents ranked faculty engagement activities the highest. These included encouraging faculty research and publication, assigning teaching and other duties to faculty, evaluating faculty performance, and maintaining a conducive work climate.

Aggarwal, Rochford, and Vaidyanathan (2009) also explored typical sources of stress of the role. Chair responses reflected the tensions inherent in the dual identity of faculty who serve as both administrators and researchers. Chairs reported stress primarily due to the effect of the role on time available for personal research. Finding uninterrupted chunks of time to dedicate to research, having insufficient time to remain current in the field, and attending meetings that take up too much time ranked as the top three stressors. Building on these findings, the researchers recommended institutional and personal strategies to address stressors, including developing time management and delegation skills, and restructuring the position at the institutional level.

Allocation of Resources

Department chair decisions regarding the allocation of resources also emerged as a prevalent theme in the literature. Bozeman, Fay, and Gaughan (2013) explored department chair autonomy regarding determination of funding for new hires in Science, Technology, Engineering, and Math (STEM) departments. The researchers developed a power index to measure a chair's relative autonomy and decision-making authority over departmental resources. The evidence gathered appeared to suggest that the chair's previous experiences, especially in industry or government, positively associated with greater power and autonomy. A positive association between levels of perceived power and the emphasis on research as a departmental strategic priority. Chairs rated increasing sponsored research, improving the quality of graduate students, and adding tenure-track lines as the highest STEM priorities. Chairs also rated racial and gender diversification of the faculty an important priority, but not the highest. These findings implicate power and influence as essential dimensions to departmental chair control of resource allocation. Within an environment of diminishing funding for higher education, the findings suggest that chairs that are more powerful will control greater influence over institutional resources than less powerful ones.

In a broader study of resource allocation practices, Fitzgerald, Mahoney, Crawford, and Hnat (2014) found that 126 chairs, deans, and directors at institutions in one Midwestern state perceived quality of teaching and educational influence on students as the fairest method of distributing faculty compensation. However, respondents believed factors such as research productivity and secured funding were more likely criteria for determining compensation. Other findings included that perceptions of fairness in compensation differed by institutional type. More respondents at research institutions perceived distributing compensation based on quality and quantity research and funding to be fair than respondents from non-research institutions. The researchers did not find Carnegie classification type or position of the respondent to be significant. Based on the evidence, the researchers were unable to refute J. S. Adams' (1963) equity theory, which holds that those who contribute the most should receive the greatest share while those who contribute the least should receive the least share.

Knight, Folkins, Hakel, and Kennell's (2011) quantitative research study examined the influence of academic discipline and length of service on administrators' resource allocation decisions. The researchers presented 1,690 academic administrators (chairs, deans, program directors, etc.) with fictional funding scenarios to evaluate. Based on case data, administrators then decided whether to fund or cut the program. ANOVA analysis provided evidence that applied disciplines such as mechanical engineering were more likely to receive additional funding and to avoid cuts than other programs. While the administrator's home discipline emerged as a significant factor determining cuts, demographic variables such as length of time the administrator spent in the position or in academia were not significant. The authors concluded that disciplinary differences factor into the resource allocation decisions of administrators. In an era of reduced institutional funding and increased budgetary scrutiny, an understanding of the factors influencing chair decisions provides opportunities to reevaluate current beliefs and funding strategies to ensure they are the most effective.

Support for Faculty Teaching and Research Activities

Support for faculty teaching and research activities compose the primary responsibilities of academic department chairs. Evidence suggests that chairs' attitudes, values, and beliefs inform how chairs enact those responsibilities. Sobrero and Jayaratne (2014) examined North Carolina State University chairs' attitudes towards and support of community engagement research, in particular as it influenced the tenure and promotion process. Administration legitimized community engagement research by including it in the six Realms of Faculty Responsibility recognized by the institution. In an on-line survey of 64 of the university's chairs, the researchers found a discrepancy between departments' official stances on community engagement research and chairs' support of the practice. Seventy-five percent of the departments indicated they valued community engagement scholarship in the decision-making process of tenure and promotion. Seventy-three percent of the departments further included criteria to reward community-engagement scholarship. However, chairs' responses indicated a countervailing attitude. Chairs reported that they valued basic and applied research over community-engaged participatory research. Correspondingly, chairs indicated that scholarship published in community engagement journals was less valued than scholarship published in traditional journals for the purposes of tenure and promotion. Overall, chairs weighted two other categories of responsibilities: teaching and mentoring students and discovery of new knowledge, as more valued than engagements with constituents outside of the institution. Sobrero and Jayaratne concluded that a critical need to develop awareness and assessment of community-engaged scholarship exists. Otherwise, one critical path towards demonstrating the value of higher education to the public would remain undervalued.

Responding to changes in technology, pedagogy, and student demographics within higher education, Stringer, MacGregor, and Watson (2009) studied chairs' managerial and leadership strategies as they determined faculty workloads. The purpose of the study was to evaluate if faculty assignments by credit hour accurately reflected faculty workloads. The researchers also examined if department chairs' managerial strategies reflected leadership criteria as found in "learning organizations". Strategies such as maintaining flexibility, encouraging experimentation, acquiring knowledge from outside sources, and diffusing knowledge internally define leadership in learning organizations. Forty-three faculty and eight department heads from one private university participated in the research. The researchers discovered no correlations between faculty assignments by credit hours and faculty workloads. However, interviews with department chairs exposed that chairs understood the need to adapt their management strategies to the changing contexts of higher education. The researchers found that chairs valued flexibility in credit hour assignment and encouraged faculty experimentation during the assignment of workloads.

Chairs demonstrated leadership by introducing knowledge from outside the department to improve managerial strategies for faculty workloads. Often, chairs learned new strategies from other chairs, deans, or colleagues outside the institution. The evidence from interviews points to chairs fostering the diffusion of knowledge within the department as innovations. Chairs desired formal mechanisms to support dissemination of information at their institution. These finding confirmed that the chairs' management behaviors aligned with the characteristics of learning organizations. Stringer, MacGregor, and Watson concluded that alignment of the department with changing institutional values demonstrated leadership in the position during times of institutional transformation.

Taggart's (2015) study contextualized the findings of Stringer, MacGregor, and Watson (2009) for new faculty. Taggart investigated how department chairs' personal values influenced the recommended time allocations for teaching and research departments provide new faculty as a guideline to attain tenure and promotion in a timely manner. The researcher hypothesized that formal organizational characteristics such as research facilities, prestige rankings, and teaching workloads were the dominant influences on chair recommendations. Taggart examined data that Bozeman, Fay, and Gaughan (2013) collected in 2010 for a quantitative study on department chairs in 149 Carnegie Classification Doctoral/Research universities. STEM field chairs represented approximately 75% of the 1,832 respondents. The results demonstrated that, while chairs officially followed organizational norms for recommendations to new faculty, chairs' values also influenced their recommendations. Specifically, Taggart found that chairs' academic time allocations, career history, and prioritization of quality teaching shaped the advice provided to new faculty. Taggart's research affirmed that formal organizational characteristics, such as research facilities, faculty workload, and prestige rankings still factored into recommendations. Contrary to the study's hypothesis, the findings revealed that chairs' values and attitudes provided a countervailing influence to formal organizational characteristics on recommendations of workload prioritization.

Virick and Strange's (2016) quantitative study focused on the department chair's influence on junior faculty's development. The researchers used person-environment fit and value congruence theories as a framework to evaluate the effect of value mismatch or match between junior faculty and their department chairs. Virick and Strange hypothesized that value alignment between junior faculty and the chair strongly influenced junior faculty's job satisfaction and organizational commitment. In particular, the researchers focused the study on the importance of teaching and research tasks. The researchers surveyed 174 faculty at one university regarding their attitudes towards clarity of expectations, faculty agency, career successes, overall job satisfaction, organizational commitment, and turnover intentions. The study yielded evidence that faculty members whose priorities did not match their chairs' reported feeling less clear in their expectations for teaching and scholarship. Faculty with teaching and scholarship priorities different that their chairs' priorities reported feeling less successful than their peers did. While a mismatch did not affect overall job satisfaction of the junior faculty, alignment predicted higher levels of job satisfaction and less intention of turnover. Virick and Strange concluded that awareness efforts based on the four-stage model of acculturation by Rosch and Reich (1996) can reduce misalignment. This study ultimately reinforced the bidirectional relationship in sense-making between faculty and department chairs.

Department Chair Leadership

The term *leadership* assumes different meanings depending upon the context of its use in the literature. *Leadership as a function or role* of the chair permeates much of the literature and incorporates a broad range of institutional expectations of the role. In contrast, *leadership styles and traits* compose a distinct category of scholarship centered upon individual interpretations of the role. This section separates the discussion of department chair leadership into two subsections: examinations of department chair leadership *styles* and the implications of specific leadership *traits*. In order to contextualize the studies of leadership I discuss Burns' (1978) model of transactional, transformational, and laissez-faire leadership that several of the studies reference. A review of Bryman's (2007) meta-synthesis follows. This meta-synthesis established the most recent baseline for higher education leadership literature review. As such, it provides context for the behavioral styles and traits researchers commonly investigate. In particular, Bryman's focus on "effectiveness" of leadership presages current investigations, which seek to understand the changing responsibilities and expectations of the department chair within the current climate of higher education.

Burns (1978) and others developed a leadership model defined by three primary types of leadership styles. Transactional leadership connotes managerial-type tasks. Transactional leadership focuses on exchanges between the leader and follower, which produce a desired outcome. In academic departments, these outcomes primarily concern day-to-day operational goals such as completion of daily tasks to teach classes, advise students, and perform administrative or managerial functions in a timely manner. Transactional leadership may require reward or punishment in order to effect the desired outcomes. In contrast, transformational leadership depends on a strong relationship between the leader and followers. This bond creates productivity and reinforces organizational loyalty by promoting a shared vision for the department. Changing the curriculum, increasing diversity hires, and expanding community-engagement research may require department chair transformational leadership. Finally, Laissez-faire leadership reflects a hands-off or passive approach to leading. While the managerial aspects of the role of department chair associate most often with transactional leadership, the literature contended that department chairs' transformational leadership shapes organizations and collectively influences the direction of institutions.

Bryman's (2007) meta-synthesis of effective leadership in higher education established a foundation for examining contemporary developments in department chair leadership. Bryman's synthesis covered the literature from three countries: the US, the UK, and Australia for the years

1985-2005. While the higher education institutions of these three countries demonstrate different organizations and governance, Bryman contended that most of the literature he reviewed focused on higher education institutions in the United States. Bryman further contended that the three countries shared the academic department as the common unit of analysis (p. 694). Investigation into the literature resulted in identification of 13 aspects of leader behaviors that characterized an "effective" department leader. According to Bryman, these characteristics more accurately defined chair leadership than the general leadership literature. However, he conceded that the definition of leadership is not consistent across the scholarship. As such, Bryman broadly defined leadership as "influencing or motivating others towards accomplishing the department's goals" (p. 696). This definition roughly encapsulates Burns' concepts of transactional and transformational leadership.

The thirteen aspects of leader behavior reflect both the internal and external facing responsibilities of the role of department chair. Bryman's leadership aspects included: (a) clear sense of direction/strategic vision, (b) preparing department arrangements to facilitate the direction set, (c) being considerate, (d) treating academic staff fairly and with integrity, (e) being trustworthy and having personal integrity, (f) allowing the opportunity to participate in key decisions/encouraging open communication, (g) communicating the department's strategic department, (h) acting as a role model/having credibility, (i) creating a positive/collegial work atmosphere in the department, (j) proactively advancing the department's cause with respect to constituencies internal and external to the university, (k) providing feedback on performance, (l) providing resources for and adjusting workloads to stimulate scholarship and research, and (m) making academic appointments that enhance department reputation (p. 697). Bryman anticipated that these aspects of leader behavior would serve as a framework for institutions to operationalize through leadership training and regular evaluations.

Bryman concluded that some behaviors considered as “effective” leadership function in conflict. For example, evidence from the literature suggested that department chairs at research institutions should have credibility as researchers in addition to serving as full-time leaders. However, the literature also revealed that department heads have limited time to role model this behavior because of administrative and managerial priorities. Similarly, Bryman exposed the inherent limitations in the role of the departmental chair that challenge the “effectiveness” of leadership. For instance, the temporal nature of the appointment limits available time for chairs to demonstrate leadership over time such as by correcting a dysfunctional department culture. In addition, the specificity of the leadership requirements in one departmental context may not translate to other contexts. Departmental cultural context therefore has implications for chairs selected from outside the existing department faculty. Bryman concludes that future research in this area may help to clarify and mediate specific challenges to leadership.

By focusing on department heads, Bryman’s research review is laudable for identifying and addressing an import gap in the scholarship of higher education leadership. It established a foundation for contemporary meta-analyses that cover scholarship that is more recent and addresses some of the inherent weaknesses of the original analysis. New syntheses should provide validation of Bryman’s findings as well as reflect on how conceptualization of “efficient” leadership has shifted since the Great Recession of 2008-2012.

Building upon Bryman, researchers modeling contemporary department chair leadership have examined the effect of institutional change on the role. For example, Whitsett’s (2007) study of department chairs centered on adaptability and flexibility of the role within the context of business schools affected by constrained resources. The researcher used the Leadership

Adaptability Description (LEAD) and the Personal Information Data Sheet (PIDS) as research instruments. Six chairs and 64 faculty completed the survey instruments to examine chairs' leadership styles, adaptability, and flexibility. The study compared chairs' self-reported primary and secondary leadership styles to faculty's perspectives regarding their chairs' style. Department chairs perceived their primary leadership style as selling (6/7 participants), with a secondary style of participating. In contrast, faculty perceived participating (28/64) as chairs' primary leadership style and selling as their secondary style (20/64). Selling, in this context, connoted the behavior required to convince faculty to carry out the tasks that chairs request. The study also found no evidence of gender difference in faculty perceptions of chair adaptability. The researcher concluded that, based on faculty feedback, department chairs should focus professional training on improving their ability to diagnose tasks as well as use the appropriate leadership behavior to the task.

Researchers also modeled department chairs' leadership styles within emerging higher education contexts. For example, DeLotell and Cates (2016) examined department chair leadership of online adjunct faculty at a for-profit online institution. The researchers argued that the traditional relationship between leadership and institutional loyalty might not apply to faculty participating in higher education's new markets, such as virtual classrooms. In this environment, the researchers contended that organizational commitment for adjunct faculty is not commensurate to commitment for full-time on-campus faculty. The researchers framed the leadership of department chairs within Burns (1978) model of transactional, transformative, and laissez-faire leadership to evaluate the relationship between chairs' leadership style and adjunct faculty's affective commitment to the organization. A positive relationship exists between chairs' transformational leadership and adjunct faculty affective commitment. No significant relationship existed for adjunct faculty affective commitment and transactional leadership. Similarly, no relationship existed for adjunct faculty affective commitment and laissez-faire leadership. The researchers concluded that as dependence on adjunct faculty grows within the new economic model of higher education, chairs should become more involved in the relationships between adjuncts and the institution in order to foster affective commitment. Institutional affective commitment ultimately aligns adjunct faculty goals with those of the institution.

Studies about leadership traits composed a second sub-category of the literature of department chair leadership. Many of these leadership trait studies couch the implication of their results in terms of the efficiency or effectiveness of the department chair based on presence or absence of a particular leadership trait. Discussions of efficiency and effectiveness align with evidence of increasing accountability of department chairs for departmental performance to institutional goals. A focus on chair communication styles, social intelligence, and conflict management styles all speak to leadership skills necessary to navigate a changing institutional environment. These studies implicate a need for improving departmental chair training in order to lead within this new environment.

Afzalur, Civelek, and Liang (2015) modeled the relationship between department chairs' social intelligence (SI) and the turnover intentions (TI) of faculty members through a survey of 406 faculty belonging to 43 departments at one university. As defined by the researchers, SI included dimensions of social awareness, situational response, cognitive empathy and social skills. Turnover Intention is the intent to leave the department of a faculty member. The findings revealed that department chair SI was negatively associated with faculty TI. The lower the chair's SI, the higher the faculty's TI, and vice versa. The researchers argued that training and education remediates department chairs deficiencies in these social skills. These findings have implications for organizational performance in higher education. The evidence suggested that low department chair SI serves as a barrier to a department becoming a high performing organization. Therefore, improving the social intelligence of chairs serves to improve organizational performance.

Czech and Forward (2010) evaluated the communication and leadership behaviors of department chairs. The researchers asked 202 faculty to identify supportive and defensive communication styles of their department chairs. The faculty perceived chairs to be effective when they demonstrated communication styles that emphasized problem orientation, description, control, and neutrality. Faculty perceived chairs that demonstrated supportive communication as the most effective at their position. The researchers drew two key conclusions regarding department chair communication and leadership. First, as communication affects relationships and organizations, the communication climate of a department becomes a key indicator of its effectiveness. Communication style also predicts outcomes such as job satisfaction, commitment, and performance. Second, communication is an essential dimension of departmental leadership. Effective leaders use narrative, stories, and symbolic action to transmit and reaffirm organizational goals. The implication for higher education leadership is that department chair communication training may improve organizational efficiency and faculty job satisfaction.

Stanley and Algert (2007) examined the conflict management styles of 20 department chairs using the Thomas-Kilmann Conflict Mode Instrument (TKI). According to this qualitative study, department chairs as leaders spend 40% of their time managing conflict. However, most department chairs remain unaware of their conflict management style. The researchers found that 11 of the 20 chairs primarily used a compromising mode of managing conflict. This mode seeks to find a middle ground among individuals in conflict. However, the chairs noted that the nature of the conflict determined the mode of conflict management used. Furthermore, the types of conflicts department chairs managed generally aligned with their responsibilities. Hiring decisions, personality conflicts, and resource conflicts composed the three primary categories of conflicts chairs managed. Finally, department chairs believed that higher education institutional culture played a role in the nature of the conflicts that they manage. The researchers concluded that, as department resources decline in the current climate of higher education, professional development for department chairs to manage conflict assumes a higher priority. Conflict management training therefore maintains a healthy organizational culture.

Finally, Isaac, Griffin, and Carnes (2010) examined faculty perceptions of women as department chairs in academic medicine based on masculine/feminine leadership trait dichotomy. The researchers tested the predominant gender bias that effective departmental leadership requires chairs to demonstrate stereotypical male behaviors associate with leadership. These *agentic* behaviors include toughness, directness, independence, and transparency. In contrast, women as leaders exhibit stereotypical female leadership behaviors that focus on community such as empathy and relationship building. The study considered conceptualizations of effective leadership and transformational leadership in order to generalize styles of leaders. Of the three general types of leaders: transformation, transactional, and laissez-faire, the r purports that transformational leaders are the most effective.

According to the researchers, this study identified that the female chairs exhibited three essential qualities determined to be desirable in academic medicine department chairs. First, the female academic chairs demonstrated both agentic and communal traits according to interviewed faculty. Faculty used descriptors traditionally defined as agentic, such as tough, direct, and transparent, to describe the female chairs. Faculty also characterized female chairs as facilitators of faculty career development as well as relationship-builders with the faculty. These traits fell under the category of communal leadership. The literature indicated that faculty judged women more harshly than men given similar positions. However, women could reduce this gender bias if they demonstrated both agentic and communal traits. The results aligned with the literature that identified no significant difference between male and female leaders' leadership traits in determining effectiveness. The researchers recorded no negative perceptions of the three female chairs' effectiveness. Finally, the study affirmed existing research that female chairs exhibited transformational leadership characteristics. The researchers acknowledged limitations on the generalization of their results to other academic and medical leadership contexts. The study's implications provided a leadership model for future female chairs in academic medicine. Ultimately, failure to acknowledge gender issues runs the risk ignoring the professional development of potentially effective female chairs.

Department Chairs as Change Agents

Building upon the literature of leadership, researchers investigating the role of department chair have started to focus on the influence of chair as an agent of change. The increasingly complex challenges facing higher education compel institutions to adapt continually to new conditions and requirements. Students demand a diverse faculty that better reflects an increasingly diverse student body (Chun & Evans, 2015). Innovations in pedagogy and technology similarly task faculty to re-educate or draw the scrutiny of administration and students. Institutions that fail to keep pace may find that they are at a disadvantage in the competitive higher education market. In their boundary spanning role, department chairs serve as mediators between the administration, students, and other stakeholders on one hand, and faculty on the other. The application of and limitations to chairs' authority and ability to affect change emerged as a primary theme of this literature.

Adoption of Innovation

Feuerstein (2015) investigated the gap between on administration's directive to create an institutional culture of assessment and the implementation of this directive at the departmental level. Through interviews with 11 female and six male chairs at one Midwestern liberal arts institution, Feuerstein exposed the sense-making processes of chairs regarding departmental changes in support of assessment. Chairs expressed confusion about implementation of assessment programs. In particular, they cited a lack of training in quantitative measures used to assess student learning. Chairs also suggested that administration did not convey an adequate explanation of the institution's use of assessment data to them. Despite these doubts, chairs recognized the value of assessment planning on departmental approaches to student learning. Chairs recounted stories of beneficial collaborations between faculty members that aligned individual approaches to assessment. This alignment fostered a more systematic departmental approach. At the same time, chairs observed doubts among faculty members that served as a barrier to embracing assessment in some cases. Faculty perceived philosophical issues with assessment and lamented the time expenditure necessary to provide adequate assessment results. Finally, chairs demonstrated a wide range of responses to serving as mediator between administration and the faculty in creating a culture of assessment. Some chairs simply conveyed administration's request as a mandate while others engaged faculty in debate or subversive actions to protect department culture. Feuerstein concluded that chairs sensed a shift away from autonomous decision-making and academic freedom to managerial alignment with administration regarding assessment. This change challenged department chairs to resist transformation of their role in the face of increasing managerial expectations.

Van Horne and Murniati (2016) interviewed department chairs for a qualitative study regarding perceived barriers to faculty adoption of technology through active learning classrooms (ALC)[1]. Whiteboards, computer stations, and collaboration spaces characterize classrooms designed as ALCs. The researchers considered department chairs' perceptions of ALC adoption both by faculty and by the institution. The researchers situated department chairs in the center of the initiative to incorporate ALCs into curricular changes. Van Horne and Murniati uncovered department chairs' concerns that ALCs did not demonstrate, or were not aware of, a tangible enough link to improved student outcomes for wide-scale curricular change. These findings problematized chairs' negotiation with faculty to adopt the change. Chairs also expressed concerns that administrative and cultural obstacles curbed institutional expansion of ALC adoption. For example, faculty remarked that they had little time to devote to curricular innovation given other responsibilities. The researchers noted other cultural and administrative factors that shape department chairs' decisions to support ALCs including faculty teaching autonomy, tenure policies, classroom assignment policies, and course planning responsibilities. The researchers concluded that department chairs, as mediators of curricular innovation, must understand the effectiveness of technological and pedagogical innovations in order to reduce uncertainty and foster adoption.

[1] While the term Active Learning Classroom (ACL) has considerable traction in the study of pedagogy, scholars debate the characteristics and implications of the term. Many faculty consider all classrooms "active" and a place of "learning" regardless of the actual use of technology.

Diversity Hiring

Recent efforts to diversify the academy revealed that chairs are influential in departmental adoption of diversity efforts and initiatives. For example, Green, Lewis, Richmond, and Stockard (2011) explored the issue of inequity in racial and gender diversity hiring in top-ranked chemistry departments. In a quantitative study, they reported on the pre- and post-results of an underrepresented minority (URM) workshop for chemistry faculty leaders sponsored by the National Science Foundation and Department of Energy. The researchers asked chairs questions regarding URM hires in three areas: (a) factors that slow URMs' career progress, (b) factors that made recruiting URM job applicants difficult, and (c) factors that would help hiring of URM in the next five years.

Based on survey results from 19 respondents, the researchers found that chairs identified a greater role for themselves and their departments in bringing equity to racial and gender diversity in STEM. Chairs reported that subtle biases against URM faculty ($p < .001$) and lack of mentorship opportunities ($p < .001$) were the most critical factors affecting URM careers. Chairs also indicated that the factor most likely to hinder URM recruitment was the small number of URM candidates. High demand for URM candidates was also a highly rated factor. The role of the chair as a change agent emerged in responses to the third set of questions. Chairs indicated that they must become more aggressive in efforts to increase the diversity of the applicant pool as well as address faculty attitudes towards URM in order to improve URM faculty hiring. The researchers concluded that chairs acknowledged the essential role they play in the diversification of the academy, in particular through influencing faculty attitudes and changing departmental processes in support of increased institutional diversity.

In a related quantitative study, Su, Johnson, and Bozeman (2015) examined organizational factors that contributed to a commitment to gender diversity in STEM departments. In particular, the researchers assessed the gender and administrative power of the department chair in constructing and fostering departmental commitment to diversity. The researchers hypothesized that women chairs would show more commitment to diversity than male chairs. Likewise, the more powerful the faculty perceive a department chair to be (especially if a woman), the more likely the department demonstrates a commitment to diversity. The researchers assumed that the more authority the chair demonstrates, the more likely the chair was to be involved in hiring decisions. Survey responses from 1,832 STEM department chairs in 149 universities composed the data set.

The survey results challenged the researchers' hypotheses. The survey suggested that departmental commitment to diversity strategy correlated with faculty perceptions of the administrative power of their chair. Correspondingly, department chairs exhibiting strong authority were more likely to pursue a gender diversity strategy than chairs with less perceived authority regardless of gender. The researchers noted that this observation challenged the generally held belief that gender diversity strategies are most effective if implemented in a top-down manner. However, the researchers also discovered that women chairs were less likely to pursue a gender diversity strategy than male chairs, in contrast to the expected result. The researchers theorized that this attitude might have been an effect of participation in departments where faculty perceived diversity as less of an issue. Su, Johnson, and Bozeman ultimately suggested that their findings have policy implications for institutions as they initiate efforts to improve gender diversity. Instead of strictly supporting top-down initiatives, institutions should also engage academic chairs as key agents of departmental influence and change.

Finally, Chun and Evans (2015, p. 46), appropriated Ernst and Chrobot-Mason's (2011) formal conceptual model of boundary spanning behaviors as part of their empirical, qualitative study of department chairs within the context of ongoing institutional diversity initiatives. Earnst and Chrobot-Mason described six boundary spanning leadership practices in corporate managers. As Chun and Evans centered their study on institutional diversity initiatives, these functions and behaviors focused on processes of formalizing or challenging new institutional policy. The behaviors included the following:

1. Department chairs mediate the institutional boundaries between faculty and administration.
2. They reflect on boundaries as a means to codify the boundary while constructing shared meaning.
3. They reaffirm and develop social bonds between faculty and administration in order to build trust.
4. When needed, they can muster stakeholders across the institution to collaborate on a common issue. Mustering stakeholders allows them to reframe the boundaries.
5. Department chairs can construct meaning through new experiences.
6. They can remove, change or add to the boundaries through intergroup reinvention.

One limitation of the model is that it does not consider chair engagements with stakeholders outside of the institution, such as professional networks, community engagements, and alumni donors. It also does not capture chair engagements with students and the parents of students. Given the diversity of functions and behaviors included in interpretive models of boundary spanning, I will maintain a broad and emergent definition of the concept based on the simplest description suggested by Adams (2014).

Gaps in the Literature

A review of the literature on department chairs revealed several gaps, which may serve as a foundation for the further study of chairs as they enact and negotiate their roles as researchers and department leaders. Five prevalent topics emerged from the scholarship published during the years 2006 through 2017: the demographics and career path of department chairs, the experiences of women department chairs, the roles and responsibilities of chairs, chair leadership styles and traits, and the department chair as change agent. Across these categories, I extrapolated three primary underlying themes, which reflect the contemporary lenses through which researchers view the role. The first theme is the emerging importance of the chair within the contemporary context of higher education. Cipriano and Riccardi's (2017) assessment of the department chair as an institutional linchpin seems an apt analogy for the pivotal role chairs play mediating among faculty, administration, students, and other stakeholders in the external environment. The second primary theme regards chair role conflict and role ambiguity as it complicates the boundary activities and operational efficiency of the position. For example, findings from Adams (2014) support the premise that role conflicts complicate boundary spanning. In parallel, the dual-identity of a department chair as an administrator and as researchers problematizes chairs' perceptions of a balanced professional and personal life. The third theme entails the multidimensional leadership function of the role. From these three themes, a narrative regarding the developing role of the chair in higher education emerges. In particular, as the complexion of the role has changed in response to increasing departmental and external demands. This narrative has informed the research questions of this project.

Synthesizing the literature of department chairs also identified areas for further research and development of the scholarship. The limited number of empirical studies regarding preparation of department chairs for the role indicates that the socialization of department chairs marks a gap in the scholarship. Exploring the processes by which department chairs make sense of the role would help to inform the scholarship regarding influences on the attitudes and values of the chair. Chairs' social networks with mentors, other chairs, and departmental faculty peers could provide additional perspective on socialization processes by identifying influences on the department chairs' attitudes and values.

The literature also exposed a need for further exploration into underrepresented academic populations of department chairs. Studies by Acker (2014), Wharton and Estevez (2014), Isaac, Griffin, and Carnes (2010), and Perrakis and Martinez (2012) explored the challenges of women as an underrepresented demographic in higher education middle management. However, few studies explored the experiences of minority, disabled, or queer department chairs. In a similar manner, the sense-making of faculty regarding minority, disabled, or queer department chairs would address a gap in the literature.

The effect of the higher education institutional context on the characteristics of the chair requires further investigation. Crawford's (2012) study of chairs at HBCUs demonstrated that institutional categorization problematizes the study of department chairs. Further study of permutations of the role at HBCUs, Hispanic Serving Institutions (HSI), Asian Serving Institutions (ASI), and tribal colleges would contribute perspectives of place and institutional mission to the scholarship. Likewise, the scholarship lacks representation from other Carnegie Classification categories, such as community colleges, specialized colleges such as Law Schools, and other 2-year institution types. Finally, the literature does little to address department chair leadership over a fractured faculty which includes both tenured/tenure-track and non-tenure track faculty. The issue is of increasing importance as institutions continue to hire faculty without the securities of tenure.

Qualitative empirical studies remained conspicuously absent in the literature. While some researchers addressed the chair as an individual actor (Berdrow, responsibilities of mentorship), most disassociated the variance of personal experience from the study. This gap in the literature demands attention. According to Cresswell (2013, p. 44), qualitative research is a process which follows “from philosophical assumptions, to interpretive lens, and on to the procedures involved in studying social or human problems.” Failing to explore the lived experiences of department chairs limits an understanding of their sense-making within the contemporary environment of higher education. By way of example, department chairs hold varying degrees of authority and influence. Researchers demonstrated studies demonstrated that chairs often faced challenges to decision making regarding resource allocation, workload distribution, and leadership. Furthermore, recent changes to higher education problematize women’s career paths to leadership positions, the hiring of faculty, and the prioritization of administrative tasks. Understanding the experiences of department chairs within this evolving environment through qualitative research would serve to expand the empirical observations on this liminal and underexplored role in higher education.

Theoretical Frameworks

The application of theoretical frameworks to empirical studies of department chairs is inconsistent across the literature. Frequently, established data collection instruments or literature reviews served in place of theory as a method to establish scholastic legitimacy. For example, Aziz et al. (2005) structured interpretation of chair training needs around the concept of knowledge, skills, and abilities (KSAs) inventories. Stanley and Algert (2007) used the Thomas-

Kilmann Conflict Mode Instrument (TKI) to evaluate department chair modes of managing conflict. The comparison of chairs' expressions of agentic and feminine leadership traits served as the structure of Griffin and Carnes (2010) exploration of women as department chairs. The literature of leadership traits from other fields served as a proxy for educational leadership theory. Surprisingly, the researchers chose not to consider critical gender theory in their study. Overall, use of these instruments and literature reviews in place of theoretical frameworks likely relates to the overall lack of empirical studies on department chairs as well as the broad range of disciplines representing the researchers' backgrounds.

Only a limited number of studies regarding the career arc of department chairs considered theory. In particular, the theory of role transition and role satisfaction featured prominently. For example, Smith, Rollins, and Smith's (2012) study of department chair transition back to the faculty incorporated Ashforth's theoretical discussion of transition of roles in organizational life. This theory posited that role satisfaction emerges from satiation of psychological needs of belonging, controlling, identity, and meaning among others. The researchers coupled this theory with Kurt Lewin's field theory, which posited that social states are fluid, but held in place by opposing forces. In general, however, empirical studies on chair careers focused on defining chairs' perceptions of their role within the institution.

I also identified that department chairs consider the lack of professional preparation for the role as an institutional weakness. Researchers used professional development theory in studies of chair tasks, values, and attitudes. Crawford (2012) for example, structured his study on the theoretical framework of department chairs as actors in policy situations. However, only Berdrow (2010) engaged the scholarship of organizational theory as the framework for assessing the role of chair. Berdrow drew from Meyer's (1988) systems theory as well as Bolman and

Deal's (1997) Four-frame model of organizational complexity in order to describe the operational and leadership responsibilities of the chair.

In contrast, empirical studies on the department chair as leader incorporate existing leadership theoretical frameworks. Burns (1978) categorization of leadership into transactional, transformation, and laissez-faire leadership featured prominently among these theories. Delotto and Cates (2016) and Isaac, Griffin, and Carns (2010) both considered leadership behavioral traits as they frame the role of the department chair within Burn's classification. Other researchers drew from specific leadership trait theories. Rahim, Civic, and Liang (2015), for instance, explored the effect of department chair social skills in the context of Turnover Intention theory. Use of these theories ultimately reflects higher education scholarship's dependence on a broader spectrum of social science theory. It also sheds light on education's lack of discipline-specific theoretical theory. The implications for the field beg researchers to question how they may remediate this gap.

Theoretical Framework: Organizational Role Theory

For this study, I selected organizational role theory as the theoretical lens through which to examine the lived experiences of department chairs as they negotiate and enact their research-related roles and responsibilities. Role theory concepts, such as role negotiation, role socialization, role boundary spanning, and role stressors such as role conflict, role ambiguity, and role overload align with exploring how department chairs facilitate faculty research productivity and understand their own research practices as chair. According to Bess & Dee (2012a, p. 244), recent scholarship on administrators and faculty in higher education has failed to explore theory-building research on roles in higher education. The inclusion of organizational role theory in my study seeks to contribute to efforts addressing this gap.

According to Biddle’s (1986, p. 68) classic model, role theory considers how people behave in different, but predictable ways, given a particular social identity and situation. Within this model, Biddle’s concept of *roles* refers to three interrelated aspects: the “patterns and characteristics” (p. 68) of participant behavior, the parts and identities participants assume in a particular situation, and the behavioral expectations about the role that participants understand and follow. Bess and Dee (2012a) claimed that roles set the limits of expected responsibilities and behaviors creating boundaries of what is permissible and impermissible. In creating limits, roles standardize responsibilities and behaviors. In doing so, they further stabilize expectations so that responses from individuals in those roles are eventually systematic regardless of the individual in the role. Of particular importance to this study, roles set the expectations for performance and productivity.

In applying role theory to colleges and universities, Bess and Dee (2012a) considered Katz and Kahn’s (1978) classic organizational role theory. Bess and Dee argued that role theory explains how institutions codify the fundamental duties, tasks, responsibilities, and expectations associated with a particular position within an organization. In this context, the role is an element of the institution’s bureaucratic structure. The organization and not the individual defines the role. For example, an institution defines the responsibilities and behavior expectations of a faculty member. These responsibilities generally align with the institution’s teaching, research, and service missions. A participant in the faculty role who does not perform these functions will not remain a faculty member for long. According to Bess and Dee (2012a), role functions also receive meaning through complementary relationships and power dynamics within organizations. For example, the *manager* role predicates the complementary functions of an *employee* role. Similarly, the roles of *faculty* and *dean* interact through a power dynamic that defines expected functions and behaviors. The dean expects the faculty to produce research and educated students. The faculty must perform functions that produce these outputs or receive poor performance reviews from the dean.

According to Katz and Kahn (1978), the behavior of individuals within a role also informs the conception of the role. This behavior contributes to a more complete model of roles beyond the organization's formal definition of the role. The interactions of the individual role holder as they engage other roles in predictable ways informs the expected behavior of the role (Bess & Dee, 2012a). Bess and Dee's model of role construction engages several interacting components including a role sender, sent expectations, sent role, received role, and focal person. The *role sender* is generally a person in a position of authority who constructs the formal organizational definition of the role and transmits it to others as a *sent role*. For example, a dean may develop and communicate a new job description for a department chair position. The *sent expectations* include the dean's behavioral expectations of the chair position, such as participation in committee meetings or support for faculty research. The sent expectations further includes the penalties for non-compliance, such as reduced resources for the department if the chair does not meet performance goals. The *focal person* is the individual who inhabits the role. This person receives and translates the sent expectations as the *received role*. At any point along the process, the role sender and role receiver may miscommunicate or misinterpret information about the role due to a lack of clarity in the message. This potential noise adds complexity to how role senders and role receivers interact.

The positionality of the role within the organization, institutional characteristics, and personal characteristics complicate how individuals develop, send, receive, and interpret role functions and behaviors. According to Parsons (1960), organizational roles manifest at three levels: technical, managerial and institutional. Technical roles, such as faculty, are responsible for core service and product production of the organization. Roles at the managerial level supervise roles at the technical level to ensure productivity. The research focus of my study, the department chair role, resides at the managerial level. Roles at the institutional level interface with external stakeholders to acquire resources. As cited in Bess and Dee (2012a), Floyd and Lane (2000) suggested that conflicts among the roles at all levels occur due to ambiguous information and goal misalignment. The type of organization also influences how individuals experience roles. In general, the more bureaucratic the institutional culture, the more diffuse the expected functions and behaviors of the role (Bess & Dee, 2012a). Finally, individual characteristics of the focal person inform the role. For example, communication styles, leadership styles, and levels of agentic traits affect how faculty perceive the effectiveness of their department chairs.

Role Negotiation and Role Socialization

Graen & Scandura (1987) expanded role theory to include the concept of *dyadic role negotiation* between a role sender and a role receiver. According to this theory, individuals pass through three phases in the adoption of a role. First, individuals learn what role senders (generally superiors) expect behaviorally from role receivers through a concept called *role taking*. The role sender sends information regarding an unstructured task for the role receiver to evaluate. Based on the behavior and response of the role receiver, the role sender and role receiver may engage further in *role making*. For example, a dean may engage a department chair to help solve an issue with program enrollment. The chair may communicate back advice. From this advice, the dean and chair may negotiate a working relationship through the enrollment issue. According to Graen & Scandura (1987), the role sender exchanges commodities with the role sender during collaboration on the unstructured task. These commodities include information, influence, tasks, latitude, support, and attention. Finally, the behaviors of the role sender and role receiver organize into a stable dyadic via *role routinization*. In the example of the dean and chair, the dean may further formalize this relationship through promoting the chair to an assistant dean.

Merton (1968) defined role socialization as the process by which a new member of an organization becomes aware of the goals and procedures that are associated with the role. Through a process of assimilation, groups gradually inculcate individuals into the values, norms, behaviors, and relationships of the role. According to Van Maanan and Schien (1979), organizational socialization is a life-long continuous process. Socialization prescribes how individuals learn the cultural perspectives of an organization and apply them to challenges. The researchers described a framework of three organizational dimensions that expedite role socialization: functional, hierarchical, and inclusion. The functional elements include the role's responsibilities. For example, chairs' responsibilities include a diversity of managerial tasks, leadership behaviors, and researcher responsibilities. The hierarchical elements reflect the organizational ranking of the role. Ranking further determines certain characteristics of the role, such as authority and power that differ according to ranking. Finally, inclusion encapsulates the importance of the individual to others within the organization. Individuals exist either towards the center or towards the edge of the organization in terms of group inclusion. Groups conceptualize members that exist towards the center of organizational as more included than members that exist on the edges of organization. To move towards the center is to be more included. Movement inwards requires the member to demonstrate shared values and perceptions of the organization. According to the researchers, this process is analogous to a group accepting a stranger.

Role Stressors

According to Bess and Dee (20012a), ambiguity and misinterpretation of roles are primary sources of organizational issues in higher education. Unclear communications by role senders, such as deans, coupled with the complexity of organizational environments compel chairs to negotiate stressors in the workplace as they enact roles. Organizational theory researchers have identified three main categorizes of role stressors: role conflict, role ambiguity (i.e. role clarity) and role overload. According to role theorists, role stressors contribute to job dissatisfaction, reduced sense of personal accomplishment, issues with communication, loss of productivity, and loss of organizational commitment (Örtqvist & Wincent, 2006, Greene & Organ, 1973).

Biddle and Thomas (1966) identified three role conflict scenarios. First, individuals negotiate *role conflict* when they hold conflicting ideas about one or more roles in which they engage. For example, a chair may struggle to balance time for personal research while attempting to complete departmental administrative tasks. Similarly, individuals negotiate role conflict when they encounter incongruity between other people's perceptions of a role and their own perceptions. The faculty may have different expectations of the chair's level of authority when proposing departmental changes than the chair holds. Finally, a person's conflicting experiences when engaging role conflict constitutes a type of role conflict. Getzels, Lipham, and Campbell (1968) refined the concept of role conflict by delineating five sources of role conflict within organizations including conflicts between cultural values and institutional expectations, conflicts between role expectations and individual personalities, conflicts among and internal to roles, conflicts due to personality disorders, and conflicts in individual's perceptions of role expectations.

Role ambiguity and role overload present further challenges to enacting roles in higher education. *Role ambiguity* occurs when individuals are unsure what actions to take to fulfill the expectations of a role (Örtqvist & Wincent, 2006). For example, faculty may encounter role ambiguity when they must balance teaching demands and increased research productivity (Richards & Levesque-Bristol, 2016). In contrast, *role clarity* refers to the inverse scenario where the focal individual perceives predictability of job tasks associated with the role as well as unambiguity of communications regarding the role. Finally, *role overload* occurs when an individual's available time and resources are inadequate to meet the expectations of the role (Örtqvist & Wincent, 2006). For example, a dean may spend so much time in committee meetings during the day that she must find the time to respond to emails and review faculty dossiers for promotion late into the night. According to Posig and Kickul (2003), role overload creates emotional exhaustion, which affects performance levels.

Boundary Spanning Roles

Organizational boundaries and boundary spanning roles provide a supplemental role conceptual framework for understanding how department chairs negotiate their research-related roles and responsibilities. Hall and Fagen (1980) originally described *boundaries* as elements of the general systems theory framework. According to this framework, systems are sets of interrelated elements separated from their environments by boundaries. Boundaries serve to protect the integrity of the system through filtering and selection functions. As part of a continual flow of energy, inputs and outputs traverse the boundaries of the organization. Bess and Dee (2012a) further elaborated that organizational boundaries serve to differentiate functions within bureaucracies. For example, a student services organization, a school of arts & sciences, and a president's office each has unique boundaries both internal and external to the organization. In this role, boundaries contribute to the construction of organizational identity.

Those who mediate across, manage, or discover new organizational boundaries demonstrate *boundary spanning role* functions and behaviors (Prysor & Henley, 2017). Tushman (1977) originally coined the term "boundary spanning" to describe private industry personnel in an innovation system who are responsible for, or adopt, the role of linking an organization's internal networks with external sources of information. According to Mintzberg's (1993) classic study of organizations, personnel who serve as the face of the institution in external environments perform input acquisition, resource acquisition, information acquisition, product/service dispensing, and information dispensing tasks. As such, they serve as a first line of engagement with new coalitions in the external environment. In the external environment, they have the ability to assess opportunities, negotiate relationships, and provide information that helps the institution's administration to align internal organizational structures and processes with new external conditions and demands. Realignment ensures the institution is capable of adapting to new external conditions.

As both a formalized and informal role, faculty, staff, and students are all capable of participating in boundary spanning. Bess and Dee (2012a, p. 95), contended that: "Organizational members who cross boundaries to enact their roles in the surrounding environment – the boundary spanners – play key parts in maintaining the flow of energy in and out of the institution and in establishing and maintaining a clear image of the institution for the outside public". Based on roles whose function is to engage in this dyad of external to internal interaction, boundary spanners in higher education therefore include deans, presidents, board members, and faculty researchers. Boundary spanning can also be transient. Adams (2014), for example, defines boundary spanners within the context of higher education/community partnerships as those who cross boundaries to increase access to resources and build reciprocal partnerships. In this context, faculty, staff, and students all perform boundary spanning activities. Adams also proposed that boundary spanners collaborate on common goals with partners both inside and outside the institution.

Conclusion

The purpose of this study was to examine department chairs' research-related roles and responsibilities at one public research university. A study of the scholarship of department chairs since 2006 revealed five prevalent topics: the demographics and career path of department chairs, the experiences of women department chairs, the roles and responsibilities of chairs, chair leadership styles and traits, and the department chair as change agent. Across these topics, three primary underlying themes emerged. The first theme centers on the increasing centrality of the chair within the contemporary context of higher education. The second theme focuses on role conflict and role ambiguity as it complicates the boundary activities and operational efficiency of chairs. The third theme centers on the role of chair as an emergent leadership position. From these three themes, a narrative of the importance of the role of the chair in the increasingly complex environment of higher education emerged.

CHAPTER 3

METHODOLOGY AND METHOD

Investigation of department chairs' research-related experiences within the cultural context of their organizational environment defined the approach to this study's methodology, methods, and research design. In Chapter 1, I identified two research questions. The first research question addressed: What are department chairs' research roles and responsibilities as department leaders? Two sub-questions arise from this primary question:

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

The second research question addressed: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders? Three sub-questions arise from the research question.

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

Methodology

In order to address the research questions, I selected a qualitative methodology and an explanatory case study method of investigation. I selected a qualitative methodology as the means to understand the experiences of department chairs as they negotiate the dual roles of department leader and career researcher. According to Creswell (2013, p. 44), qualitative research starts with the researcher's assumptions and theoretical frameworks, which "inform the study of the research problems by addressing the meaning individuals or groups ascribe to a social or human problem". Creswell's focus is qualitative research as a process that carries the researcher from assumptions about the research problem to the framework and procedures used to study the problem. Holloway (1997, p. 2) provides a similar definition of qualitative research that centers on understanding "the social reality of individuals, groups, and cultures." The intent of qualitative research is for the researcher to examine the human condition through the lens of the problems people face and how people experience those problems.

Creswell (2013, p. 43-47) provided a set of non-exclusive characteristics of qualitative research, which considers the social and cultural context of the researcher within the research process. These characteristics included: (a) the research occurs in a natural setting of the people to be studied; (b) the researcher is the key instrument for data collection; (c) the researcher uses multiple data collection strategies such as interviews and observations; (d) the researcher organizes data thematically through inductive and deductive reasoning; (e) the researcher is attempting to capture the participant's meanings of their experiences of the issue or problem, not the researcher's meaning; (f) qualitative research uses an emergent design that may change throughout the research process; (g) the researcher must describe their position within the study (e.g. reflexivity) which includes background experiences; political orientation; and other factors which may shape the researcher's interpretations; and (h) qualitative researchers attempt to describe holistically the issue they are researching by providing multiple perspectives.

Savin-Baden and Major (2013) provided additional characteristics, which center the researcher within qualitative research as an acknowledgement that all research is subjective. These characteristics challenge ideas of "objectivity" in qualitative research. The authors argued that qualitative researchers must "acknowledge multiple constructed realities," must understand they are "value-bound," and must recognize that research changes both the subjects of the study and the researcher (p 13). The authors also shed light on the ethical dimensions of the qualitative research process by contending that researchers have an obligation to treat participants with dignity and to acknowledge their different philosophical perspectives.

Based on the characteristics detailed by Creswell and Savin-Baden & Major I determined that qualitative research was the best fit for the study of department chairs' research-related roles and responsibilities. Three primary reasons demonstrate why it was the best fit for this study. First, the research questions this study posits required an understanding of the attitudes, experiences, and perceptions of department chairs within a "natural setting." The academic environment of department chairs provides critical contextual information about organizational culture, professional interactions, use of space, and official documentation, which may be lost in a quantitative study. Second, as an element of qualitative research, the researcher may acknowledge the subjectivity of the researcher position within the study. I have friends and family who are, or have served as, department chairs at the selected site institution and other institutions. Prior to this study, I had preliminary conversations with them regarding the challenges of the role of the department chair within the current higher education research prestige economy. A qualitative approach allowed me to acknowledge this reflexivity in the research process and use it as a strength of the study. Third, I wished to understand department chair positionality. According to Kezer (2002), *positionality*, including role within the organization and field of study, contributes to the ways in which people define leadership and the means by which this leadership emerges. Qualitative research enables me to select an organizational role theory theoretical framework to explore the interaction of these characteristics within the institutional context as part of the explanatory aspect of the research method.

Method

The method for this research study was an explanatory case study based on Yin's (2014) qualitative method description. The explanatory case study framework provided opportunities for the discovery of similarities and differences across department chairs' experiences enacting research-related roles and responsibilities. From these experiences, I developed an explanation for how department chairs at one public research university made sense of and negotiated their research-related roles and responsibilities as they facilitated faculty research productivity. The context of this study was a public higher education research university. The purposeful site selection and population was a Southern public research university undergoing "striving" (O'Meara, 2007). I de-identified the site in the study in order to preserve the anonymity of the study participants.

Study Method

An explanatory case study method served as the framework for this study. According to Yin (2014), an explanatory case study attempts to explain how or why some condition, situation, or sequence of events came to be or did not occur. Yin suggested several criteria for determining whether to use an explanatory case study method, including the type of research questions posed, the extent of control a researcher required over the actual behavioral event, and the degree of focus on contemporary events as compared to historical events (p. 9). According to Yin (2014, p. 147) the purpose of an explanatory case study is to explain a phenomenon by stipulating a presumed set of causal links about it, or "how" or "why" something happened. The causal links may be complex and difficult to measure in any precise manner (Yin, 2014, p. 147). Similarly, this study of department chairs' research-related roles and responsibilities addressed research questions regarding *how* department chairs enact and negotiate research-related roles and responsibilities through the causal links between chairs' experiences, attitudes, values, and beliefs regarding research and the types of activities chairs engaged in to support faculty research productivity. Linking individual chair experiences and conceptualizations of research-related roles and responsibilities provided an explanation for how department chairs at one striving public research institution negotiate the dual roles of department leader and career researcher as they support faculty research productivity.

According to Yin (2014), explanatory case studies are also effective for research where the researcher does not require manipulation of the relevant behaviors under study (p. 12). In this study, I did not require control of department chairs' behaviors, actions, or responses. Instead, I attempted to capture the multiplicity of experiences, attitudes, beliefs, and values of chairs in a "natural setting" as they informed the chairs' research-related roles and responsibilities. Using the same method for each participant interview ensured generalized findings while acknowledging chairs' unique experiences and thought processes.

Yin also argued that explanatory case studies are applicable where the studied events are contemporary instead of historical. Using an explanatory case study method, I explained how department chairs enact research-related roles and responsibilities at one public research university, which had recently started to focus on improving the institution's research prestige. The organizational role of chair serves as a mediator between faculty and administration as the institution undergoes transformational change to its research mission. The organizational context creates opportunities to enact research-related roles and responsibilities as well as encounter challenges as the institution changes. An explanatory case study method provided a method to capture chairs' experiences of these challenges as they support faculty research productivity. The explanatory aspect of an explanatory case study also provided the methods to posit an explanation for an observed pattern of responses to those challenges within the specific context and environment (Yin, 2014).

According to Yin (2014), the case explanatory study requires extensive data collection using multiple formats. Yin discussed six types of information to collect in an explanatory case study including documents, archival records, interviews, direct observations, participant observation, and physical artifacts. This characteristic of the case study aligned with the needs of this research study. While interviews with department chairs composed the majority of the data collection, observation and documentation of chairs' environments, and documentation of processes, such as business analytic reports served as important data for shaping a holistic analysis of the case.

I acknowledge that the explanatory case study method has limitations. The scope of cases may be unbound according to Savin-Baden & Major (2013). The boundaries of the case are important for a complete understanding of the case. However, the boundaries of the case may not lend themselves to an easy definition. For example, some department chairs conflated research productivity assessment with student learning outcomes assessment. These cases required the researcher to refine the boundaries of the case in order to extract the data and limit the scope of the project. Some quantitative researchers also criticize the case study method for providing a simplistic explanation of complex dynamics based on a single case. Case studies in general may be invasive to the participants. To address the issue, I limited my role as an observer within the selected site. The Data Collection section defines this role.

Positionality of the Researcher

Savin-Baden & Major (2013, p. 73) suggested that researchers include a positionality statement to establish the honesty and plausibility of the study for readers. As a Director of Information Technology responsible for over 20 employees, I share many of the same functional and administrative tasks as department chairs. These commonalities inform my positionality as a staff department leader examining another institutional department leader. Throughout the interviews, I observed some of the same challenges I encountered in my role, such as balancing the needs of the individual or department with the demands of administration, collaborating with stakeholders both external to the department and external to the institution, and engaging in the challenges of creating consensus on innovations and change. However, I am mindful not to create false equivalencies. Based on Bergquist and Pawlack's (2008) study of the cultures of the university, the cultural differences between the professional staff's managerial culture and the faculty's collegial culture inform the roles of director and chair differently. For example, department chairs are peers to the faculty they manage while staff directors are superiors in a hierarchy of command. Furthermore, the dual-identity of the department chair as researcher and administrator creates a unique sense-making experience that the staff director does not possess.

As a second point of positionality, my experiences with department chairs included personal and professional relationships with several chairs both at the site institution and at other institutions. Their input into the challenges they encountered in the role informed my research and shaped the interview questions that would most likely elicit a mindful response. Their story is the foundation for my study.

According to Savin-Baden and Major (2013, p. 70), “Biases can cloud researchers’ judgement and lead them to see what they expect or want to see, which may nor may not be what the data suggests.” Ignoring bias may lead to misconceptions regarding how one’s personal perceptions influence the research process. While I practiced a gender-neutral approach to developing the interview questions, coding the data, and analyzing the data, my personal perceptions as a male researcher contextualized any interpretation of participants’ responses. In particular, I acknowledge that my experiences, attitudes, values, and beliefs as a male researcher inform my interpretations of female department chair responses. These interpretations may not align with the participant’s intent.

Epistemological Assumptions

I assumed a social constructivist positionality for the methodology of my study. According to Creswell (2013), qualitative research demands that researchers embrace multiple perspectives and realities. In particular, exploration of participants’ perspectives on a phenomenon requires that the researcher use the instruments and data analysis techniques that allow for the capture of multiple subjective experiences. In order to capture the lived subjective experiences of department chairs as they experience their research roles and responsibilities, I adopted the methods and analysis protocols that best enabled the ontologically subjective assessments of the participants to emerge.

Data Collection

Creswell's (2013) recommendations for data collection informed the data collection processes of this study. According to Creswell (2013), data collection activities not only entail collecting data, but also include related activities essential to the process of gathering the information to answer each research question. Creswell imagined a circle of linking activities, which included locating the site, identifying the individuals, and addressing issues of access to the population. Additional steps in the circle focus on sampling, collecting, recording, and storing data. A researcher must resolve fieldwork issues as part of the process. One public Southern research university served as the purposeful site selection and provided the participant population for the study. In order to retain anonymity requirements, I de-identified the institution, departments, and individuals within the project. Semi-structured interviews with department chairs served as the primary data collection activity. Review of analytics documentation, participant observations, and photographs of department chair spaces served as supplementary data collection activities, which helped to contextualize the chairs' answers.

Site Selection

The site for this study was a Southeastern public research university undergoing institutional striving. Researchers suggested that discipline and institution type tend to influence the department chairs' roles, responsibilities, and challenges (Crawford, 2012; Hancock, 2007; Aggarwal, Rochford, & Vaidyanathan, 2009; Bozeman, Fay, & Gaughan, 2013, Fitzgerald, Mahoney, Crawford, & Hnat, 2014; Knight, Folkins, Hakel, & Kennell, 2011). According to Delener (2013), researchers seldom have explored the context of different institution or department types on department chairs' roles and responsibilities. The findings from this study are therefore specific to the context of the selected site. The findings may not reflect experiences of department chairs at other types of institutions, such as liberal arts colleges, or in disciplines outside the scope of this study, such as nursing and other professional schools.

I selected a public research university demonstrating evidence of changing institutional research priorities as the site of this study. Throughout this study, I have de-identified the site to retain anonymity. I refer to the selected site as Southern Research University (SRU). SRU is a Carnegie Classification doctoral-granting R2 public university with an enrollment of more than 38,000 students and employing 1,800 faculty as of 2017. Evidence of the effects of external economic, social, and technological pressure exists on two fronts within this institution. Over the previous decade, the institution experienced dramatic student population growth. Examination of public university institutional statistics showed that student enrollment increased by over 13,000 students since 2007 and 18,000 students since 2003. After the previous president retired, a new university president set new institutional research goals including a mandate to increase the institution's research productivity as well as foster innovation in research, scholarship, and creative activities. In support of these goals, the president announced an initiative to create research centers in support of collaboration and hire more tenure-track faculty. Within the explanatory case study model, this strategic shift at SRU represents a direct response to external pressures in higher education. The institution changed its research posture ostensibly to compete in the prestige research economy. This increased emphasis on the institution's research mission created new pressures external to the departments, which inform how chairs enact and negotiate research-related roles and responsibilities.

Participants

The purpose of the participant interviews is to identify how department chairs enact research-related roles and responsibilities and negotiate these roles and responsibilities as faculty researchers and department leaders. At the selected site, department chairs from arts and sciences, commerce, education, engineering, communications, and human environmental sciences were included in the participant population. The inclusion criteria for these colleges and schools was: (a) the included schools generally reflected the same academic colleges and schools explored in the scholarship and (b) the administrative structures of these academic colleges and schools followed the administrative model of deans and department chairs. The inclusion criteria allowed for study of a cross-section of research experiences in academic disciplines in organizational units with similar administrative structures. I excluded six colleges and professional schools from the study: nursing, law, community health, continuing studies, social work, and undergraduate honors. These schools did not meet the study criteria.

I used a purposeful homogeneous sampling strategy to select participants from the colleges and schools included in the study. According to Patton (1999), as cited in Savin-Baden and Major (2013), a purposeful sampling strategy allows for selecting information-rich cases for study in depth. I chose homogeneous sampling based on Savin-Baden and Major (2013). This sampling strategy allows for the selection of a small sample of individuals who share common characteristics. I identified 52 chairs from departmental, college, or school websites for inclusion in the study. I used the definition of academic *department chair* as presented in the Operational Definitions section of Chapter 1 as the selection criteria for participants. Participants all: (a) shared the position of academic department chair at one public research institution and (b) had research responsibilities for the department faculty. I excluded chairs that did not meet the operational definition of academic department chair from the study. This group included endowed chairs, program directors, and deans serving as interim chair during a period of receivership. I also excluded one department chair serving as the committee chair for this study. Out of an initial population of 52 department chairs, I excluded four. My goal was to interview chairs until I reached saturation or half the population (24 participants). Given the unique discipline and environmental contexts of department chairs, I did not anticipate that saturation would occur prior to interviewing 24 chairs. Of the 48 department chairs with research responsibilities in the included colleges and schools, 22 chairs responded favorably to a request for an interview.

Table 1 shows the distribution of desired and actual participants. Due to the small number of department chairs in some colleges and schools, I grouped participants from all non-Arts and Sciences colleges and schools into one category in order to retain anonymity.

Table 1

Number of Department Chairs and Chair Participants by College or School

College or School	Number of Chairs	Desired Participants	Actual Participants
Arts and Sciences	21	11	13
Other Colleges and Schools	27	13	9

I acknowledge that purposeful sampling has limitations. Yin (2014, p. 44) contended that sampling terminology may mislead researchers into assumptions that cases from a population of like-cases. I expect each department chair's experiences to be unique. Cresswell (2013) further recommended that researchers remain open to changing the number of participants or sampling strategy based on the conditions of the study. Given the time constraints chairs experience, I anticipated that some chairs would not be available for the study. I remained open to adjusting the number of participants from each college or school or changing sampling during my data collection.

Description of Department Chair Study Participants

In order to contextualize responses to the research questions, I first asked participants about their background and experiences becoming a chair. I collected data on the number of years they served in the role of chair, their motivation for accepting the role, why they believe others selected them for the position, and whether they received any formal or informal training for the role. Twenty-two department chairs participated in this study. Table 2 provides a summary of participant information compiled through attribute coding.

Participants and Confidentiality

Confidentiality of participants was a high priority of the study. After receiving Institutional Review Board (IRB) approval for my study, I recruited participants through e-mail requests and follow-up phone conversations. In all cases, I assigned a pseudonym to the participant. Table 2 provides details on the participants for the study. Appendix G provides brief descriptions of each chair in order to record their individual personalities. As participants came from a relatively small population, I redacted all names and characteristics that may expose the identity of the selected site institution or participant. I have redacted all mentions of specific schools, colleges, departments, programs, or other named individuals throughout this study. I have also redacted all information from photographs that could identify the institution, school, department, or individual, such as names and images. I blurred this information from all photographs using image manipulation software.

Table 2

Southern Research University Department Chair Participants

Pseudonym	Gender	Rank	Years Chair at SRU	Hire Type	Notes
Adam	M	Full	2	Internal	
Andrew	M	Full	2.5	External	
Bill	M	Full	7	External	Total chair years: 19
Brian	M	Full	< 1	External	
Charles	M	Full	13	Internal	
Dana	F	Full	4	External	
Daniel	M	Full	< 1	External	
Edward	M	Associate	5	Internal	Returning to faculty
James	M	Associate	1.5	Internal	
Jennifer	F	Full	1.5	External	Total chair years: 4
John	M	Full	5	Internal	
Karl	M	Full	5	Internal	
Margaret	F	Full	4	Internal	Retiring within year
Mark	M	Full	21	Internal	
Matthew	M	Associate	2	Internal	
Merle	M	Full	7	Internal	Retiring within year
Michelle	F	Associate	4	Internal	Also serves as assistant dean
Ray	M	Full	3.5	Internal	Became chair as associate
Sam	M	Full	4.5	Internal	Retiring within year
Steven	M	Full	4	Internal	Became chair as associate
Thomas	M	Full	9	Internal	
Walt	M	Full	14	Internal	Retiring within year

Interview Protocol

Appendix B presents the interview protocol for this study. I selected a semi-structured interview protocol. According to Savin-Baden & Major (2013), the semi-structured protocol provides a framework for the interview through predesigned open-ended questions. This protocol also allows the interviewer to delve deeper into particular topics with more specific follow-up questions or to explore new topics. This protocol aligns well with the needs of the study. Department chairs may not necessarily be comfortable discussing some topics such as relationships with deans and faculty, tenure and promotion processes, personal experiences, or organizational culture. In these cases, the researcher may instead compare answers based on a series of more specific questions, which emerge from broader discussion topics. With one exception, all interview questions were gender-neutral. For one probe question, I asked female department chairs if being a woman in a leadership position influenced their research-related roles and responsibilities. During the interview process, I also amended three interview probe questions in order to elicit a more nuanced response from the participants.

Documentation & Observation

Appendix C details the documentation protocol. Savin-Baden & Major (2013) indicated that documents provide supporting information that may not be available through other data collection methods. In this study, photographs of academic departmental spaces and business Academic Analytics® reports provided valuable organizational context to the answers that department chairs gave in the semi-structured interviews.

Data Storage

Cresswell (2013) recommended that researchers should pay more attention to study data storage and handling. He elucidated six principles of data storage and handling pertinent for qualitative research. Among these principles were ensuring data storage and retention, protecting participant anonymity, and developing a data collection matrix. In order to align with Cresswell's principles, I maintained data in two formats. First, I stored physical data, such as documents and field notes, in categorized folders in a locked file cabinet in my office. I also scanned all documents and uploaded them to cloud storage provided by the site institution. I stored all raw interview sound files and other digital media associated with the project in this private cloud storage accessible only to the researcher and dissertation committee.

Data Analysis

Creswell (2013) represents data analysis as a spiraled process. First, the researcher prepares and organizes the data through the method that best suits the data (e.g., transcription of text data). Then, the researcher reduces and classifies the data thematically through the process of reading, memoing, and coding. The researcher next interprets the data through the codes in order to get to the "larger meaning of the data" (p. 187). Finally, the researcher describes the data through text, figures, or tables. For this study, I chose the explanatory analytic technique for data analysis. My coding methods included Attribute, Holistic, Values, and Focused Coding. I used NVivo 11.x software to assist with coding.

Analytic Method

As researcher, I chose the explanatory case study as the research method. Correspondingly, I selected Yin's (2014) explanatory analytic technique for this study's data analysis. The explanatory analytic technique has elements to help researchers identify causal links among the data and build explanations for phenomena during data analysis. According to Yin, these causal links may reflect insights into social science theories. Researchers construct narratives based on the causal links that answer how and why research questions. In this study, elements such as chairs' experiences, attitudes, and values, as well as organizational role theory served as the elements through which I developed a narrative regarding how chairs' enact and negotiate research-related roles and responsibilities.

Coding

According to Saldaña (2013), coding is a strategy to solve a problem that does not have specific "formulas or algorithms to follow" (p. 8). I coded semi-structured interviews as part of the data analysis process. I initially coded four transcripts manually through two coding cycles in order to explore the data and to ensure that I had selected the correct coding strategies. Once I was satisfied with the coding strategies, I imported the text transcripts into NVivo Pro software for formal coding. NVivo Pro provided the functionality to group related excerpts of text under one or more “nodes” or categories. These “nodes” approximate the same function as codes. A researcher can group nodes into a hierarchy under a parent node, duplicate nodes among parent nodes, or merge similar nodes. NVivo Pro node functionality provided not only the opportunity to explore the multiple dimensions of the data, but also made management of 350 coded pages of text more manageable.

This study followed Saldaña’s recommendation for a flexible, three cycle approach to data coding. I first used *attribute coding* based on Bazeley (2003) and others. This coding method enabled me to capture basic demographic attributes about the participants that may inform how they enact research-related roles and responsibilities. The attributes I captured using this coding method included gender, years as chair, and hire type (internal or external). I also recorded background experiences such as training for the role of chair, transition to chair, and previous administrative experiences. Attribute coding allowed me understand the demographic data of participants as well as organize the data for future use beyond the current study. Within NVivo Pro, I created codes for attributes such as Hire Type, Why Selected, and Previous Experience.

I used *holistic coding* based on Dey’s (2007) model for the next pass of the first coding cycle. According to Saldaña, this coding approach is straight forward, exploratory, and a good choice for beginning researchers. The holistic coding analysis also lends itself to the case method of research because its strength is bounded stories, observations, and vignettes as one would find in multiple interviews. I used holistic coding to group data by the study's research questions. Holistic coding also revealed unanticipated roles and responsibilities of department chairs.

I made a third pass of the data during the first coding cycle using *values coding* based on Gable and Wolf (1993). The strength of this coding technique is capturing subjective *values*, *attitudes*, and *beliefs*. Values are "the importance we attribute to oneself, another person, thing, or idea" (Saldaña, 2013, p. 111). Attitudes are the ways in which we think about ourselves or other people and ideas, or the way we feel about those things. According to Gable and Wolf, beliefs are harder to define, but are part of a system of values and attitudes, which includes personal experiences, prejudices, knowledge, and morals. Because enactment of research-related roles and responsibilities is behavioral, values coding helped to capture chairs' understandings of their research-related roles and responsibilities as well as their experiences and dilemmas regarding research, their identities as researchers, and challenges they faced as department leaders. These perceptions helped to explain how chairs' background experiences, defined roles, and role stressors affected their experiences supporting research productivity. Example values codes include Attitudes Towards Academic Analytics®, Relationship with the Dean, Perceptions of Research Reputation, and Perceived Risks to Productivity.

Charmaz's (2006) *focused coding* served as the second cycle of coding for this study. Focused coding helps the researcher to develop categories or themes within the data. I first used focused coding to identify conceptual categories within the answers of the participants. For example, codes recorded for chairs' research related roles and responsibilities inside and outside of the department clustered around concepts of Building Department Research Cohesion, Creating Opportunities for Faculty Research, and Assessing and Communicating Research Productivity. I also created conceptual categories based on role theory. I looked for evidence of the negotiation of dyadic organizing of roles, role socialization, role conflict, and boundary spanning role functions and behaviors. Within the NVivo Pro tool, the function to sort and arrange nodes into a hierarchy of concepts functioned as the focused coding method. I sorted holistic and values codes into major themes. I also duplicated holistic and values codes in order to assign them to multiple focused codes. Coding in NVivo of 22 transcripts and 40 photographs and interview/site observations through the two coding cycles created 163 codes.

Quality Assurance

Quality assurance provides methodological coherence in order to enhance alignment among research questions, methods, and the processes to collect and analyze data (Savin-Baden & Major, 2013). Quality assurance method ought to align with the researcher's philosophical stance and positionality within the study. I selected an audit trail strategy to ensure quality during the research process. I documented and catalogued all interview notes, raw sound files of the interviews, observation notes, photographs, and document notes in order to create a record of the study process. Furthermore, I kept a journal of the study process in order to increase availability of the study to other researchers and ensure study reproducibility.

Limitations and Delimitations of the Study

The limitations of the study reflected common challenges of a qualitative research methodology. Chairs come to the role through diverse paths (Bisbee, 2007). Faculty exhibit diverse motivation for accepting the position, such as a sense of duty or increase in pay. This study will not be able to capture all past experiences, which may inform the department chair's positionality towards research. Chairs I interview for this study also may prevaricate or obfuscate the truth due to concerns of portraying a negative picture of his or her tenure as chair. According to Creswell (2013), document analysis can serve to contextualize other data sources, such as interviews, to create a clearer focus of the study. In this study, I collected relevant documents where available in order to corroborate interview responses. Correspondingly, the positionality of the interviewer can introduce bias into the research process (Cresswell, 2013). Acknowledging that my perspectives on department chairs influence my research is part of the research process.

Several delimitations of the study also bear discussion. My goal was to investigate department chairs' research roles and responsibilities across disciplines within one striving research institution. Because the scope of the study was a single research institution, the conclusions I drew from the evidence may not generalize to the experiences of chairs at other types of institutions, such as community colleges or liberal arts schools. I further bound the scope of the study through the departments I selected to be in scope. In particular, I excluded medical and law school chairs in order to align my study with almost all the models of department chairs reflected in the literature. I also chose not to evaluate the differences in chair experiences based on department type or academic discipline. The literature suggests a gap in the scholarship around studies exploring the differences in chairs' experiences between disciplines or across other departmental characteristics. However, I perceived that focusing on these departmental particulars might compromise anonymity. When essential to my analysis, I instead used the broader academic descriptors of STEM (science, technology, engineering, and math) and non-STEM fields to preserve participant anonymity. Finally, in order to limit the scope of the study I only interviewed tenured and tenure-track faculty in the role of chair. I chose not to interview other institutional sources such as faculty, deans, non-tenure-track faculty, and students, which might have provided additional insight into the research topic.

Conclusion

The purpose of this study was to examine department chairs' research-related roles and responsibilities at one public research university. For this study, I selected a qualitative explanatory case study as the best method and methodology to address the research questions. I used a purposeful homogeneous sampling strategy as the participant selection method. Of the 48 chairs I identified in the population, 22 agreed to participate in the study. I collected data using a semi-structured interview protocol. I also collected documents and observations on the participants and their spaces. For data analysis, I selected an explanatory analytic technique based on Yin (2014). Data coding occurred in three cycles. During the first cycle, I used attribute coding, holistic coding, and values coding. During the second cycle, I used focused coding. Limitations of the study centered on chairs intentionally obfuscating the truth. Delimitations of the study involved limiting the study's scope by particular types of institutions, schools/colleges, and populations interviewed. Through this study, I hope to tell the story of department chairs as they seek to make sense of supporting faculty research in the increasing complex environment of higher education.

CHAPTER 4

EXECUTIVE SUMMARY OF FINDINGS

The purpose of this explanatory case study is to examine the research-related roles and responsibilities of department chairs at one public research higher education institution. In this chapter, I present an executive summary of the interview and observational data that addressed the study's two research questions:

Q1: What are department chairs' research roles and responsibilities as department leaders?

SubQ1: How do department chairs support faculty productivity inside the department?

SubQ2: How do department chairs engage environments outside the department to support faculty research?

Q2: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders?

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

Southern Research University (SRU) served as the selected site. Currently, SRU is undergoing a strategic shift in its research mission in order to compete in a prestige research economy. This "striving" (O'Meara, 2007) for prestige creates opportunities for department chairs to experience a variety of roles and challenges and as they put into practice institutional initiatives to improve research productivity. Appendix G provides brief descriptions and background information for the participants of this study.

Research-Related Roles and Responsibilities

Evidence from interviews and observations revealed that chairs' research-related roles and responsibilities as department leaders tended to fall into one of four thematic categories: (1) assessing department research productivity, (2) fostering the department's research environment, (3) facilitating faculty research processes, and (4) supporting researcher careers. Chairs primarily support faculty productivity within the department. Chairs' research-related roles and responsibilities extend into external environments when they engage with deans to implement productivity improvements, interact with institutional business processes to remove obstacles to productivity, and use their social and professional networks to facilitate collaboration and resource sharing. Through these internal and external roles and responsibilities, the chair leads change to align the department with new institutional expectations of research productivity and productivity assessment. Depending on the status of the department's research productivity, the enacted changes might be incidental to gain efficiencies or transformational to realign the department.

Assessing Departmental Research Productivity

As the demand for improving research productivity intensifies at SRU, chairs and deans communicate about research performance and other productivity policy. The study's findings suggest that chairs assume a central role in fulfilling administration's directives to improve institutional research prestige through departmental research productivity assessment. Chairs experiences, beliefs, attitudes, and values inform how they make sense of messages from administration. Chairs reframe messages to build faculty consensus regarding productivity directives. Within the department, chairs integrate productivity standards at the request of deans. In particular, the findings reveal that deans at SRU task chairs with putting into practice business analytics for research through the Academic Analytics® proprietary business analytics service. Throughout these processes, chairs encounter challenges from uncertainty in messaging, entrenched organizational practices, and the external realities of sponsored research funding as they assume leadership over productivity directives in the department.

Receiving Communications about Productivity

Participant responses indicated that chairs are cognizant of their role within the process of receiving, making sense of, and communicating policy regarding research productivity to the faculty. While few chairs had heard of the term "striving" (O'Meara, 2007), chairs understood the university had shifted its strategic planning under the new administration towards improving institutional research prestige. Chairs received messages regarding the institution's new targets for external grant awards. For chairs in Arts and Sciences departments, the administration's messages implicated the STEM fields (science, technology, engineering, and math) fields as under the greatest pressure to improve productivity (Adam). Chairs also received messages regarding new initiatives to facilitate research productivity such as SRU's new research centers (Thomas). One of the goals of this new institutional initiative was to increase emphasis on collaborative interdisciplinary research (John).

Making Sense of Productivity Messages

Chairs rely on their understanding of their department's ability to meet research goals and their personal experiences as researchers to make sense of productivity messages. Reconciliation of administration's messages with departmental realities left some chairs doubtful of the institution's ability to meet its goals. A few chairs voiced concern that their department was set up to fail because of administration's previous focus on increasing enrollment and emphasizing undergraduate teaching (Margaret; Andrew). Chairs in STEM fields also cited the availability of external funding as a threat. Chairs noted that many national funding organizations had not increased awards to keep up with the cost of equipment and other expenses (Thomas). Chairs also doubted that SRU possessed the infrastructure, including researchers and assets, to improve productivity. For example, one chair suggested that STEM fields at SRU needed to address "unacceptable lab conditions" and "safe working spaces" (Edward) as a starting point to improving productivity. However, when this chair brought these issues to the attention of administration he was "attacked and yelled at" (Edward). Other STEM and non-STEM chairs worried about their department's ability to hire top-performing researchers given the non-competitive nature of SRU's start-up packages (Thomas; Bill).

Communicating Productivity Message

Participant responses exposed chairs' use of different tactics to communicate messages to faculty regarding research productivity. Some participants felt it was best to be transparent in their communications with faculty. Other chairs chose to reframe messages from administration regarding productivity. Spinning the message and deflecting blame allowed some chairs to align with the faculty in order to build consensus on new productivity goals. Other chairs conceded that they could only delay the inevitable so long. In the end, the chairs needed to "toe the party line" (Thomas).

Putting Business Analytics for Research into Practice

The central role of the chair in putting research analytics into practice emerged as one unexpected finding of the study. Participants revealed that chairs and deans used a diversity of informal and standard analytic methods to track faculty productivity. The most commonly mentioned method was the Academic Analytics® service for research. Academic Analytics® is currently the most popular proprietary business analytics service measuring teaching, learning, and research productivity (Becker, S. A., et al., 2018). SRU's administration began experimenting with Academic Analytics® several years ago to track learning outcomes, but recently affirmed its importance to the institution's research strategy with deans and chairs.

Deans at SRU tasked chairs with putting the Academic Analytics® proprietary reporting service into practice to improve research productivity in the departments. According to participants, the tasks involved in incorporating Academic Analytics® were some of the more polarizing research-related responsibilities of chairs. Throughout the interviews, chairs often conflated attitudes towards Academic Analytics® as a reporting service with more general directives and messages regarding research productivity from administration. As part of the document collection, I reviewed three annual Academic Analytics® radar reports from one SRU department. According to the reports, administration assesses four vectors of productivity: citations, book publications, article publications, and grant awards. (See Figure 1, pg.149).

Concerns about Academic Analytics®. Chairs discussed three general categories of concerns about Academic Analytics®: (1) tools and processes, (2) uses of the data, and (3) threats to the nature of research. Some chairs suggested that evaluating research performance through quantitative measures did not capture all nuances of research productivity (Adam; Walt). While most chairs believed their dean possessed a reasonably clear sense of how to use the analytics data, some chairs had concerns about transparency of that use (Mark; Ray). Chairs also provided evidence to support their belief that administration does not have a clear understanding of the validity of the data. The quantitative data often lacked context necessary for an accurate picture of productivity.

Some chairs argued that putting Academic Analytics® into practice had the potential to change the nature of research at SRU. Chairs expressed concern that dependence on analytics might shift research towards more fundable research (Matthew) or towards research subjects that administration preferred (Steven). Chairs worried that particular types of research, such as community engagement research, might suffer as a result. Chairs of departments with a creative activity research tended to put Academic Analytics® into practice less (Ray; Walt). In these cases, the chairs mentioned that the deans relied on them as experts to create the new standards around assessment of creative activity productivity.

Positive perceptions of Academic Analytics®. Despite concerns, most department chairs saw positives to putting Academic Analytics® into practice. Non-threatening, clear messages about analytics from the deans and perceptions of the usefulness of the tool helped many chairs to internalize the value of analytics and the importance administration placed on measuring productivity. For other chairs, the dean offered less specific instructions for using Academic Analytics® but empowered the chair to lead the process of adoption. Chairs perceived Academic Analytics® reports demonstrating positive productivity as an advantage when negotiating resources with administration and disproving faculty members who contended that they could not improve research productivity (Bill; Andrew).

Aligning the department with Academic Analytics®. Chairs reported that putting Academic Analytics® into practice changes departmental processes and culture. As a result, chairs enact research-related responsibilities as they align the department to the use of analytics for productivity decisions and strategies. Developing uses of analytics in the departments requires chairs to help faculty start new research habits. Some chairs perceived it as a teaching tool for junior faculty (Brian). The deans also tasked chairs with leading efforts to identify peer and aspirational institutions in order to implement departmental productivity benchmarks. Chairs tended to address these tasks collaboratively as a department although a few assumed the task without faculty input (Sam; Edward; James).

Remediating issues with quality. The study's findings indicate that putting Academic Analytics® into practice informs how chairs evaluate faculty productivity for quality. The departmental standards for acceptable journal quality was an area of concern to some chairs. Most chairs reported limited experience with faculty publication in vanity and predatory journals. Chairs who encountered this issue in their department indicated that predatory publishing practices most affected junior faculty and aging senior faculty. When encountered, chairs generally warned against their use but did not actively intervene to stop the publication habits of faculty. Chairs intervened when they perceived faculty relying on predatory and vanity journal publications to meet tenure and promotion expectations.

Promoting the department to external stakeholders. Chairs use analytics data to promote their department to administration and other external stakeholders. Annual reports give the chair an opportunity to highlight productivity improvements. Chairs believed analytics reports would draw administration's attention to the department (Bill; Brian) and help them to sell the department across campus and to external donors (Jennifer).

Fostering an Environment Conducive to Research Productivity

Chairs enact their research-related roles and responsibilities to foster an environment conducive to research productivity. Job stressors affect worker productivity (Cranny, Smith, & Stone, 1992). Departmental environments supportive of research are an important factor in reducing job stressors on faculty. The evidence suggests that chairs seek opportunities to create or strengthen a common department identity and reinforce research productivity as a desirable department trait. To foster a research environment inside the department, chairs often extend their responsibilities into external environments to create and defend departmental and disciplinary research boundaries. One unexpected scenario that emerged from the findings centered on external hire chairs' initiation of transformative cultural changes. The background and personality of the chair, perceptions of the responsibilities of the position, and departmental factors inform how chairs create or strengthen research productivity values.

Creating a Common Department Identity

One theme that emerged from participants' answers centered on creating a common departmental identity as a means to foster an environment conducive to research productivity. Some chairs discussed a need to build an "esprit de corps" (Ray). Establishing research expectations with the faculty helps chairs reinforce productivity as a department value. Chairs indicated that they inform faculty that research is the "clear, primary goal" of the department (Edward). Chairs pointed out the importance of inculcating junior faculty to a "new value system" (Daniel) of research productivity expectations. Some chairs suggested that department meetings are an opportunity to reinforce a common culture of productivity. Meetings provide a chance for the faculty to share successes and update others on current research projects. Finally, an office inventory of the chairs I interviewed revealed that some offices have furniture and space ostensibly designed in part to reinforce a culture of discussion and collaboration such as white boards, tables, and sitting areas.

Transforming Research Culture as an External Hire

Participants reported that some deans provide externally hired chairs flexibility to transform departments in order to foster a more productive research environment. Some external hire chairs identified that an underproductive research culture emerged in some departments as a response to the recent historical emphasis on teaching at SRU. Chairs engaged in “myth busting” (Brian), shifting teaching loads and responsibilities (Andrew), aligning faculty to new value systems (Daniel), helping merge programs (Jennifer), and developing a new PhD program (Bill) to change their department’s research reputation.

Defending Departmental and Disciplinary Boundaries

Chairs also discussed defending the department’s research identity as they engaged faculty and administrators across campus. Ownership of curriculum, programs, and scholarship emerged as territorial conflicts chairs negotiate at SRU. According to one chair of a small department with an interdisciplinary focus, reinforcing the department’s disciplinary boundaries, including the permeability of those boundaries with faculty, helped to maintain the viability of the department’s research focus (Karl). Supporting this strategy required inculcating faculty to the realities of the disciplinary research dynamic as well as reaffirming his discipline’s boundaries in his interactions with other scholars and administrators across campus.

Facilitating Faculty Research Processes

The findings revealed that chairs facilitate faculty research through the phases of the research process. For the purposes of this study, I used the research process model of Kwon (2017) as a framework to describe the chair's involvement in faculty research processes. Kwon described four phases of research process effort: (1) Generating Ideas, (2) Obtaining Funding, (3) Experimenting, Collecting, Creating, and Analyzing; and (4) Disseminating Results. Participants' responses tended to fall under one of five primary responsibilities: facilitating faculty ideas and collaborations, facilitating research funding, creating opportunities to perform research, removing administrative obstacles, and facilitating research publications. By way of clarification of duties, some chairs suggested that their Associate Dean of Research or Research Dean communicates research opportunities to chairs and faculty, facilitates grant proposals, and mediate issues in the research process. Chairs also engage directly with faculty to provide many of these services as another layer of support.

Facilitating Faculty Ideas and Collaborations

According to participant responses, chairs create opportunities for faculty to generate new research ideas as well as facilitate faculty collaborations. The findings showed that chairs varied in the level of their engagement in this phase of the research process. The primary methods participants used to help faculty generate new research ideas were communicating opportunities and creating conversations about research. One chair discussed developing several internal and interdisciplinary writing groups centered on scholarship themes shared among faculty across departments (Karl). The chair requires all department faculty to participate in these writing groups. These groups give faculty an opportunity to have peers across campus read their scholarship. Chairs also discussed the role of external speakers in facilitate new ideas.

Participant responses demonstrate that chairs facilitate inter- and intra-departmental collaboration by drawing on their research experiences and professional networks to make connections on behalf of faculty. The cross-disciplinary or applied nature of some departments' research provided more opportunities to collaborate across departments than other departments. Participants discussed how SRU's recently created research centers reinforce collaborative research as an important institutional strategy for pursuing larger grant awards. While collaborative research introduces new opportunities for faculty, it also creates challenges to a department's identity and values. Faculty must engage with other researchers on common goals as well as share space and equipment. As a result, chairs must mediate faculty engagements inside the department as well as across departments in order to ensure that the effort placed into collaborations returned value and evidence of productivity.

For most participants, the effort to make a connection on behalf of a faculty member for collaboration was serendipitous. Chairs volunteered to make connections when they identified opportunities for a match in research interests. Participant responses also provide some evidence that chairs create opportunities for faculty research by collaborating as a co-primary investigator (PI) (Brian; Edward). However, participants perceived that chairs' personal beliefs about research and lack of sub-discipline expertise, as well as institutional factors, limited the viability of collaboration at SRU. Some chairs contended that the "top-down approach (Thomas)" driven by chairs or administration was not always successful. Within the department, Chairs encounter challenges as they negotiate the resource contention issues inherent to collaborative research. Participant responses also indicated that collaboration is not effective or appropriate for all disciplines. Ultimately, chairs acknowledged that individual faculty member initiatives generate most collaborations.

Facilitating Obtaining Funding

The findings show that chairs' support of faculty research funding processes is primarily limited to providing advice and mentoring. James characterized grants as the "underbelly of the chair's existence." Chairs shared concerns regarding internal and external funding environments and their effect on faculty efforts to procure the grants necessary for research productivity. These concerns tended to influence chairs' advice to faculty and interventions in faculty grant processes. According to participant responses, junior faculty receive the most attention from chairs while associate and full professors receive little direct attention. The findings also reveal that chairs looked more favorably on faculty pursuit of external grants than internal grants.

Support for junior faculty. Chairs remarked that their engagement in faculty grant processes was primarily reactive rather than proactive. However, chairs were more proactively involved in junior faculty grant processes than the processes of assistant and full professors**.** Participants indicated that chairs lend their experience to junior faculty to help them make the right decisions about grants. Chairs also cited a need to monitor and intervene in situations where junior faculty have not applied for grants as expected, have applied for the wrong grants, or are applying for too many grants at the expense of publishing. Most chairs mentioned that they were happy to provide advice and mentoring.

Internal grants. Chairs were less involved and less enthusiastic about supporting faculty pursuit of internal grants than pursuit of external grants. STEM chairs tended to perceive internal grants as having limited value because the money was already on campus. According to some chairs, pursuit of internal grants also represents an opportunity cost in terms of lost time and effort to pursue funding from external grants. For junior faculty in particular, the loss of time to pursue external grants added unnecessary risk to the tenure process. Other chairs contended that college-funded internal grants serve as an important source of funding that supports junior faculty productivity or may serve as a "springboard" to larger grants (Steven). One chair cited a concern with a lack of institutional "bridge funding[2]" (Margaret) for productive faculty caught between grants.

External grants. Participant responses also suggested that chairs are more reactive than proactive in supporting faculty pursuit of externally sponsored research funding. Chairs suggested that the effort required to procure external funding had dramatically increased in recent years. The increased effort for grants places additional pressures on institutional resources and hurts faculty morale (Margaret). Some participants suggested they faced a dilemma encouraging junior faculty to spend time and effort on external grants. Providing the wrong advice to junior faculty introduces risk to their tenure process. Despite concerns about the external funding environment, chairs placed surprisingly little emphasis on direct intervention in associate and full professor external grant and funding processes compared to junior faculty.

Facilitating Faculty Experimenting, Collecting, Creating, and Analyzing

Chairs enable faculty to experiment, collect, create, and analyze data by creating opportunities to engage in these research tasks. Unless a chair served as a project co-PI, no chair suggested that they personally engage in another faculty member's experimenting, collecting, creating, or analyzing of research data. Instead, chairs facilitate the faculty's ability to perform these research tasks through execution of three standard managerial responsibilities: protecting faculty from administrative overhead, managing resources, and managing workloads. These managerial tasks create time and opportunity for faculty to perform research tasks throughout all

[2] Bridge funding a type of internal institutional grant intended to support promising researchers through gaps in external sponsored funding. Bridge funding helps researchers to retain personnel and cover the costs of research until the researcher secures new external funding.

phases of the research process, but are essential for faculty to complete tasks in the Experimenting, Collecting, Creating, and Analyzing phase of research. Without equipment, travel funds, and time in the lab, field, or archive, faculty struggle to complete data collection.

Protecting faculty from administrative overhead. Chairs attempt to eliminate unnecessary administrative tasks to increase faculty time available for research. Chairs also bridge institutional silos outside of the department to reduce the administrative burden on faculty. One chair suggested that this "silo-ification" of the university challenges chairs to be a "Jack or Jill of all trades" (Charles).

Managing resources. According to study participants, chairs stimulate research productivity by managing departmental resources such as discretionary funds for equipment, travel, and building space. Chairs supplement the school's funds with a departmental pool of resources for research. The findings show that chairs have concerns regarding the lack of direction for the use of resources and the effect of budgeting changes at SRU on their resource management strategies. Chairs also weigh the productivity of faculty against a need to distribute funds evenly among faculty when deciding resource requests. One prominent finding was that chairs tended to prioritize resources for junior faculty above other faculty.

Developing department funds. Participants explained that the primary method chairs have available to build a department's funds for resources is course fees. Although not a prevalent responsibility, a few chairs mentioned they reach outside of the department to meet with donors to build department funds (Michelle; Jennifer; John). Participant responses reveal that they were developing new revenue streams, such as online degrees and courses, as option to increase funds (Dana).

Prioritizing faculty resource requests. Participant responses suggest that most chairs try to adhere to a strategy of equitable prioritization and distribution of departmental funds. Chairs also invest funds back into the department for the benefit all faculty members' research. Despite attempts to balance requests, chairs admitted that funding might not always be equitable. For example, some chairs suggested that demonstrating a funding balance among departmental programs was often difficult because of differing research requirements of the subfields. The findings indicate that chairs think about research impact when funding equipment.

Prioritizing junior faculty and productive faculty. Regardless of the level of available department resources, chairs prominently mentioned junior faculty as the highest priority for resources. Despite claims of equitable distribution, some chairs also admitted that they were more likely to give extra funding or higher priority to a productive faculty member's requests (Mark; Michelle). Chairs also consider research impact when funding equipment for departmental use.

Managing workloads. Time to perform research was the most prominently mentioned resource available to chairs for allocation. To counter the trend of increased faculty commitment to students, chairs use a variety of strategies to create uninterrupted time for faculty to research and write. While some of these strategies stem from college or school policy, chairs often develop strategies outside of the constraints of policy. Participants discussed three main strategy to create time: (1) adjusting course schedules, (2) providing faculty a course release, and (3) experimenting with innovative strategies such as creating less-intensive online courses to take the place of regular classes. Chairs often use these strategies as both a reward for productivity and as incentive to complete research.

Facilitating Disseminating Results

While it was not a prevalent finding, some participants discussed how they used their professional connections to facilitate faculty publication of research. Several established senior scholars serving as chair suggested that they used their network of contacts at book and journal presses to help their faculty publish new research. One chair provided his faculty an opportunity to publish in an anthology upon which he was serving as editor (Charles). He admitted that the publications were not enough to give anyone tenure, but the opportunity sent a message to the faculty that his connections were available to the department.

Supporting Researcher Careers

According to participant responses, department chairs support faculty researcher career advancement. SRU's tenure and promotion (T&P) process for faculty career advancement and yearly faculty activity reports (FAR) for merit pay raises provide chairs opportunities to engage faculty in discussions of research productivity expectations. Through the processes, chairs also have opportunities to reward productivity, address underperformance, and provide guidance and advice in support of improving faculty productivity.

Supporting Faculty through the Career Lifecycle Phases

The findings reveal that chairs change how they support researcher careers as faculty progress through the career lifecycle. Junior faculty, associate professors, and senior professors present chairs with unique support challenges. For junior faculty, the chair's primary focus is ensuring progress towards tenure. According to participants, chairs must motivate and support associate professors so that they continue to produce and achieve the milestone of full professor. Participant responses suggest that some associate professors lose the momentum of their research agenda. These faculty members risk stalling in their progress towards full professor and contributing less to the department's productivity. Chairs also face challenges supporting senior faculty as they exhaust career milestones and potentially lose momentum for their research agendas. To address these risks, chairs enact different responsibilities to assess, reward, and motivating faculty. Chairs also enact informal responsibilities to monitor and mentor faculty through the career stages.

Inherited Rubrics. Some participants struggled with the quality or applicability of the assessment rubrics they inherited when faced with the new productivity realities of institutional striving. As a response to putting research analytics into practice, one chair updated the department's rubric as one of her initial tasks (Dana). The intention was to tie productivity to the annual evaluation in a clear manner.

Support of junior faculty through T&P. Participant responses suggest that chairs engage in the careers of junior faculty to varying degrees. For chairs with responsibilities to large departments, supporting junior faculty careers often passes through an assigned associate or senior faculty member. This faculty member liaises with the chair and mentors the junior faculty through the tenure process. The preparedness of the junior faculty to perform without close monitoring factored into the level to which the chair directly engaged in mentoring. Participants suggested that mentoring junior faculty was only as effective as the junior faculty member's willingness to communicate with the chair.

Productivity concerns reinforced some participants' contentions that support for junior faculty is essential to faculty retention and overall departmental productivity. Participants monitored junior faculty's progress towards tenure to ensure they were on track to meet the research productivity requirements. As a corollary, participants also indicated that chairs try to guide junior faculty along the most direct path to tenure, such as focusing on article publication instead of investing in writing a book (Jennifer). A few participants provided stories about advocating on behalf of junior faculty to the tenure and promotion committees and associate deans. Participants did not share many stories about failed tenure reviews, but the ones they shared seemed to make an impression on them.

Supporting associate professors. Participants suggest that chairs primarily engage in the careers of associate professors as researchers within the context of productivity underperformance. Chairs offer career advice and discuss progress towards full professor as a component of yearly assessment. Using "sticks and carrots" (Adam), chairs reward faculty for good productivity and attempt to motivate underperforming faculty who have stalled in their progress towards full professor status. Chairs perceive rewarding and motivating as a means to advance departmental productivity.

Associate professors who lost research momentum were a major concern of chairs. These professors often continue to serve the department as excellent teachers but cease to perform new research or publish. Chairs suggested that they walked a fine line discussing underperformance with their colleagues during assessment activities. They were mindful about sending the wrong message. Other chairs simply saw underperforming faculty as a lost cause. Participants indicated that when confronted, some underperforming associate professors deflected blame for their lack of research progress on changes to assessment rubric. As a result, a few chairs conceded that they were at a loss as to how to help associate professors rebuild career momentum when advice and guidance offered during assessment failed.

Supporting full professors. Faculty that achieve the rank of full professors pose another set of challenges to department chairs as they facilitate faculty careers. Participants suggested that chairs consider senior faculty as unlikely to change their productivity at this stage in their careers. Chairs complained that they have limited opportunities to engage in the careers of full professors. When chairs engaged in the careers of senior faculty, it was often under difficult circumstances. For example, one chair discussed the difficult decision to reduce a once highly productive senior faculty member's department resources because he was producing less.

Associate professors serving as chairs tended to face an additional challenge assessing full professors. One associate professor chair contended that the difference in prestige and experience between the career stages of associate and full professor serves a similar purpose as a hierarchy of authority in some contexts (Matthew). He experienced resistance delivering yearly assessments of research productivity to senior faculty who contended that he was not qualified to assess their productivity.

Carrots & Sticks

Chairs revealed that rewarding high performing faculty and motivating underperforming faculty were key strategies to building departmental productivity. Several chairs referred to the twin motivational strategies of rewards and punishments as "carrots and sticks" (Adam; Merle, Jennifer; James). Chairs contend that the most formal "carrots & sticks" available to them were merit raises. Chairs do not provide the raises directly. Instead, they work through the established FAR process to influence merit raises for high performing faculty. Participants suggest that chairs first ensure that productive faculty receive positive annual activity report scores. Despite their best efforts, several chairs admitted that they were disappointed in the actual efficacy of the merit raise as a reward.

Chairs also discussed teaching schedules and course loads in terms of "carrots & sticks." According to participants, productive faculty occasionally ask for teaching schedules or course releases that maximize their available time for research. Chairs also contended that they occasionally have no choice but to assign a larger teaching load to consistently underperforming faculty. One chair referred to this punitive measure as "the biggest stick" (Adam). Most chairs did not consider "sticks" to be a response used except as a last resort. Instead, chairs preferred positive motivational techniques.

Chairs agreed that the reward strategy most available to them was to recognize faculty for career successes such as receiving a grant or publication in a prestigious journal. In addition to congratulating the researcher personally, chairs recognized faculty career successes through multiple channels including circulating memos and e-mails (Bill), making announcements (Michelle; Andrew), using social media channels (Ray), and holding special functions (Ray). Some departments also maintain a tradition of displaying new publications in a trophy case or hanging a signed print of a new publication's cover outside the department offices (See Figure 2, pg. 213; See Figure 3, pg. 214). Several chairs discussed the importance of ensuring that deans heard of any successes because of how it reflects on the researcher and the department.

Participant responses also suggest that chairs use their role as faculty advocate to administration as a "carrot" to reward productivity. Chairs nominate productive faculty for institutional awards and advocate for faculty sabbaticals. Chairs also prominently mentioned space for labs and offices as an available asset chairs distribute for reward (Thomas; Michelle; Edward; James).

Motivating underperforming faculty. As a result of the protection of tenure, most chairs in this study held the view that few "sticks" exist that force tenured professors to be productive. The two punitive methods chairs most mentioned included giving low merit raises during assessment and assigning a heavier teaching load to faculty without an active research agenda. Echoing a typical managerial trope of other professions, many chairs believed that finding a person's passion improved their productivity. Chairs recounted numerous stories of individuals who were unhappy as researchers but productive as teachers or administrators. The chairs' expectations for these faculty members are that they contribute to the department by assuming a greater share of teaching and service responsibilities, not as a punishment, but as a means to move the faculty member closer to career they prefer to have. Regardless of how they engaged faculty through the processes of tenure and promotion and outside of that process, respondents suggested that they had a responsibility to manage faculty throughout their careers while serving as chair. Fostering researcher careers leads to positive work conditions and benefits the research profile of the department.

Negotiating Roles

The second research question to this study is: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders? Three sub-questions arose from the research question.

a. Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?
b. Sub-Q2: How do department chairs perceive and experience the administrative value of their research?
c. Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

I asked participants a series of questions to understand how chairs negotiate the dual roles of department leader and career researcher while performing administrative service. I focused on how chairs engage in their active research agenda, professional identity and reputation, and career aspirations in order to make sense of the challenges chairs face maintaining multiple roles.

I expected to find that chairs' negotiation of the dual roles of department leader and career researcher inform how they enact research-related roles and responsibilities in support of faculty productivity. Three major themes emerged from the participants' responses: (1) maintaining research productivity, (2) perceiving administrative value to research, and (3) growing professional identity and career aspirations. The data suggest that, while not all chairs maintain an active research agenda, those that do perceive value in continuing their research as chair. Chairs also perceive that their research reputation and agenda provides some power and authority to enact research-related roles and responsibilities. Finally, chairs' professional identities and career options and aspirations grow as they serve as career researchers and department leaders.

Maintaining Research Productivity

Participant responses indicate that the time spent in service as chair reduces the time, resources, and opportunities available for an active research agenda. While deans expect nominal research productivity from the chair position, the loss of research momentum often leads to feelings of anxiety, frustration, and guilt for many chairs. Associate professors serving as chairs expressed concerns regarding a loss of time for research needed to make full professor.

Many chairs desire to engage in research and remain productive. To maintain a research agenda and contribute to the productivity of the department, chairs create time for research productivity. Chairs also transform their research projects, collaborations, processes, roles, and agenda to accommodate the available time they create for research productivity. Differences in departments, disciplines, and personal characteristics inform how chairs continue to engage in research. One interesting finding from participant responses is that some chairs reported that they experienced more research productivity serving as chair than prior to serving as chair.

Deans' Expectations of Research

The majority of the chairs indicated that they received no formal message from the dean regarding expectations of research productivity. Through reductions to Full Time Equivalent (FTE)[3] headcount and contract stipulations, most faculty members understood that assuming the role of chair would reduce time for research. When chairs received messages from their dean, the focus was on placing the research of the department above their own.

Negotiating research support with dean. Some participants indicated that they negotiated research time and resources with their dean as part of their contract. Chairs discussed nine or 12-month contracts as standard offers. For those chairs that discussed their FTE, the most common percentages for research were .2 (Brian; Jennifer; Edward) or .25 (Matthew). Some deans also offered chairs research assets and accommodations. Chairs reported receiving a $3,000/year travel budget (Steven), post-docs (Thomas; Edward), and "alternative workspaces" to perform chair duties while the researcher was in the field collecting data (Bill). Participants also remarked that new chairs generally receive course waivers from deans in order to ease the transition into administrative duties. Chairs tended to associate course waivers with more time to dedicate to research.

Messages to associate professor chairs. In contrast to full professors serving as chairs, the findings suggest that deans expect associate professors to continue to work towards full professor. Associate professors serving as chairs indicated that progress towards full professor was a struggle (James; Steven). Despite providing messages of support for associate professors

[3] Full Time Equivalents (FTE) refers to the percentage of an employee's work dedicated to particular tasks or roles. For example, a chair with a .25 FTE towards research spends 25% of a workweek (i.e. 10 hours of a 40-hour workweek) on research tasks. At SRU, department chairs generally dedicate .5 FTE towards administrative duties.

research productivity, associate professor chairs contended that they do not receive enough material support from deans to advance to full professor without considerable difficulty.

Negative Effect of Serving as Chair on Research

Despite negotiating provisions with the dean to maintain personal research, most participants reported that service as chair reduced the time, resources, and opportunities available for research activity. Participants suggested that the administrative responsibilities of chair expand to fill all available time (Andrew). Chairs also complained that their dean did not offer enough course waivers to support a chair's continued research agenda. One chair indicated that the institution would eventually have to address research time for department chairs since the current availability of waivers was "not a sensible arrangement" (Dana). A lack of course waivers suggested to chairs that some deans prioritize teaching over research although the deans did not share the reasons for this priority.

Effect on Research Lifecycle. Chairs struggled throughout the research lifecycle. Starting new research projects was a challenge for chairs. Multiple chairs shared stories regarding a lack of time to generate new ideas. For some researchers, the loss of proximity to research spaces as they move to the department's central offices affected their perceptions of data collection productivity (Thomas; Sam). Chairs compensated by scheduling time to visit labs and check in on post-docs and graduate students. Participants also alluded to the struggle to meet publishing deadlines while chair. One chair offered that asking a co-author to help finish a paper was often necessary to meet a deadline (Edward).

Frustration, Anxiety, and Guilt

Participants reported that they felt frustration, anxiety, and guilt regarding the loss of dedication to their active research agenda while serving as chair. Cycles of motivation, thwarted by interruption, characterized chairs' experiences working on their research agenda. Chairs also acknowledged they worried about the effects of service on their careers and families. One chair negotiated with the dean to balance family schedules with time for research (Michelle).

Disciplinary and Career Factors Affect Research

The findings also indicate that disciplinary and career factors inform a chair's ability or desire to maintain an active research agenda. Participants noted that some applied subfields accommodate an active research agenda better than other fields. Some participants also reported that they did not desire an active research agenda as a career decision. For instance, some senior faculty chairs step away from their research in order to focus on administrative responsibilities (Margaret; Mark; Merle). Serving as chair near the end of their careers was a natural transition away from their research. Other chairs were comfortable taking a break from their research in order to focus on administrative efforts. One chair had recently completed a number of writing projects and felt he was at a "natural pause" in his research (Ray). These responses implicate personal choices as a key factor influencing whether chairs maintain an active research agenda.

Productivity Strategies

Despite the loss of time and resources for an active research agenda, chairs develop strategies to maintain research productivity. Chairs remain opportunists in order to take advantage of time as it becomes available. According to one chair, learning how to prioritize administrative tasks is a skill that helps to create time for research (Charles). Chairs learned to accomplish small research tasks in between administrative duties.

Chairs reported that they most require blocks of uninterrupted time to be productive researchers. Chairs discussed specific strategies to create blocks that fit their lives, personal preferences, and phase of the research lifecycle. One strategy chairs use is to work off-hours and weekends. Hours outside of work tended to provide the best opportunities for time without interruptions. Participants suggested they also limit interruptions while in the office. This proved challenging as chairs' offices were often located in hubs of department activity. Chairs also create flexibility in their work schedules. Several chairs recommended scheduling classes in contiguous blocks so that they have a morning or afternoon free to perform. Other chairs simply avoid the office by scheduling one day at home a week for research at a home office where they are able to analyze data or write without interruption. One interesting finding that emerged was the value of office administrators as a support system to help the chair make time for research. Participants contended that administrative staff are good "about keeping crazy people away" (Jennifer) and take on responsibilities for activities that would otherwise consume the chair's time. Observations from the interviews revealed that, like most faculty, chairs use offices as a space to perform research tasks. As with all research faculty, the chair's ability to have research materials nearby creates opportunities for research.

Participant responses reveal that chairs adapt the characteristics of their research projects to accommodate limits on the time available for research activity. Chairs suggested that they are more selective about the projects they undertake. Limitations on time also require chairs to prioritize their projects. One chair focused all his research effort, such as conference presentations, to the ends of contributing to one publication (Steven). Another chair perceived an importance to thinking about teaching and research as "mutually informing" activities when developing projects (Charles).

Participant responses reveal that chairs' research roles transform because of the loss of time to administrative responsibilities. Chairs with established research labs relinquish some independence as a "hands-on" researcher to assume an oversite role. These chairs depend more on their graduate students and post-docs to maintain research momentum. Participants with previous research collaborations tended to continue to depend on them for productivity after becoming chair. Some chairs with existing research collaborations indicated that having co-PIs served as motivation to maintain productivity. Letting go of a primary PI status for a project was often difficult for chairs. Chairs also perceived opportunities to start new collaborations with junior faculty as a way to maintain research productivity as well as support the junior faculty's efforts towards tenure. At least one chair was concerned about the ethical implications of asking junior faculty to collaborate on projects. She worried about the perception that the chair may have coerced the junior faculty to participate (Jennifer).

Many faculty members change their publication behaviors while serving as chair. Some chairs supplement or substitute longer form article and book submissions with shorter pieces. Chairs turn to essays, blog posts, and popular magazine and newspaper opinion pieces as a means to maintain the momentum of their research agenda. One chair argued that these forms are importance because "They become little petri dishes where you can kind of experiment with an idea in four paragraphs…" (Charles). Another common practice chairs used to maintain productivity was to publish data and scholarship from research completed prior to assuming the role of chair. Publishing previously collected data allows chairs to contribute to the publication analytics of the department while keeping a research agenda afloat until the chair's tenure ends. Chairs also described publishing old conference papers (James), "stuff already in the pipeline" (Karl), and travelogue journal entries (Sam).

A few participants indicated that the framework or focus of their research changed as they assumed administrative duties. Some chairs move away from empirical studies, which might require time-intensive data collection processes, such as fieldwork or laboratory work (Bill; Steven). Chairs primarily expressed dissatisfaction with these changes. For example, one chair suggested that he lacked the time "to sit down and engage with some of the really deep problems" (Andrew). A few participants discussed taking on different types of research-related projects such as digital humanities (Adam).

Positive perceptions of productivity. Given new strategies to cope with the lack of time for research, some participants described research productivity successes while serving as chair (Adam; Michelle; John). When discussing productivity, chairs always qualified the claim with a concern to temper the success, such as being disappointed that they were no longer first author on publications (Edward). Some chairs suggested that once a chair publishes all their extant research, productivity might wane as the chair engages less in new research (Daniel).

Perceiving Administrative Value of Research

Participant responses suggest that chairs perceive that their researcher reputation and active research agenda provides value to enacting research-related roles and responsibilities in support of faculty productivity. I anticipated that a chair's reputation as a researcher and active research agenda might influence the power and authority that faculty and administration ascribe to them as they support faculty productivity. According to Gmelch (2016), service to faculty and administration limits the power and authority of the chair. Furthermore, a chair's expertise as a researcher or scholar informs how faculty perceive the chair's legitimacy (Chun & Evans, 2016). Three primary themes of findings emerged. According to participants: (1) chairs perceive themselves, and believe faculty and administration perceive them, as at least satisfactory researchers; (2) chairs perceive that their research reputation informs how they enact research-related roles and responsibilities with faculty, and (3) chairs perceive only limited benefit from their research reputation with administration.

Perceptions of Research Reputation as Satisfactory

Personal perceptions of reputation as researcher. Based on participant responses, most chairs assess themselves as having at least a satisfactory reputation as a researcher. Most chairs hesitated to describe themselves as having an exceptional reputation as a researcher. Chairs agreed that their reputation as a researcher is a central to their professional identity. Chairs without an active research agenda often conflated their current reputation with their career reputation (Mark; Walt). Chairs nearing the retirement milestone tended to look back positively on their careers as researchers. A few chairs indicated that their reputations were significant enough to influence the direction of their discipline's research (Charles; Karl).

Perceived reputation among faculty. Most chairs believe that their reputation as a researcher among faculty is at least satisfactory. Chairs indicated that they based these assumptions on their daily engagements with faculty (James). Most chairs who were recent external hires tended to see their reputation with the faculty more positively because the department had expectations of their reputation when they hired them. Similar to their perceptions of their reputation, older chairs believed that faculty focused more on their career reputation as a researcher over their current reputation.

Administration's perceptions. Few chairs reported any direct interactions or communications with administration regarding their professional reputation as researcher. In the absence of direct evidence, most participants ascertained that they maintained a satisfactory reputation as a researcher with their dean. External hires suggested that their reputation was likely one factor in their hiring (Bill; Brian, Andrew). Despite generally positive perceptions of their research reputation among their college or school's administration, some chairs indicated that administration valued their reputation as an administrator more.

Reputation as Researcher Informs Responsibilities with Faculty

Participant responses suggest that reputation as a researcher informs how chairs enact research-related roles and responsibilities with faculty. Chairs discussed how their reputation as researchers served to role model departmental research expertise and productivity expectations and enhanced their authority with the faculty. One chair speculated that his college preferred that chairs are productive because, "they have the respect of the discipline" (Ray). Other chairs' perspectives suggest that active research enhances the chair's authority with faculty. One chair offered that a research reputation puts chairs in an advantageous position when entreating faculty to be productive by providing a "moral authority" (Adam). Chairs also described how junior faculty approached them to review work or seek advice because of their reputation as an experienced researcher. For example, one chair offered that junior faculty had come to him to receive guidance on the decision to spend their time pursuing grants or publishing (Daniel). Most chairs who were recent external hires tended to see their reputation with the faculty more positively because the department had expectations of their reputation when they hired them. For example, as an external hire, Brian's signing was contingent upon assurances that the high performing junior faculty would not leave for other schools if he accepted the position. Brian expected the faculty to stay and build the department's research reputation. Finally, two chairs indicated that their research agenda and reputation directly influenced the research focus of their departments (Charles; Karl).

Chair's research agenda and reputation not that important. Some chairs presented a countervailing view of the importance of a chair's research reputation and research agenda. Chairs perceived the nexus of research expertise with the endowed chairs instead of department chairs (Mark). Other chairs did not perceive where they had the authority to act as more than just a "middle manager" (Matthew; Steven). Participants did not discuss the importance or unimportance of reputation as a product of individual, department, or school differences.

Reputation issues of associate professor chairs. Some associate professors serving as chairs held concerns about their reputations as they directed departmental improvements in research productivity. For example, one associate professor chair worried that the faculty might question his legitimacy as a researcher due to a lack of experience with large sponsored project awards (Matthew). However, another associate professor chair perceived that his department's senior faculty respected him as a researcher despite his lower-ranked status (James). This perception was important because it meant that the senior faculty believed he was qualified to evaluate their scholarly work.

Researcher Reputation Informs Responsibilities with Administration

Compared to chairs' experiences of the value of their reputation with faculty, participant responses suggested that chairs perceive negligible value to their research reputation and active research agenda with administration. Chairs observed no influence of their research reputation on the school's resource allocation processes. Chairs contended that other institutional factors were likely more influential. However, at least one chair suggested that poor performance, such as failing to provide budgets on time, or requiring constant reminders to complete tasks, might affect resource distribution (Adam). Another chair relayed a story of his dean's unexpected intervention in his department's researcher hiring practices. The perceived overreach suggests that reputation as a researcher carries limited influence to stop administration from intervening in departmental business decisions (Andrew).

Professional Identity and Career Aspirations Growth

Participant responses suggest that researchers experience growth to their professional identity and career aspirations while serving as chair. Chairs carry their experiences and beliefs as faculty members and career researchers to the role of department leader as they enact research-related roles and responsibilities. The findings also show that exposure to new experiences as chair informs how they perceive their role as researcher in limited contexts only. However, serving as chair exposes the researcher to new skills, environments, and career opportunities, which inform career aspirations and choices. Those career choices have implications for the departments and institution’s support for faculty research over time. In particular, one interesting finding was that associate professors struggle with career concerns while serving as chair. Based on observations, chairs’ offices also reflect their dual roles as researchers and administrators. Despite experiencing growth in professional identity, most chairs continue to place highest value on the researcher role as their primary professional identity. However, some chairs’ observations of career choices contested that assumption.

Perceptions of their preparedness for role

Participants’ experiences as faculty members shape their perceptions of their preparedness for the role of chair. Some chairs contended that they felt unprepared to be a successful chair. However, nearly all chairs commented that the institution made some formal training available to them. Even when they pursued no formal training, many participants indicated that they prepared for the role of chair through other experiences. Chairs cited previous administrative positions, such as directorships of undergraduate or graduate studies, as important stepping-stones to becoming a chair. Chairs identified other experiences as influential to their administrative training such as managing a research center (Adam; Sam), chairing professional organizations (Sam), and running a restaurant (Michelle). Finally, participants revealed that mentors and colleagues serve an important role in socializing the chair.

Researcher Role Informs Chair Role and Responsibilities

Some chairs draw upon their experiences as researchers to inform how they enact their research-related roles and responsibilities as chair. Chairs perceived commonalities of puzzle-like challenges between research and serving as chair (Jennifer; John). Some chair brought research experiences to help establish new research standards in their departments (Karl). Another chair cited management of large research projects as providing preparation for the role of chair (Dana). Chairs' conceptions of research also informed how they put Academic Analytics® into practice**.** One chair remarked that his focus on analytics in his own field informed his approach to being chair (Brian). Participants also suggest that some of the traits required to be a successful researcher apply to being a successful chair. Participants emphasized the importance of bringing the thoroughness and organization of their research efforts to the role of chair. Participants also asserted that the "pack animal" nature of their department (Walt) and their empathy and cynicism around faculty research issues (John) also informed their activities and perspectives as chairs.

Chair Role Informs Researcher Role and Responsibilities

While chairs tended to attribute some influence of their researcher experiences on their approach to serving as chair, they identified only a limited influence of the chair role on the researcher role. Most respondents observed no influence on their role as a researcher. These chairs tended to notice a strong division between the roles. A few participants acknowledged that how they perceive the concept of *research productivity* changed while serving as chair. Some chairs cited their experiences with vanity journals and tenure and promotion processes as contributors to their understanding of their own research and research productivity. Chairs either increased or decreased the importance of journal prestige for their publications based on their experiences with faculty publications (Matthew; James). Serving as chair reinforced one faculty member's respect for faculty who were actively engaged in a research agenda instead of ignoring their responsibilities as researchers (Steven). Participants seemed ambivalent about whether serving as chair improved their research efficiency. Some chairs reported that they experienced growth in personal and interpersonal skills such as entrepreneurialism, persuasive communication skills, and extroversion that would help them as researchers. Chairs also suggested that they became more collaborative as chairs. The opportunities to participate in collaborative research as chair informed how some researchers started thinking about their own research (Brian; Dana).

Experiencing the institution as a political environment. Serving as chair provides researchers new opportunities to expand their knowledge and experience of the institution as a political environment. One common theme of participants' responses regarded the importance of relationships they developed with other chairs. Chairs rely on other chairs to help navigate the political landscape of the university. Chairs exchange information, collaborate, and commiserate with other chairs as they experience the institution. A few chairs contended that they belonged to a "semi-organized caucus" (Andrew) of chairs that meet over beers to discuss mutual interests. One chair admitted that the caucus meets with the deliberate intention of "circumventing the dean" (Andrew). Chairs compare notes on what the dean tells them individually to get a more complete picture of an initiative or decision.

Chair offices reflect multiple roles. One observation I made during the interviews was that department chair offices often reflect chairs' multiple roles as administrators, teachers, and researchers. Faculty members tend to carry their research, personal lives, and teaching passions into their department's administrative spaces. Objects on the walls, desks, and shelving in chairs' offices reflect the faculty member's career narrative. Chairs prominently displayed pedagogical items, items that reflect the chair's institutional allegiances, and logos and awards from professional organizations that reflect membership in research networks and reinforce research legitimacy. Chairs personal interests and passions also emerged through more unique items that reflect their broader personal identity. In contrast to shelf spaces, desks tended to reflect the delineation between researcher and administrative roles.

New Career Opportunities and Aspirations

The findings show that serving as chair exposes faculty members to new career opportunities and aspirations. As chairs expand their professional network across campus, interact with administration, and learn new administrative skills, they evaluate their professional identity and career goals. Some chairs perceived their time as chair to be a crossroads in their career. Participants suggest that the career options for a full professor are limited. Chairs decide whether to return to the faculty as full-time researchers, continue as administrators, or forge a new path. Regardless of the choice, serving as chair allows faculty members to consider full-time administration at a later point in their career as a viable career option.

Career disruption. According to some participants, becoming a chair disrupts careers and creates uncertainty. For some faculty members, serving as chair disrupts the career faculty lifecycle. Associate professors in particular expressed concerns that they would be unable to meet the requirements for tenure. Experienced chairs entreated associate professors to avoid accepting a position as chair (Sam; Jennifer).

Career options for full professors limited. Participants also noted that limited career options exist for faculty after attaining full professor status. This perceived limitation caused chairs to question their career options and aspirations. Participant responses reveal chairs' fears over career stagnation. Chairs cited the highly competitive nature of earning a new position, such as an endowed chair or deanship, as reason for concern. No chairs mentioned leaving academia for other industries or interests, except as it pertained to retirement.

Reconsidering career aspirations. Participants suggested that the chair position served as one crossroad in a faculty member's career (Ray; Steven). Some chairs perceived their tenure as a protected space to think about the next career steps (Ray). Some participants suggested that they would be unable to return to the same faculty role after serving as chair. Chairs suggested that serving as a department leader transformed them and provided administrative experience that "opens up other kinds of doors" (Adam).

No interest in administration. The majority of participants did not declare an immediate interest in pursuing an associate dean or dean position as the next step in an administrative career. Typical reasons chairs relayed included wanting to maintain autonomy and independence (Andrew), being too near the end of their career (Bill), and having no further career goals as an administrator (Brian). Older chairs in particular were more interested in retaining their position as chair until they retired. Particular characteristics of the position of dean did not align well with some participants' interests or perceived strengths such as becoming too distant from students (Mark) or requiring extensive social interactions with donors (Michelle).

Future role in administration. Despite acknowledging the negative aspects to serving as dean, some chairs still expressed interest in pursuing a future in administration. Chairs qualified their interest by suggesting that they would need to meet certain personal criteria in order to move to administration full time such as family considerations (James). Chairs who expressed an interest in pursuing an associate dean or dean position felt as though the position of chair was preparing them for that possibility (Jennifer).

Researcher Identity First

Regardless of how serving as chair informed their professional identity, most participants considered their researcher professional identity more important than their identity as an administrator or department leader. Participants used very firm language in describing their primary professional identity as a researcher. However, some chairs offered perspectives that softened the assumptions of the researcher as primary professional identity. Dana contended that her professional identity is more fluid. Similarly, Margaret reflected on how serving as chair at certain times in a faculty member's career influences how they think about their professional identity. In examining her tenure as chair near the end of her career, she identified how that service had enabled her to make life transitions.

Conclusion

Using data collected from interview questions, observations, and documents, this study focused on department chairs' enactment of research-related roles and responsibilities at one public research university undergoing institutional striving. The findings help to explain how chairs enact research-related roles and responsibilities within the department and in external environments in support of faculty productivity. The data suggest that chairs assess department research productivity, foster the department's research environment, facilitate faculty research processes, and support researcher careers in support of faculty research productivity. Chairs engage faculty, colleagues, research networks, administration, social networks, and business processes within the department and in external environments as they enact their roles and responsibilities. One surprising finding was the central role that chairs play in putting Academic Analytics® for research into practice to support the institution's participation in a prestige research economy.

This study's findings also showed how chairs negotiate the dual roles of career researcher and department leader as they enact their research-related roles and responsibilities. The findings suggest that chairs use different strategies to maintain research productivity. Creating time for research and transforming research agendas were the two primary strategies chairs use to maintain research productivity. Chairs also perceive administrative value to their research agenda and reputation as they support faculty productivity. Participant responses did not indicate that research agenda and reputation helped them as they engage with administration. Chairs report that their experiences, attitudes, and beliefs as a researcher inform how they approach their research-related roles and responsibilities as chair. Serving as chair shapes a faculty member's perceptions, attitudes, and beliefs about research, but does not necessarily shape their professional identity as researchers. Faculty negotiate serving as chair by developing new perspectives about career possibilities and opportunities, but maintain an allegiance to their researcher identity.

CHAPTER 5

FINDINGS

The purpose of this explanatory case study is to examine the research-related roles and responsibilities of department chairs at one public research higher education institution. In this chapter, I present the interview and observational data that addressed the study's two research questions:

Q1: What are department chairs' research roles and responsibilities as department leaders?

SubQ1: How do department chairs support faculty productivity inside the department?

SubQ2: How do department chairs engage environments outside the department to support faculty research?

Q2: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders?

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

Southern Research University (SRU) served as the selected site. Currently, SRU is undergoing a strategic shift in its research mission in order to compete in a prestige research economy. This "striving" (O'Meara, 2007) for prestige creates opportunities for department chairs to enact research-related roles and responsibilities as they put into practice institutional initiatives to improve research productivity. Appendix G provides brief descriptions and background information for the participants of this study.

Research-Related Roles and Responsibilities

Evidence from interviews and observations revealed that chairs' research-related roles and responsibilities as department leaders tended to fall into one of four thematic categories: (1) assessing department research productivity, (2) fostering the department's research environment, (3) facilitating faculty research processes, and (4) supporting researcher careers. Chairs primarily support faculty productivity within the department. Chairs' research-related roles and responsibilities extend into external environments when they engage with deans to implement productivity improvements, interact with institutional business processes to remove obstacles to productivity, and use their social and professional networks to facilitate collaboration and resource sharing. Through these internal and external roles and responsibilities, the chair leads change to align the department with institutional expectations of research productivity and its assessment. Depending on the status of the department's research productivity, the enacted changes might be incidental to gain efficiencies or transformational to realign the department.

Assessing Departmental Research Productivity

As the demand for improving research productivity intensifies at SRU, chairs and deans communicate about research performance and other productivity policy. The study's findings suggest that chairs assume a central role in fulfilling administration's directives to improve institutional research prestige through departmental research productivity assessment. Chairs experiences, beliefs, attitudes, and values inform how they make sense of messages from administration. Chairs reframe messages to build faculty consensus regarding productivity directives. Within the department, chairs integrate productivity standards at the request of deans. In particular, the findings reveal that deans at SRU task chairs with putting into practice business academic analytics for research through the Academic Analytics® proprietary business analytics service. Throughout these processes, chairs encounter challenges from uncertainty in messaging, entrenched organizational practices, and the realities of external research funding as they assume leadership over productivity directives in the department.

Receiving Communications about Productivity

Participant responses indicated that chairs are cognizant of their role within the process of receiving, making sense of, and communicating policy regarding research productivity to the faculty. While few chairs had heard of the term “striving” (O’Meara, 2007), chairs understood that the university had shifted its strategic planning under the new administration towards improving institutional research prestige. Dana’s dean reinforced research productivity at the annual chairs’ retreat where “thinking about the broader research profile of the department is an ongoing theme, all the time.” James perceived clarity about his role in the process of improving productivity: “I'm a disseminator of policy. And the implementer of policy, and a returner of reports.” According to Edward, the lack of message clarity problematized his decision-making around productivity. Absent of clear instructions from the dean, he considered his role in the process as “the adapter” between the department and administration. In this role, he interpreted the directives so that he could determine if the department could meet them. Considering a recent message from the Vice President of Research at SRU, he stepped through the implications to his department: “Okay. Well, where are we close to what he wants already and how can we contort ourselves to get what they're looking for, while at the same time meeting our practical day to day needs?” Awareness of their active role in productivity directives suggests that chairs have some agency to interpret how they enact research-related roles and responsibilities as responses to these messages.

Many chairs received messages regarding the institution’s new targets for external grant awards. Michelle, a recently appointed chair remarked, “They're not even making any bones about it, which is fine.” For chairs in Arts and Sciences departments, the administration’s messages implicated the STEM fields (science, technology, engineering, and math) fields as under the greatest pressure to improve productivity (Adam). Administration expected departments in these fields to double external funding within the next 5 years (Bill; Edward). Corollary goals across schools and colleges included increasing the population of PhD students (Mark; Bill), scholarly publications (Mark; Sam; Dana), and departmental prestige (Jennifer).

Chairs also received messages regarding new initiatives to facilitate research productivity. SRU formally established four new research centers (Thomas; John). One of the goals of this initiative was to increase emphasis on collaborative interdisciplinary research (John). Administration and deans also sent communications regarding new productivity enhancing programs targeting junior faculty but available to all faculty. Participants mentioned “publisher in residence” (James) programs and grant-writing workshops (Charles) as a few of these initiatives.

Making Sense of Productivity Messages

Chairs rely on their understanding of their department’s ability to meet research goals and their personal experiences as researchers to make sense of productivity messages. Reconciliation of administration's messages with departmental realities left some chairs doubtful of the institution's ability to meet its goals. Edward challenged the primacy of research among administration's directives, calling it "one of a litany of priorities now." He was also very cynical about the institution's ability to improve productivity. To Edward, the institution's "top down" approach to the initiative did not align with the reality of the departments "on the ground." The institution's repetition of demands for a "return on investment" for providing departmental new hires research startup funds also alarmed Edward. He considered the approach a risk to the entire university. He admonished, "Go to Chronicle of Higher Education and read hundreds of papers on it. Research never yields a profit to any university." Edward argued instead that the institution needed to increase up front funding of research in order to "get more on the backend."

Adam contended that the recent productivity communications about the STEM fields to increase grant awards created an "ancillary pressure" to improve performance in other departments even if the department was not a significant grant awards recipient for the institution. As chair of a department focused on book scholarship and publication, Adam interpreted his dean's message as a directive to publish books with greater frequency. The chair of a department with both traditional scholarship and creative activity, Ray struggled with the meaning behind the message he heard about STEM department productivity. He questioned whether administration's focus on the STEM fields implied that it valued his department's creative and scholarly productivity less. He worried that resources for his department might shift to STEM fields in the future, although he had not yet seen evidence of that trend. He contemplated, "So that's something that, in a dark moment, one might worry about for the future, but I'm not paranoid about that right now."

A few chairs voiced concerns that their department was set up to fail because of the previous administration's focus on increasing enrollment and emphasizing undergraduate teaching. According to Margaret, SRU's expectations of productivity, coupled with heavy teaching loads, escalate the stress levels of an already pressured faculty. She admonished, "In a way, the pressure up the line is not helpful. Because… the faculty tend to interpret pressure to write more grants, but also handle an increasing number of students, as an impossible conundrum." To Andrew, a STEM chair, productivity was a simple numbers game he could not win. He pointed to his department's student to faculty ratio as a prime example of the challenge he faced attempting to get faculty to produce: "In 1998 [SRU] had 18,000 students roughly. This department had 31 faculty members. When I came two and a half years ago, [SRU] had 36,000 students and this department had 27 faculty members." Andrew acknowledged that he had revisited the department's curriculum as a prerequisite to improving research productivity.

Chairs in STEM fields and underfunded fields also perceive the external research-funding environment as a threat to improving productivity. Some chairs characterized national funding in their STEM fields as "flat" (Andrew) or "utterly dried up" (Edward). Thomas compared his experiences as a researcher awarded a National Science Foundation (NSF) grant to the current funding environment. He recalled that, "the first NSF grant that I got is basically the same amount of money that [sic] the last NSF grant that I got." The failure of external sources to increase funding to offset skyrocketing costs affected his department's odds of meeting productivity demands. The current political climate also informed the availability of funding for marginalized fields, such as smaller "studies" departments. Karl's small department engaged in research topics that external funding sources often viewed as problematic to fund, such as race and gender. He cited the current political climate of the country as a factor "moving against us" when seeking funding. Merle likewise claimed the Trump Administration's drive to cut federal research funding created a hyper-competitive environment that had "more faculty fishing out of the same pond." As the chair of department focused on creative activity, Walt also perceived the current political climate as a threat to receiving resources. He felt very fortunate that SRU had not yet experienced cuts to funding of performances. However, compared to funding for the sciences, he voiced concerns about the potential for a future reduction in support.

Chairs also doubted that SRU currently possessed the infrastructure, including researchers and assets, to improve productivity. Edward laid out the issues in some STEM field research at SRU from his perspective:

> Startup packages are laughable, and the space concerns for some departments are great… There's a couple of departments that just have, I mean, just to be honest, just truly unacceptable lab conditions. They're unsafe. So when I hear this, oh, we're gonna do all these big things for research, you know - the idea of having a safe working space where you can perform chemical experiments without worrying about fumes, or a floor that doesn't have holes in it. That's just your bare starting point.

Voicing concerns often earned Edward a rebuke. "When I bring up low startup and …the limits of the research infrastructure, I'm probably walking on thin ice when I say this, I actually get attacked and yelled at sometimes. Basically saying, you know, deal with it."

Other STEM and non-STEM chairs echoed Edward's concerns regarding the inability of their department to compete in hiring top-performing researchers given the quality of SRU's start-up packages. Chairs perceived low-end start-up packages as "a sore spot (Bill)" and a challenge that put SRU "well behind our competitors" (Thomas). Mark contended that the resources and support structures needed to grow research productivity must focus on hiring technicians and creating a lab infrastructure so that, “a faculty member doesn't have to walk into his or her lab and do anything themselves.” Shifting the burden of laboratory logistics to technicians and graduate students optimizes the faculty member’s role in the research process. Mark still claimed that, despite the undergraduate growth, SRU had not invested in the graduate and research support structures necessary for the institution to create a sustainable scenario for productivity.

Communicating Productivity Message

Participant responses exposed chairs’ use of different tactics to communicate messages to faculty regarding research productivity. The presence or absence of transparency in communications was a theme of participants’ responses. Some participants felt it was best to be transparent in their communications with faculty. Adam reflected on how the reality of capitulation informed his approach to delivering administration’s message. He contended that he was not going to lie to his faculty or conceal the directives. He argued, “We are fools to try to pretend this isn't happening. You can't stonewall an administration forever. It's not going to work.”

Chairs also were transparent about how to meet new productivity goals with faculty. After a junior faculty member labeled Brian as “transparent”, he conceded that one of the best things he could do for faculty was let them learn from his past mistakes as a researcher. This required open and honest conversation about expectations, “I try to just let them know what I value, what I will back them on.” For Edward, the new reality of demands for improved productivity meant that he was looking for, “not quantity, but quality, which will lead them faster to a path that I was real slow getting down in terms of funding.” Bill echoed this sentiment. He contended, “No one is in the dark about what the expectations are. And we discuss the Academic

Analytics® data in faculty meetings to see, 'Alright. So you want to move up four places. What has to happen?'" The chair's transparency helps chairs and faculty to navigate the uncertainty surrounding administration's productivity directives together.

Other chairs chose to reframe messages from administration regarding productivity. Sam echoed a few chairs when he discussed the complexities of explaining to faculty how tenure requirements might change. Sam received a message that tenure would prioritize journal article publication. The dean's message conflicted with the reality that half of his department's faculty published books, which require more time to write than articles. Faculty members who write books instead of articles for tenure risk appearing less productive in annual reviews. Sam insisted, "I have to decide when the sky is falling, not the Dean." He contended that if he were honest with the faculty, "they would be scared to death." Sam believed his reframing strategy allowed him to get the faculty's attention when it mattered most. He affirmed, "When I do go to faculty or staff with issues that… the sky really is falling. They know it's true." In Sam's case, the dean allowed the department to use a ratio of books to articles to determine tenure.

Spinning the message and deflecting blame allowed Charles and Andrew to align with the faculty in order to build consensus on new productivity goals. Charles pitched the changing expectations as an opportunity to the department instead of a threat. To Charles, talking about improved productivity with faculty became a way to, "start talking about how these larger institutional pressures could be something that we would capitalize on in our own way to advance our own interests." Charles acknowledged that only a few faculty responded to that message and began pursuing additional grant opportunities. Chairs more often discussed meeting the new goals as a concession. Andrew used his dean as a "useful bad guy" to soften the faculty's outrage at the demand to increase grants. He remarked, "I would say, 'Hey, the Dean is really after us. I really need you guys to be applying for grants.'" Andrew reported that the junior faculty responded to his strategy.

Some chairs conceded that when it came to delivering the message of improving research productivity, a chair could only delay the inevitable so long. In the end, the chair needed to "toe the party line" (Thomas). Improving research productivity was the new reality according to Adam and Sam. They believed that taking a stance against directives to improve productivity would be detrimental to their departments in the end. By demonstrating that the department made an effort towards the goals in each annual report, Adam could shift some of the burden of finding solutions to productivity issues back on administration. He contended, "We're doing everything we can. That's all I can do. And if it doesn't work, then give me something you think will work. We'll try it!" Sam acknowledged that his dean was very generous rewarding progress towards improved productivity by providing additional support for research. To receive the rewards, the dean needed to know that the faculty was "putting something into it". Sam reinforced this quid pro quo relationship with his faculty, "So almost everything that I ask [is], 'How much are you putting in as a department? …What we have as a department is coming from you.' But he wants to know that we're committed."

Putting Business Analytics for Research into Practice

The central role of the chair in putting research analytics into practice emerged as one unexpected finding of the study. Participants revealed that chairs and deans used a diversity of informal and standard analytic methods to track faculty productivity. The most commonly mentioned method was the Academic Analytics® service for research. Academic Analytics® is currently the most popular proprietary business analytics service measuring teaching, learning, and research productivity (Becker, S. A., et al., 2018). SRU's administration began experimenting with Academic Analytics® several years ago to track learning outcomes, but recently affirmed its importance to the institution's research strategy with deans and chairs. In response, deans tasked chairs with putting Academic Analytics® into practice as they improved research productivity in the departments. According to participant responses, the tasks involved in incorporating Academic Analytics® were some of the more polarizing research-related responsibilities of chairs. Chairs offered a broad range of attitudes and beliefs regarding the effectiveness and perceived administrative uses of research analytics. While most chairs saw a benefit to research analytics in improving the productivity of their department, some chairs perceived it as a threat.

Throughout the interviews, chairs often conflated attitudes towards Academic Analytics® as a reporting service with more general directives and messages regarding research productivity from administration. For the purposes of this section, I focused only on responses associated with business analytics for research as a concept and Academic Analytics® as a proprietary service. Departmental and school/college differences also informed how department chairs engaged in putting Academic Analytics® into practice.

Academic Analytics® at SRU. According to participants, one of most direct ways that administration's research productivity directives affected chair's responsibilities is putting into practice Academic Analytics®. The reports from Academic Analytics® enable administration and chairs to benchmark department's research productivity against other departments on campus, peer institutions, aspirational institutions, and national medians. Within the last few years, some deans created tiers of productivity to slot departments (James). The deans tasked chairs with putting Academic Analytics® into practice within the departments to facilitate data collection and remediate productivity issues.

Chairs reported that they also rely on other analytic tools to determine faculty productivity such as Google Scholar™ (Bill; Edward), Scopus H Index (Matthew), Social Sciences Citation Index (Matthew), and field-specific citation indices (John). Deans and SRU's administration also employ these analytic tools. Chairs collect data on productivity and report them back to administration. Deans ostensibly use the data to create reports and set productivity goals for the departments. Chairs use the reports as a roadmap for improving productivity within the department. The data provide administration with one measure of institutional research prestige and identifies strong and weak departments, programs, and individuals.

As part of the document collection, I reviewed three annual Academic Analytics® radar reports from one SRU department. According to the documents, administration assesses four vectors of productivity: citations, book publications, article publications, and grant awards. The analysis indicated that the reviewed department exceeded a national median composed of 111 departments in three of the four categories (See Figure 1.). During the years reviewed, the department failed to meet the nation median in Awards.

Concerns about Academic Analytics®. Chairs discussed three general categories of concerns about Academic Analytics®: (1) tools and processes, (2) uses of the data, and (3) threats to the nature of research. Chairs concerns reflect uncertainty about the repercussions on faculty of putting administration's directive into practice. Some chairs also expressed uncertainty regarding their role in the process of integrating Academic Analytics® into their department as they attempted to satisfy the concerns of faculty while meeting the requirements of administration.

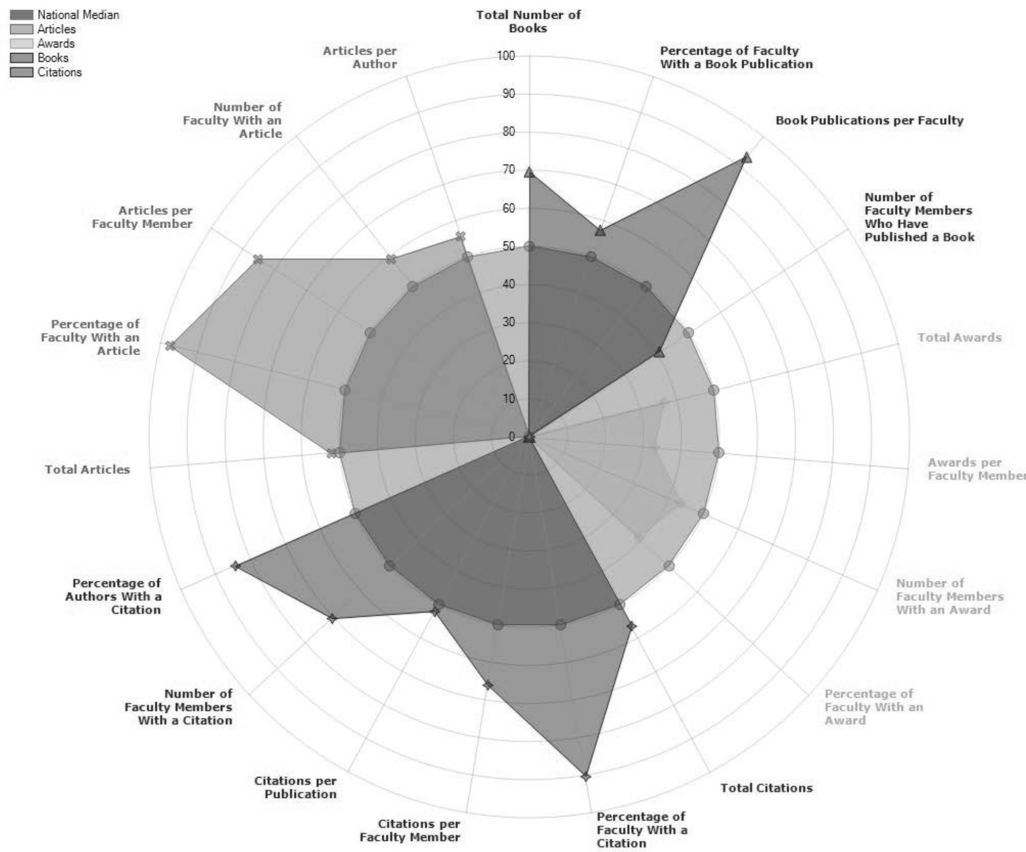

Figure 1. 2015-16 Academic Analytics® Radar Report for one SRU department. Copyright © 2016, Academic Analytics, LLC. Collected document. This illustration shows the categories available for research analytics and the department's performance in those categories.

Tools and processes. Chairs voiced concerns about quantifying research productivity through a tool. Some chairs suggested that evaluating research performance through quantitative measures did not capture all nuances of research productivity (Adam; Walt). According to Steven, analytics has limitations as a tool: "It can cast a wide net, but it's still a net. So some things aren't caught in it, and so you have to justify the work that goes into it." Dana contended that Academic Analytics® is a "flawed instrument", but flawed equally for everyone. She still conceded that some disciplines might not receive adequate representation for effort. Edward offered that more comprehensive methods than the "one dimensional" use of analytics existed. To Edward, a better evaluation method would include, "…the actual research product, impactful papers, which cause people think of [SRU] as a leader, and producing graduate students." He believed a blended tool approach using Google Scholar™, which he preferred for its transparency and comprehensive publication data, was preferable to Academic Analytics®.

Uses of data. While most chairs believed their dean possessed a reasonably clear sense of how to use the analytics data, some chairs had concerns about transparency of that use. Ray pondered, "It's not clear where their numbers are coming from. So you kind of have to just trust these numbers that are coming out of this black box." Mark echoed many of Ray's sentiments. He conjectured that administration did not share data because, "… they're afraid people misread it." He intimated that administration knew from the data that the institution was top heavy with undergraduate students and "way under" with graduate students. Although he had seen the data, he was not sure administration was ready to "convey the bad news" more broadly to the campus. Chairs' uncertainty about the uses of the data implicates administration in failing to convey the institution's goals for research and research productivity initiatives. The lack of a comprehensive plan for the data suggests that administration has yet to settle on the uses of the data.

Chairs also provided evidence to support their belief that administration does not have a clear understanding of the validity of the data. The quantitative data often lacked context necessary for an accurate picture of productivity. Andrew referred to a recent discussion with his dean regarding the department's analytics scores. The dean informed Andrew, "'You've got three faculty up there. (Points up)… I need *ALL* of your faculty up there.' And I'm like, 'Well you know I got five people over the age of 70s. (LAUGHS). I got you know, another five over the age of sixty.'" Edward recalled finding his grandfather listed as a current award recipient in the data despite having retired years ago. Identifying this unsettling error made Edward dubious of the accuracy of the data. Unsurprisingly, both chairs expressed measured enthusiasm for Academic Analytics®.

Changing nature of research. Brian and Steven argued that dependence on Academic Analytics® had the potential to change the nature of research at SRU. Brian considered the example of a faculty member who publishes a "high-impact" book intermittently instead of consistently publishing less impactful articles. He worried that the analytics favor the articles to the book despite the greater importance of the book. Brian argued that incentivizing article publication might help institutions in the short term at the expense of building a first-class reputation of impactful research. He offered a warning based on his experience at a previous institution, "when they started really relying on the Academic Analytics® and their provosts put in some incentives that really drove that annual number, I just saw a lot of short-sighted thinking in terms of research." Likewise, Steven contented that the analytics movement was a "culture shift that I think is more than saying we need to do more research. It's a culture shift that says we need to do *this* type of research." Steven was concerned that administration's reward system for productivity could reduce incentive for faculty to spend effort on alterative research models, such as community engagement research, in favor of heavily awarded research. He wondered where his faculty's regional work with rural communities fell into the quantitative award metrics of analytics. He decried, "Well, that was definitely not going to get picked up by Academic Analytics®, but where does that enter into the conversation? Again… it ends up with a pat on the back, thanks for doing it." He contended that analytics would privilege some research programs, such as those with national attention, over other ones. Steven also firmly believed that Academic Analytics® is ultimately a "faculty governance issue." He worried that, "It's not driving the ship yet, but boy is it close." The implication for chairs is that faculty who focus on non-fundable research might find they rate lower than faculty who focus on research that is popular to fund. Artificially lower ratings for productive faculty has implications for fair tenure and promotion processes as well as faculty retention.

Chairs of departments with a creative activity research component tended to put Academic Analytics® into practice less. Ray chose to push back on the full integration of Academic Analytics® into his department. He implied that his department was going to balance administration's directives with established departmental goals and research directions. According to Ray, the faculty knew the research goals of the department. He affirmed, "Our goals are not being dictated by trying to get to the next level on those charts. We're setting our own goals by our own priorities. And then we'll let the charts catch up with us." Ray indicated that he planned to use Academic Analytics® reports "to remind ourselves of those goals we've set." Likewise, Walt revealed that he was not engaged in the same debates over analytics as chairs from other departments given his department's focus on creative activity. Walt contended that his dean had been "flexible and understanding" regarding analytics. Instead, of shoehorning the department into the same criteria as STEM or humanities departments, the dean asked Walt's department to help shape how administration ought to evaluate its productivity. Jennifer's school had just started an analytics initiative. She was working with the faculty to define creative activity productivity before incorporating it into tenure and promotion processes. The responses from these participants suggest that deans rely on chairs as research experts to shape how the university ought to evaluate creative activity for productivity.

Positive perceptions of Academic Analytics®. Despite concerns, most department chairs saw positives to putting Academic Analytics® into practice. Non-threatening, clear messages about analytics from the deans and perceptions of the usefulness of the tool helped many chairs to internalize the value of analytics and the importance administration placed on measuring productivity. As an external hire, Brian recalled his first exposure to Academic Analytics® during one meeting with the dean and department heads. The dean shared a spreadsheet showing a productivity summary for each department. While uncomfortable, the exercise helped galvanize Brian into focusing the department on productivity. He declared that the message was “why I started tracking, and wanted to know exactly where we were behind, and what I know about our faculty where we could very easily not be behind.” He contended the dean’s message was clear as to, “What they were tracking, and how they're going to be presenting it. Right off the bat.” Dana was confident of her department’s ability to meet the new goals defined by Academic Analytics® to improve productivity. Her dean provided a quota of two publications a year per researcher. Dana contended that the dean offered a clear goal the department could meet. In comparing the goal with her knowledge of the field, she asserted that, “That's the average and that's…, [where] a research-active department in this field should be at, and that's absolutely right. Two articles a year is a perfect standard.”

For other chairs, the dean offered less specific instructions for using Academic Analytics® but empowered the chair to lead the process of adoption. The message Adam received from his dean was that, "Here's where we are starting to take a look at. We want you to go and try to figure out… how you’re going to make yourselves more productive.” Adam was not sure the dean knew exactly what he wanted to accomplish with the data, but he was thankful that administration was not “using it as a bludgeon yet.” James contended that he did not receive messages with his analytics reports from the Dean’s Office, suggesting that he needed to “squeeze another article out of people.” He admitted that the dean targeted one faculty member for a larger teaching load based on their reported production numbers. In that instance, James was able to “go to bat” for that faculty member. By empowering chairs to make decisions about how to improve research productivity, deans give chairs agency to choose how to enact research-related responsibilities.

Some chairs embraced Academic Analytics® as a useful tool to improving departmental productivity. Bill believed analytics gave him an advantage in his engagements with administration and faculty. In dealing with administration, analytics provided him visibility into his department’s ranking against competitors for resources. With evidence of improving productivity metrics, analytics then became, “a handy tool to use to ask for more” from administration. Analytics also provides hard data to disprove faculty members who contend that they could not improve research productivity. He offered, “I can tell them that eighty percent of your colleagues in this discipline, who have the same teaching load …are managing to do what you're doing and more.” Bill’s comments suggest that the analytic reports serve as symbols of authority in some cases as chairs engage faculty to improve research productivity.

Aligning the department with Academic Analytics®. Chairs reported that putting Academic Analytics® into practice changes departmental processes and culture. As a result, chairs enact research-related responsibilities as they align the department to the use of analytics for productivity decisions and strategies. Chairs reported differing levels of faculty resistance to analytics. Building faculty consensus to commit to the culture change, developing analytic benchmarks, remediating issues with journal prestige and predation, and promoting the department to external stakeholders emerged as chair-driven responsibilities necessary to put Academic Analytics® into practice.

Building consensus on culture change. Developing uses of analytics in the departments requires chairs to help faculty start new research habits. Bill referred to the arrival of Academic Analytics® as "culture change." He remarked, "'They all know what the game looks like now… if you go back 10 or 15 years, this was essentially a teaching department… And so this transformation has occurred relatively quickly, and the faculty have responded well to that." Bill's metaphor of analytics as a game helped him and the faculty make sense of the implications of analytics to their research agendas. He contended, "That sounds demeaning, but it's not. To play a game successfully, you have to know what the rules are. And then within the rules, you exploit those rules to try to quote-unquote 'win.'" As Steven collected data for productivity reports, he noticed a shift in the data his dean requested over time. He noted that, when he first started as chair, the dean asked that he include all types of publications in his analytics reports. Steven now observed, "This past year, I don't know if it was a mistake or what. Well, obviously it wasn't a mistake. It explicitly said only journal articles. Think about how that changes the academic work between your faculty members here."

Brian saw analytics as a teaching tool for junior faculty. He had the advantage of being in an analytics-intensive discipline where the young faculty were "big data-oriented folks." He discussed introducing the faculty to Academic Analytics®, "There's no real pushback at all to using it. Being rated against others by that, as long as they know what those measures are going to be." For Michelle and a few other chairs, aligning faculty to the new culture was also easy. She joked, "They're gung-ho. I don't have any researchers that sit on their laurels and say, 'Oh! I made my two papers this year and now I'm going to go play Scrabble.'" Most chairs' experiences reflected Dana's introduction of analytics to her faculty, "Okay, let's grouse about what's wrong with it, but then see what can we do. How should we be directing resources? What should we be emphasizing?” In contrast with deans’ opaque messaging about the uses of analytics data, the participants’ responses indicate that chairs were more transparent with their faculty about how analytics data affected them.

Developing benchmarks. The deans also tasked chairs with leading efforts to identify peer and aspirational institutions in order to implement departmental productivity benchmarks. Chairs tended to address these tasks collaboratively as a department (Sam; Edward). A few chairs chose to exert more control. Despite holding the role of chair as an associate professor, James assumed the responsibility of identifying peer and aspirational institutions for his department. He did not provide an explanation but contended, “I didn't open that up to the department. I just did that myself.” Other chairs contested the expectations associated with aspirational institutions. When an associate dean informed Adam of new research publication goals for his department, he began collecting evidence to support his assertion that the quotas were unrealistic. In looking at the book publication data from scholars at Harvard, Penn, and NYU. Adam contended that, unlike SRU, those schools provided their scholars a semester of research leave every 2 years. He argued back to the associate dean that,

> …you can't just say to write faster and expect that it’s going to happen. So you can berate us with it. You can bludgeon us with it. You can say look at these other schools that are doing it faster. It doesn't matter. It doesn't matter. It's not going to work. It's a blood from a stone situation.

Adam’s response indicates that some chairs perceive immutable limitations to the value of Academic Analytics® without changing the underlying institutional support for faculty research.

Remediating issues with quality. The study’s findings indicate that putting Academic Analytics® into practice informs how chairs evaluate faculty productivity for quality. The prestige of a journal or book press is an important element of the faculty member and department's publication benchmarks in Academic Analytics®. As a result, chairs generally seek to improve the quality of journals in which faculty publish. Similarly, the context and venue of creative activity informs the perceived quality of the effort. The findings show that chairs work with faculty to improve the department's overall quality for publications and creative activities. As a component of this responsibility, chairs warn faculty members against publishing in predatory and vanity journals in particular. In cases of systemic use of less prestigious and predatory journals in a department, the chairs intervene to realign faculty publication habits.

The departmental standards for acceptable journal quality was an area of concern to some chairs. When he first became chair as an external hire, Andrew took up the task of clarifying the department's admittedly vague quality standards. He believed that, "our tenure guidelines talk about 'high quality publications'. How do you decide where a high quality publication is? It's like Justice Goldberg and pornography. You know it when you see it." During reviews of the tenure guidelines with faculty, Andrew used his experiences at his previous institution as a platform to "remonstrate" some of the senior and junior faculty over their decisions to publish in less prestigious journals. Attempting to correct years of drift regarding tenure guidelines proved challenging, but Andrew believed that the payoff was a department better aligned to modern research productivity realities. Daniel's approach reflected realistic expectations given the productivity history of his department. The level of productivity he inherited as an external hire was so low that he did not think the faculty were "sophisticated enough" to publish scholarship in quality journals. He chose instead to celebrate quality work regardless of where faculty published it. He commented, "It's a challenge piece to kind of recognize excellent work without over pressuring people to the point that they're unable or afraid to attempt."

Creative activity is also subject to evaluation for quality. According to Walt, scrutinizing the context under which creative activity occurs informs the activity's quality much like journal quality. He offered that, invited international performances receive more acclaim than other types of performances. While he had not encountered faculty intentionally taking advantage of international context to trick others into believing their performance was an invited performance he suggested that he needed to scrutinize "the narrative" of each performance to determine quality.

Most chairs reported limited experience with faculty publication in vanity and predatory journals. Chairs who encountered this issue in their department indicated that predatory publishing practices most affected junior faculty and aging senior faculty. When encountered, chairs generally warned against their use but did not actively intervene to stop the publication habits of faculty. Michelle remarked, for example, that publication in predatory journals likely happens but "doesn't even hit our radar." She encouraged faculty to avoid them because they did not contribute positively to a faculty member's *curriculum vitae*. To Steven, the practices of predatory journals were "slimy" and "disgusting." As a member of multiple journal editorial boards, Steven admonished new junior faculty who confided in him that they were considering publishing in a predatory journal. He contended that the availability of start-up funds to junior faculty, coupled with their "frantic" drive to publish for tenure, created conditions that might lead a junior faculty member to go "the wrong direction" when predatory journals offered discounts. Non-intervention by chairs in publication habits of faculty in these instances might suggest that, in some departments, maintaining collegiality is more important than improving analytic scores.

Systemic use of predatory journals in a department required chairs to intervene and transform faculty to better publication habits. Chairs intervened when they perceived faculty relying on predatory and vanity journal publications to meet tenure and promotion expectations. Dana recalled the “thorny issue” of delegitimizing vanity journals when she first took over the role of chair. She recounted how some of the senior faculty were submitting articles to a vanity textbook publisher, “that kind of looked like research, but it was really in a teaching manuscript.” She contended that people moved away from vanity journals as she revised the tenure and promotion standards. Dana perceived her issue now to be with senior faculty overemphasizing the impact factor of journals to junior faculty. This created confusion and concern for junior faculty. Dana’s next challenge was to encourage faculty to publish in “very legitimate outlets that will increase the reputation of the department and the visibility of the department.”

Andrew saw a dependence on vanity journals only with the most senior faculty members who were “still making a pretense of getting published.” According to Andrew, these senior faculty members were stuck in the irony of being unable to publish in vanity journals because they did not bring in any research grant money to pay for it. Andrew also offered his experience with a twist on the vanity journal: the vanity conference abstract. He described the practice as a faculty member who will, “get an abstract published in some conference, okay? And then you dig really far and discover that he's also on the scientific committee for this conference.” He characterized the practice as “the most capricious dodge” he had seen his department. Like Dana, Andrew established new quality standards to transform old publication habits.

Promoting the department to external stakeholders. Chairs use analytics data to promote their department to administration and other external stakeholders. Annual reports give the chair an opportunity to highlight productivity improvements. After assuming the chair role for a department traditionally know for teaching, Brian set about tracking the Academic Analytics® metrics his college emphasized. His plan was to gain proficiency in reporting departmental improvement in metrics his school most valued and highlighting those metrics in the next annual report. He hoped the numbers would help him, “Try to get some of that college attention over to the researchers in our department.” To do so, he believed he needed to change how administration perceived the productivity of the department because many of the researchers were quiet about their successes. At the time of the interview, he was collecting data and creating “nice charts with lots of upward slopes that will do it for them.” Sam also used the annual report as an opportunity to demonstrate productivity. Unlike Brian, Sam did not rely on Academic Analytics® data. Instead, he continued to use the format for productivity metrics around publications, conference presentations, and grants he inherited from the previous chair. He presented the dean with “binders this thick (widens hands)” certain that the dean read his reports.

A conversation with the Research Dean in Jennifer’s school left her contemplating strategies to be more aggressive in selling her department’s productivity. While Jennifer’s school had only recently started an Academic Analytics® initiative, the dean challenged Jennifer to begin thinking about her department’s productivity as it compared to other departments. Jennifer took the understanding back from the dean that, “The message is clear, we need to sell ourselves. It's clear we have the numbers. We are doing what we need to be doing. But I can be more persuasive in how to present it.” The dean suggested that Jennifer create reports from the numbers to sell the department “internally around the University as well as externally to our donors.” She remarked, “I couldn't have done it a year ago. But now I feel like, okay, I got it.” Jennifer’s response to the dean implies that putting Academic Analytics® into practice might require chairs to develop new skills in order to enact research-related roles and responsibilities inside and outside the department.

Fostering an Environment Conducive to Research Productivity

Chairs enact their research-related roles and responsibilities to foster an environment conducive to research productivity. Job stressors affect worker productivity (Cranny, Smith, & Stone, 1992). Departmental environments supportive of research are an important factor in reducing job stressors on faculty. The evidence suggests that chairs seek opportunities to create or strengthen a common department identity and reinforce research productivity as a desirable department trait. To foster a research environment inside the department, chairs often extend their responsibilities into external environments to create and defend departmental and disciplinary research boundaries. One unexpected scenario that emerged from the findings centered on the transformative cultural changes initiated by chairs who were external hires. The background and personality of the chair, their perceptions of the responsibilities of the position, and departmental factors inform how chairs create or strengthen research productivity values.

Creating a Common Department Identity

One theme that emerged from participants' answers centered on creating a common departmental identity as a means to foster an environment conducive to research productivity. For Ray, building an "esprit de corps" among his large and programmatically diverse faculty is important. He conflated characteristics of a positive work environment, such as an "absence of discord" with productivity. His strategy to facilitate that environment was to celebrate achievements and find opportunities to get people together who "wouldn't normally cross paths." According to Ray, the point of his efforts is to "create a sense of common purpose" in the department and ensure that everyone "feels like they're part of the enterprise". Walt believed that department productivity derives from a sense a teamwork. According to Walt, faculty should understand they have common goals but as individuals bring unique gifts to the department: "We're interdependent on each other… no one person is more important than the other... We all have individual roles to play", he contended. The benefit of this approach is that faculty members are better able to sense when a colleague is straying too far from department goals or disassociating from the department. The team gives the chair an early warning to find ways to engage that faculty member again in the department's culture.

For Charles, creating a common departmental branding reinforced research productivity. He showed me a departmental branded mug and new placards for the faculty he had authorized. While the department ostensibly purchased the mugs to attract students, Charles believed that the mugs also helped to reinforce a common identity among the faculty. Charles suggested that the symbolic bond of the mugs among faculty informed their attitudes about research at SRU. He explained that some junior faculty, who had received degrees from premier research institutions, confided in him that they often felt they were floundering at "some regional backwater university" instead of working at an institution with more research prestige. By fostering a common identity through the symbolism of the branded mugs, Charles hoped that junior faculty understood that, "they're in a place that matters and thus their work matters."

Reinforcing productivity as a department value. Establishing research expectations with the faculty helps chairs reinforce productivity as a department value. Edward discussed his desire to create a department culture where all faculty members knew that research is the "clear, primary goal." He tied productivity to departmental decision-making by declaring, "one of the first things out of my mouth every meeting; to make it clear that my decisions are governed by research productivity as much as, or more, than any other concern." Daniel considered the biggest threat to his department's research productivity to be a de facto acceptance of the status quo some of the senior faculty espoused. He perceived a need to instill in the junior faculty a "new value system" that met current research productivity expectations. He worried that unproductive senior faculty would sway the junior faculty towards the older work ethic. To mitigate this risk, Daniel worked directly with productive senior faculty to ensure junior faculty were not "socializing down" to lesser levels of productivity. He also worked directly with junior faculty to share his experiences and expectations of the fields that they worked in and the "value system inherent in those fields."

The findings also show that the department meeting serves as an opportunity for some chairs to reinforce a common culture of productivity. Sam described how the department meeting unified the faculty's diverse voices in his small, collegial department. The culture of the department emphasizes unanimity of decision-making among the faculty, "from the smallest to the largest issues." For that reason, Sam considered his role to be not just the chair of the department but also the "chair of meetings." Sam uses the first meeting of the new school year to review the messages he receives at the annual chairs' meeting with the dean. As he gained experience as a chair, he could tell which messages were important to relay to faculty and which he could filter out at meetings. By hearing a common message and fostering a unified response, Sam contended that he reduced the chaos that often interferes with research productivity. He suggested that new hires are an inherent threat to this unanimity until the faculty can inculcate them to the department's collegial culture.

Dana also discussed the changes she initiated to make department meetings a place to "share good news". She reflected, "I wanted people to have the opportunity to brag on themselves a little bit, but also to make public what people are doing. And not in a nasty way."

Dana recalled a department at her old institution where the chair would review a spreadsheet of researcher successes and pass it around for the faculty to compare. Dana contended that the spreadsheet was an ineffective way to engage faculty because it put researchers on the defensive. She believed her informal strategy gave faculty with active research, “the space to talk about their research and their successes, but not in a way that is heavy handed.”

An office inventory of the chairs I interviewed also revealed furniture and space ostensibly designed, in part, to reinforce a culture of discussion and collaboration. In addition to a central desk with facing chairs, many chair offices had a separate space set aside for a secondary table and chairs (Andrew; Brian; Edward; Matthew). Other chairs have less formal seating areas with couches and coffee tables (Charles; Mark; John). We often sat in these collaborative spaces instead of at the department chair’s desk to conduct the interview. Some chairs offices have wall maps, charts, and whiteboards to foster discussion and collaboration. Brian pointed to a set of graphs taped to the wall during our interview to illustrate his emphasis on Academic Analytics® with the faculty. He explained, “you'll notice charts over there. One of the things that faculty just aren't used to seeing … where there's some competition among the departments, and people who are researchers versus, our department … being the home for the non-researchers.” In three offices, the chair referenced ongoing research discussions, which required faculty to draft out ideas on the chair’s whiteboard. The duality of the space for research and administrative work reflects, in part, the dual identity of the chair as a career researcher and department administrative leader.

Transforming Research Culture as an External Hire

Participants reported that some deans provide externally hired chairs flexibility to transform departments in order to foster a more productive research environment. Some chairs contended that underproductive research culture and reputation emerged in some departments from a historical overemphasis on teaching (Brian; Andrew). Andrew believed that to improve research productivity he first needed to address the undergraduate curriculum of his department. He contended that the university's growth in undergraduate enrollment over the previous decade had a deleterious effect on research productivity because the department had invested its resources in large classes. As class sizes went up, the previous chair increased sections of classes, which resulted in half the tenured faculty teaching low-level classes. Compounding the issue, the department required graduate students to invest more time into grading and teaching upper-level classes. Andrew considered the feedback effect of over-investment in teaching akin to "the old joke about boiling a frog." Admitting he burned political capital to initiate the strongly contested change, Andrew shifted tenured faculty to the smaller upper-level classes, converted exams and homework for all lower-level classes to online grading, and reduced the teaching load across the board from 14 to 12 credit hours. He was shocked to find that he still faced push back from faculty because, "Faculty don't like giving up their autonomy in the classroom and… You'd think faculty would realize, you know if you do this, there's no work involved. And you can spend all the rest of your time on research."

External chairs also reshape the department's traditional identity. Brian accepted a position at SRU over a department of "not so academically inclined" teaching faculty and a number of research "up and comers." Part of his efforts to improve research productivity included using open faculty lines to hire additional researchers. Brian encountered resistance to his plan from the teaching faculty, who believed that teaching was the department's core competency. Brian responded by drawing on his research background to develop a data-driven story of the department's teaching effectiveness. He went to the faculty with the results so that he could engage in “myth busting.” He contended that the primary threat to research productivity, “… is the narrative that we, at [SRU], are effective teachers and we can't risk that mission by hiring researchers. And my numbers for our department, for the last five years, show that to be a myth.” While Brian made no changes his first year, he met with each faculty member and asked them to provide one or two sentences about how he or she would prefer their peers to remember them as researchers. According to Brian, the exercise served as a means to open a dialog with the faculty regarding efforts to improve individual faculty member productivity. Other chairs oversaw the merger of programs (Jennifer), creating new research policies (Jennifer), and narrowing the department’s research focus (Andrew).

Chairs also create new programs to refocus research efforts. Bill’s department hired him to start a PhD program based on his experience initiating one at another institution. Bill contended that the program served to focus the scope of research in the department. Narrowing the scope allowed the department to market its research strengths to prospective PhD students. Bill contended that the department’s inability to recruit PhD students was historically, “as much a damper on the research as the increased workload here.” In Bill’s department, PhD students run experiments, perform fieldwork, manage laboratories and data, contribute to publications, and essentially makes research “self-sustaining.” Starting a PhD program also attracts new research faculty who wanted “a chance to start a new program that’s transformative.” The new program had served as incentive for them to hire on in his department and replace “non-research active” senior faculty who were retiring or resigned. Bill was proud that the program brought research momentum to the department. He noted that the dean positively received the results. “So usually I get something to the effect of, keep it up, and that's the message I pass along our faculty.”

Defending Departmental and Disciplinary Boundaries

Chairs also discussed defending the department's research identity as they engaged faculty and administrators across campus. Ownership of curriculum, programs, and scholarship emerged as territorial conflicts chairs negotiate at SRU. As chair of a department with an interdisciplinary research focus, Karl believed the survival of his department depended on its ability to stand as an independent entity with discrete disciplinary boundaries. Laying claim to a cross-disciplinary body of scholarship for his department created tensions with other departments. "That's actually very complicated and potentially sensitive at one level", he suggested to me. Maintaining the viability of the department required Karl to reinforce the department's disciplinary boundaries, including the permeability of those boundaries. He offered:

> If we want to be respected, we have to respect the disciplinary boundaries in other places… and that's where I have to come in sometimes with my faculty… I have one faculty member, for example that says, 'Well I do feminist theory on campus.' And I'm like, 'Yes you do. But so do others… And so, 'I am the university's feminist theorist.' And I'm like, 'Yeah, no you're not actually because there are twenty other people who do aspects of it…. You're kind of all in the same place.'"

Karl contended that accepting that the department shares scholarship and curricular domains with other departments informs how he approaches other chair responsibilities such as committees and hiring. The permeable nature of the discipline's boundaries complicated these basic tasks of the chair. To avoid issues with other departments, he taught the faculty to "keep a low profile" when engaging other faculty on campus. He suggested, "So, it also means I have to tell my faculty, ‘Look. Don't talk about the department outside…because people are constantly sensitive about the work they do… outside of the department.’”

As Karl inculcates his faculty to the realities of the disciplinary research dynamic, he also reinforces his discipline’s boundaries in his interactions with other scholars and administrators across campus. Karl expressed cynicism to me about the ability of other departments’ faculty to address the same body of scholarship with the same level of expertise as his faculty. He mentioned that he often corrects scholars from other departments when discussing their teaching or research of their shared body of scholarship. When outside faculty members insisted that they addressed the same problems as Karl’s faculty in teaching and research, Karl was clear to make a distinction between their use of the scholarship and his faculty’s use of the scholarship. “Yes, but you're not part of the department culture or conversation”, he contested. “So... if I say [we discuss] the latest [redacted field] theoretical work, most, the majority, the vast majority would go like, “Huh?... I'm like, “No. Actually we follow these things.” We actually are a different discipline at this point…” According to Karl, faculty members from other departments who spent time in his department were able to perceive the distinction between Karl’s disciplinary boundaries and their department’s disciplinary boundaries immediately.

My interviews with Andrew and Karl revealed that chairs also defend a department’s research identity from outside intervention by other administrators. As an external hire, Andrew characterized his mid-sized department’s research culture as “problematic.” One of the issues he inherited was an absence of a research focus that left the department without a center of competency to market to graduate students. The neglect of previous department leadership created conditions where the dean began to intervene in research-related decisions. Andrew contended the department’s research posture deteriorated as the dean hired researchers over the chair's head in, "Whatever the research de jure that the president was excited about." Despite the dean handpicking Andrew for the position, Andrew contended that his biggest problem was that, "I don't think I have the Dean's complete confidence … I think he thinks he can do a better job running my department than I can." Problems reached a crisis during Andrew's first year. The dean again attempted to hire a researcher for the department while leaving the logistics of the hiring to Andrew only to later pull negotiations without explanation. According to Andrew, the miscommunications and contentious decision-making over research characterized his interactions with the dean and often placed Andrew on the defensive against a dean who "has a tendency to launch plans and initiatives without discussing with the department."

Upon taking the position of chair, another chair approached Karl with details on the politics of the department. The chair recommended to Karl to protect a particular faculty member for unspecified reasons. Karl considered the request an intrusion on his decision-making. He recounted, "so it took me a couple of years to kind of push everybody out of the business of the department. But they felt they had a stake, because they were also affiliated on paper without teaching classes in the department or anything." To Karl, serving as chair of an interdisciplinary department was a constant vigil. He contended that, "So there are constituencies - I'll say it that way - amongst the faculty and administration who I have to negotiate constantly with for our survival." Andrew and Karl's stories reveal that external sources of authority, such as administration, deans, and other department's leadership, may contest or co-opt chairs' decision-making about research. Extricating the chair from these research-related responsibilities removes an opportunity for the chair to shape the research focus of the department and align faculty productivity efforts to it.

Facilitating Faculty Research Processes

The findings reveal that chairs facilitate faculty research through the phases of the research process. For the purposes of this study, I used the research process model of Kwon (2017) as a framework to describe the chair's involvement in faculty research processes. Kwon described four phases of research process effort: (1) Generating Ideas; (2) Obtaining Funding; (3) Experimenting, Collecting, Creating, and Analyzing; and (4) Disseminating Results. I asked participants questions throughout the interview that aligned chairs' research-related roles and responsibilities to the different phases of the research process. I expected to find that chairs facilitate faculty research by removing obstacles and providing research opportunities. Participants' responses tended to fall under one of five primary responsibilities: facilitating faculty ideas and collaborations, facilitating research funding, creating opportunities to perform research, removing administrative obstacles, and facilitating research publications.

By way of clarification of duties, some chairs referenced the position of Associate Dean of Research or Research Dean as formally tasked with facilitating faculty research processes. These associate deans communicate research opportunities to chairs and faculty, facilitate grant proposals, and mediate issues in the research process. The findings show that department chairs also engage directly with faculty to provide many of these services. In this sense, chairs serve as a layer of support between the faculty and associate research deans.

Facilitating Faculty Ideas and Collaborations

According to participant responses, chairs create opportunities for faculty to generate new research ideas as well as facilitate faculty collaborations. The findings showed that chairs varied in the level of their engagement in this phase of the research process. The primary methods participants used to help faculty generate new research ideas were communicating opportunities and creating conversations about research. To assist in establishing collaborations, chairs draw upon their research networks to provide faculty opportunities and information. They also cross department boundaries at SRU to engage other chairs on behalf of faculty seeking collaborative endeavors. Chairs identified cultural norms, institutional obstacles, and personnel issues as challenges that contest their ability to facilitate faculty collaborations.

Participant responses seem to suggest that chairs filter e-mails and other communications about research opportunities. Merle’s response represented a typical chair’s effort towards this task: “Ones that I see that have particular interest to a certain faculty member, I'll encourage them. You should really look at this.” Edward looked at the e-mails about research opportunities coming down from his school administration as helpful. However, the “constant stream” of communications requires him to filter out the proposals with no relevance to his department. Editorializing messages helps Edward direct faculty to the right opportunities. He contended, “I don't want them to be overloaded, and then when good one comes through …I'll preface it with a paragraph saying, oh, if you're in this situation, you really ought to think about this.”

Chairs also facilitate research conversations. Margaret finds time to sit down with her faculty in formal and informal setting to discuss their ideas for projects and offer feedback. Her favorite conversations were her “faculty therapy times downtown on Friday afternoon.” Removing faculty from the workplace encouraged open discussion about research. She contended that, “you can get really good discussion going and when people are away from time stress, they’re more creative.” Margaret also recommended faculty attend school-sponsored workshops to help them turn new ideas into proposals.

Karl brought with him strategies to foster research conversations that he developed in his old department when he became chair of his current department. He instituted several internal and interdisciplinary writing groups centered on scholarship themes shared among faculty across departments. The writing groups meet on a regular schedule and draw faculty from across the humanities. The writing groups give faculty an opportunity to have peers inside the department and around campus read their scholarship as it develops. Karl contended, “We have lots of success with that. Lots of publications that come out of that. … All of our faculty are required to participate in that.” Karl also queries the faculty for speaker requests. According to Karl, the speakers help faculty to establish a research network. Karl’s establishment of standing workgroups creates a cohort for faculty as they step through each other’s project from inception to publication. The cohort model reinforces productivity.

Inviting potential collaborators to the department also provides opportunities for faculty to explore research ideas and build professional relationships. Brian described the first time his department brought in a special lecturer from another research university to talk to the graduate students and interact with faculty. According to Brian, the goal was to “develop a reciprocal relationship”. He discussed his role in the visit as a good faith expenditure of time and money. He remarked, “We'll pay for that. I'll do a bit of a dog and pony with a few presentations, and visit classes, and vice versa. The college has a few formal ways to do that, too, that they'll help fund.” Brian’s expectation was that faculty would have opportunities to see how their research intersected with the research at another university.

Facilitating intra- and inter-departmental collaboration. Participant responses show that chairs facilitate inter- and intra-departmental collaboration by drawing on their research experiences and professional networks to make connections on behalf of faculty. Participants discussed how SRU’s recently created research centers reinforce collaborative research as an important strategy for pursuing larger grant awards. As a new external hire with experience in collaborative departments, Daniel was curious to see how this trend of collaboration in higher education research would evolve in his department and throughout SRU's research community. He contended that, the "best science isn't done by a single person in a lab" despite SRU's historical emphasis on the traditional research model in tenure and promotion decisions. While collaborative research introduces new opportunities for faculty, it also creates challenges to a department's identity and values. Faculty must engage with other researchers on common goals as well as share space and equipment. As a result, chairs must mediate faculty engagements inside the department as well as across departments in order to ensure that the effort placed into collaborations returned value and evidence of productivity.

Some chairs use their professional and research networks to facilitate faculty collaborative research projects. Michelle discussed connecting a new researcher in her department with a researcher working on some of the same issues in another department. She negotiated the collaboration to ensure that effort between the researchers and the departments was equitable. She discussed her role in the process of negotiating the terms of the collaboration:

> …so the first thing I did was email the director of that institute and say, 'Hey, we've got somebody who wants to go that direction, can we collaborate that?' Also, I've got ties at [another research university], and I have another person who couldn't run the analyses here, but I wanted to learn how to run them. I knew the person at [another research university] who has the lab that runs those. I said, 'Are you willing to train her and let her run these in your lab? Of course, we'll pay you for costs, and in return she'll run some of yours for you.' That worked out beautifully and now they're collaborating on a grant, So, yes that's part of my facilitate and support role.

The cross-disciplinary or applied nature of some departments' research also provided more opportunities to collaborate across departments than other departments. When talking about the applied research prevalent in his department, Mark contended that, "I think naturally, we run around a little bit more than others do anyways." To Mark, this meant that cross-departmental collaboration was a common part of the department's culture and an expected responsibility of the chair and faculty.

For most participants, the effort to make a connection on behalf of a faculty member for collaboration was serendipitous. Charles discussed how he tried to make connections for faculty when volunteering to review papers and proposals. He said, "They don't have to do it, but I'm volunteering to read things they've written, give some comments on that, see opportunities. Oh, I know somebody else who works in that, and you send an email that connects two people." Walt explained that his creative activities, teaching, and administrative work provide him "nexus points" where his professional networks crossed. He enjoyed using his nexus points to help junior faculty in particular who "can't quite get their hand on that doorknob to get it to open." For Bill, the idea of research networks to support faculty was about enabling PhD students and young faculty to build their own networks. Each summer as the fieldwork season began, he made sure to talk to the students and remind them of the importance of the professional network of the PhD students, new PhDs, and senior faculty working on projects with them. His hope is that they would return the favor to their students one day, creating a "continuum of the research peers."

Participant responses provide some evidence that chairs create opportunities for faculty research by collaborating as a co-primary investigator (PI). Brian and Edward relayed stories about discussing ideas with junior faculty that resulted in new research proposals. Brian was in his first year as chair and focused more on managing the department than his own research agenda. One day he mentioned a research idea he did not have the time to pursue to a young faculty member that he considered to have scholarship “better than mine.” A few months later, the junior faculty member approached Brian with a proposal ready for the research pipeline. When an NSF grant opportunity became available that Edward’s department had never pursued before, he called a faculty meeting to generate ideas for the grant. Eventually another faculty member stepped in to help Edward. The experiences demonstrated to Brian and Edward that there were different ways to incorporate their researcher role into the chair position that served to support faculty productivity.

Barriers to collaborative research. Participants perceived that chairs’ personal beliefs about research and lack of expertise, as well as institutional factors, limited the viability of collaboration at SRU. Some chairs contended that the “top-down approach (Thomas)” driven by chairs or administration was not always successful. Thomas postulated, “I think research, productive research needs to come from the researchers, and so the administration can help support that and it can maybe give some broad guidance.” He preferred supporting faculty “grass roots” efforts to collaborate. Edward echoed the sentiment that research is a faculty-driven process. He acknowledged that he had occasionally “pulled together teams” if he saw a research opportunity worth pursuing. He argued that research driven by a top-down approach often does not align with the reality of faculty expertise. He offered, “if I come back to them and say, ‘Oh, so and so in department X has suggested this type of analysis, that none of you really do”, it's just going to die. “Edwards suggested he was more “reactive than proactive” when it came to enabling research collaboration.

Chairs also offered that they often lacked knowledge of faculty areas of expertise. As a result, their ability to engage their professional networks to support faculty research is limited.

Margaret summarized her lack of involvement in those efforts, “I don't need to [engage], because they are the experts in their individual fields.” She suggested that the size of the department and the scope of the research it encompassed made an understanding of each faculty member’s expertise impractical. Bill was unable to recall using his professional network to help faculty research. He contended, “I mean, I study beaches and blowing sand, no one else in the department is even remotely associated with that.” No participant mentioned facilitating research connections with industries. Instead, Mark and Merle indicated they referred those faculty members to other research faculty with better connections.

Chairs’ perceptions of the insular nature of departments at SRU served as a barrier to collaboration. John contended that he had only facilitated one collaboration in his time as chair despite understanding that opportunities exist at SRU. He remarked on the reasons why collaboration was challenging: “I'm sure this is common across campus. People don't cross departments. Well, partly just because they don't, partly because it's confusing how you do that, and what your end goal is.” John recently reached out on behalf of a faculty member to a potential collaborator in another department. The collaborator rebuffed his request citing a lack of time. The rebuff was enough for John to give up on the idea of collaborating. He concluded, “I don't know what it's like outside this building…And how do I have time to develop a collaboration with somebody I haven't even met yet? How do I meet somebody?”

Edward held the belief that the political environment of SRU as “not a trusting environment” worked against cross-department collaboration. In examining the opportunities for his department to collaborate, he opined:

> There's a sharp divide between engineering and the sciences, when there shouldn't be. But the STEM here is ST-EM. I don't know how that would divide up [laughs]. And so, a lot of times I actually detect secret keeping and turf battles.

Edward also saw interpersonal-conflict as a large threat to team-based science. He discussed a current issue affecting two teams of researchers in his department pursuing the same grants. While the teams finally began to talk again, Edward still pointed out that, "There's a possibility for bitterness and hostility." Edward evaluated strategies to reframe the collaboration so that the teams would see each other as "assets" instead of enemies. He considered the possibility of a department picnic and conversations as a way to mediate the personalities.

Andrew echoed Edward's frustration. He admitted that his department struggled to collaborate in "interdisciplinary things" despite obvious opportunities. He attributed the struggles to unhelpful personnel. Andrew's new strategy for promoting collaborative research entails a plan to publish a "dating book." According to Andrew, the book would be a "glossy publication and fancy." Each faculty member would have a photograph and a list of their representative publications and a description of research interests and scholarly expertise. According to Andrew when other departments engage him for collaboration, he would able to direct them to the right faculty member. Andrew was enthusiastic about getting the dating book into the hands of other STEM chairs, but cynical about its effectiveness. He scoffed, "Will it get looked at in any serious way? No, but I think it's symbolic and representational. So its value is: I'm saying we want to play ball."

Ultimately, chairs acknowledged that individual faculty member initiatives generate most collaborations. Most chairs had at least one example of a faculty-driven initiative to engage in broader collaborations within the discipline or across departments to generate research ideas.

Bill’s comment was typical of the range of responses, “We've got colleagues working with Criminology.... We've got colleagues who are working for at least two different departments in Engineering with Geology and Biology… But for the most part those connections are made based on individual initiatives.”

Within the department, Chairs encounter challenges as they negotiate the resource contention issues inherent to collaborative research. Michelle perceived the biggest challenge of growing the collaborative research capacity of her department to be not “stepping on each other’s toes.” Her department’s research values already emphasized collaboration and idea sharing among faculty members. In addition to official “pods” where faculty gathered to collaborate and discuss research, the department had recently constructed a large multipurpose communal lab, equipped with “bigger, better toys.” Used to having their own labs, some researchers came into conflict over communal space and lab resources. Michelle contended that in these cases her role as chair was to negotiate use the space, time, and equipment in order to avoid faculty interactions that devolve into “turf issues.”

Participant responses also indicated that collaboration is not effective or appropriate for all disciplines. Adam and Ray offered an alternative perspective for disciplines that focus on individual scholarship and book publication. They argued that the best way to foster an environment supporting research productivity in these disciplines was to leave faculty alone. For Ray, the goal of supporting faculty research was to “support them without bothering them.” Adam contended that faculty in his field are a “monastic breed.” The worst thing a chair could do was to “get in their business and try to tell them how to do what they’re supposed to do. It’s baaad.”

Facilitating Obtaining Funding

The findings show that chairs' support of faculty research funding processes is primarily limited to providing advice and mentoring. James characterized grants as the "underbelly of the chair's existence." Chairs shared concerns regarding internal and external funding environments and their effect on faculty efforts to procure the grants necessary for research productivity. These concerns tended to influence chairs' advice to faculty and interventions in faculty grant processes. According to participant responses, junior faculty receive the most attention from chairs while associate and full professors receive little direct attention. The findings also reveal that chairs looked more favorably on faculty pursuit of external grants than internal grants.

Support for junior faculty. Chairs remarked that their engagement in faculty grant processes was primarily reactive rather than proactive. However, chairs were more proactively involved in junior faculty grant processes than the processes of assistant and full professors**.** Participants indicated that chairs lend their experience to junior faculty to help them make the right decisions about grants. Chairs also cited a need to monitor and intervene in situations where junior faculty have not applied for grants as expected, have applied for the wrong grants, or are applying for too many grants at the expense of publishing. Most chairs mentioned that they were happy to provide advice in all cases. Thomas preferred intervention to "just sort of mentoring how to be successful in grantsmanship and where I can be helpful. Helping read proposals, or, just sort positive reinforcement kind of support" was typical of chairs' responses. In contrast, Sam was direct about the need for junior faculty to stand on their own, "I don't want to be involved in that kind of thing. They wouldn't have this job unless they have some abilities to be able to do that stuff." Participants also suggested that the chairs reactive approach might be due to differences between research specializations such that the chair's expertise may not prove a fruitful source of advice for the junior faculty (Bill; Ray).

Internal grants. Internal grants support faculty research through awards from existing university funds. Chairs were less involved and less enthusiastic about supporting faculty pursuit of internal grants than pursuit of external grants. STEM chairs tended to perceive internal grants as having limited value because the money was already on campus. According to Merle, SRU viewed internal grants as an investment in the faculty member. The university expected a return on that investment. In paraphrasing his dean, Merle told his faculty, "The University is investing in you. You haven't won anything. You've borrowed money from us."

According to some chairs, pursuit of internal grants also represents an opportunity cost in terms of lost time and effort to pursue funding from external grants. For junior faculty in particular, the loss of time to pursue external grants added unnecessary risk to the tenure process. Thomas warned, "…when it comes to, say, a tenure decision, it's all going to be about external funding. The kind of prestige in the field, or how we evaluate for merit raises and things like that, it's going to be heavily skewed towards external funding." Despite the negative connotations, Steven contended that college-funded internal grants serve as an important source of funding that supports junior faculty productivity. He recounted how, as a junior faculty member, he once used internal grants to perform research over a summer. He lamented how the internal grant process changed to push junior faculty aside in favor of tenured faculty as the size and prestige of the internal awards increased.

Margaret's primary concern was a lack of institutional "bridge funding" for productive faculty caught between grants. Bridge funding is a type of modest internal grant intended to continue support for promising research between grants. Bridge funding helps researchers to retain personnel and cover the costs of research until the researcher secures new external funding. Bridge funding ensures that research activity does not stop during the funding gap. According to Margaret, increased bridge funding at the institutional level would help faculty maintain research momentum and compensate for the shortcomings of the competitive funding environment. She considered her experience with bridge funding at SRU years earlier when she had, “little money for supplies and bridge funding for a postdoc.” She contended that SRU’s bridge funding provided her the momentum to improve her grant proposals. “And then it paid off for them, because I had over a million dollars of research funding with a big chunk of the indirect cost, which went back to them.” She implied that, as SRU changed to increase the student population, the availability of bridge funds disappeared. She recommends implementing a more formalized process for bridge funding to support productive faculty “with a decent track record that’s publishing well, to be able to help them through the rough patches.”

Some chairs supported internal grants that could serve as a “springboard” (Steven) to larger external grants. Matthew participated as co-author on a junior faculty member’s proposal for a large internal grant that would provide the department the ability to purchase lab equipment and expand its research capabilities. Matthew tied the equipment to the research productivity of the department by suggesting that, “The projects we want to do with that would be really complimentary to who we are and what we do here.” Participating on the grant allowed Matthew to add his expertise and authority to the proposal, potentially increasing the odds of acceptance.

External grants. Participant responses also suggested that chairs are more reactive than proactive in supporting faculty pursuit of external sponsored research funding. External grants support faculty research through awards and funding from sources external to the institution, such as federal and state entities like the National Science Foundation (NSF) and National

Institute of Health (NIH), non-profit foundations, and corporations. Participants voiced concern about the precarious environment for external research funding and its effect on grant writing efforts and the decisions of faculty and chairs.

Chairs suggested that the effort required to procure external funding had dramatically increased in recent years. The increased effort for grants places additional pressures on institutional resources and hurts faculty morale. In considering her time in academia as she prepared for retirement, Margaret summarized the dire prospects facing up and coming researchers as they pursued external funding:

> It is beyond distressing, because I'm seeing people who are beyond brilliant researchers, creative researchers who do beautiful work and are amazing student mentors and, you know some of these people are right now looking at just leaving research altogether because it's so discouraging to put so much time and effort into something. Every grant proposal takes an untold number of hours to get off the ground. And it's very difficult. It's difficult for families…"

She saw faculty, "writing five, six, seven grants a year and still not hitting." Coupled with the lengthy process of revising grants, adding data to strengthen proposals, and "tweaking" the proposal based on other faculty input, the entire process could add up to hundreds of hours of effort with potentially little return. To improve the odds of success, Margaret encourages junior faculty to take a SRU-sponsored flight to Washington D.C. and discuss their proposals with the National Science Foundation (NSF). The service gives faculty experience with federal research funding processes and expectations.

Some participants suggested they faced a dilemma encouraging junior faculty to spend time and effort on external grants. Providing the wrong advice to junior faculty introduces risk to their tenure process. For Daniel, sacrificing time towards publishing to pursue a grant creates more career risk for a junior faculty member than a senior faculty member. Should the grant fail, the opportunity cost to complete tenure publication requirements becomes steep. Steven took a strong stand against junior faculty applying for grants in their first few years in order to protect them from failure. He argued:

> I don't think it's fair to play roulette with somebody with their careers, so that we can get more indirect costs coming our way. It's just not fair. These are people's lives. So I tell people I don't expect them to get grants, I'd rather they spend their time publishing their empirical or conceptual work.

According to Steven, the inadequate return on the time invested in writing grants represents a dangerous proposition that institutions in pursuit of research prestige force junior faculty to endure.

Despite concerns about the external funding environment, chairs placed surprisingly little emphasis on direct intervention in associate and full professor external grant and funding processes compared to junior faculty. Chairs primarily “move things along” (James). Chairs occasionally review and facilitate external grants through the online workflow tools such as eRA (Electronics Grant Administration) that faculty use to submit to the NIH and other funding bodies. Sam remarked that all his faculty grants go through his approval. He insisted on making sure that they “…had not committed 30 percent of our departmental resources to them. And even that, I don't look at that closely until I get burned, and then I look at that person a little bit more closely on all things." Daniel discussed his role as chair in his department’s reliance on “fairly standard funding streams.” He perceived the efforts as more about helping them to “find the right funding stream than to be monitoring a common grant proposal opportunities, but there definitely is a role for that."

Some chairs encourage faculty to talk to grant body program directors to "peddle the ideas and see what the grants people actually think would be the best home for their idea (Margaret)." Chairs also review grant progress as part of tenure and promotion processes. Jennifer remarked that the initiative was with the faculty member. "You tell me. I mean, I don't get too involved, except that in my annual review letters to say, maybe there are some opportunities for funding here." Likewise, James suggested, "I don't examine their grants closely. Only enough, I suppose, to write about them in my evaluation of their faculty activity report. But, no."

On some occasions, chairs engage in the external grant process when a faculty member requests that they serve as a co-PI on the project. Michelle discussed a faculty member approaching her to co-PI a small grant based on her experience in clinical measures and writing the clinical section of grants. She agreed to write sections of the grant because the research was within her area of expertise. Similarly, John explored serving as a co-PI on a small grant but did not end up as part of the final grant team. Nevertheless, he encouraged the primary PI through the grant process and offered advice.

Facilitating Faculty Experimenting, Collecting, Creating, and Analyzing

Chairs enable faculty to experiment, collect, create, and analyze data by creating opportunities to engage in these research tasks. Unless a chair served as a project co-PI, no chair suggested that they personally engage in another faculty member's experimenting, collecting, creating, or analyzing of research data. Instead, chairs facilitate the faculty's ability to perform these research tasks through execution of three standard managerial responsibilities: protecting faculty from administrative overhead, managing resources, and managing workloads. These managerial tasks create time and opportunity for faculty to perform research tasks throughout all phases of the research process, but are essential for faculty to complete tasks in the Experimenting, Collecting, Creating, and Analyzing phase of research. Without equipment, travel funds, and time in the lab, field, or archive, faculty struggle to complete data collection and analysis.

Protecting faculty from administrative overhead. Chairs attempt to stimulate research productivity by protecting faculty from administrative overhead. Participants suggested that departmental administrative tasks increasingly consume valuable faculty time. Some tasks, such as advising students and performing institutional service, are necessary for the business of the department. However, Merle contended that the gradual aggregation of administrative tasks, which offered "no real relevance towards your goal," consumed faculty member's time to perform research. According to Merle, attempts at using technology to reduce the administrative overhead, such as the university's expense management system, simply had the opposite effect of increasing overhead as the burden of effort to fill out expense reports shifted from the department's administrative assistants to the individual faculty members.

Chairs attempt to eliminate unnecessary administrative tasks to increase faculty time available for research. Ray remarked that serving in the role of chair meant that he assumed the administrative burden of "ordering the printer toner" so others would be free to write and publish. For Bill and Edward it was limiting faculty exposure to unnecessary service work. Bill contended, "So I really tried to act as a filter to keep them, to protect them from committees and stuff and that wasn't necessary." For Mark the main role of the chair was to, "…buffer the faculty from the stupid stuff. Because universities push a ton of stupid paper work, rules, and regulations down." According to Mark, the chair must also serve as a "timely buffer." He observed the chair must respond immediately to a faculty member who "freaks out" first thing in the morning over an administrative task. Otherwise, that faculty member may end up wasting the day. If the chair responds quickly then, "…that goes away in 15 minutes and they still have the while afternoon to be productive."

Chairs also bridge institutional silos outside of the department to reduce the administrative burden on faculty. Charles contended that all of SRU's services, such as disability services, facilities services, and information technology are autonomous units that are often not in coordination with one another. As a result, "They all, to some extent, impinge upon the professor. So each autonomous service becomes something that maybe not an individual faculty member, but certainly a Chair has to know something about." Charles suggested that this "silo-ification" of the university challenges chairs to be a "Jack or Jill of all trades." From dealing with multimedia issues in the classroom to ensuring faculty are reimbursed for travel, the chair has to be "on top of a lot of different things" to ensure administrative processes do not interfere with faculty research processes. Charles relayed a story regarding issues he encountered with a student information feed from the Registrar's Office while building a departmental class schedule. Charles ultimately had to contact four other offices and coordinate among them just to find out how to fix the issue. According to Charles, these types of interactions across the silos will continue to be common for chairs so long as the administrative processes remained in autonomous silos.

Managing resources. According to study participants, chairs stimulate research productivity by managing departmental resources such as discretionary funds for equipment, travel, and building space. Chairs supplement the school's funds with a departmental pool of resources for research. The findings show that chairs have concerns regarding the lack of direction for the use of resources and the effect of budgeting changes at SRU on their resource management strategies. Chairs also weigh the productivity of faculty against a need to distribute funds evenly among faculty when deciding resource requests. One prominent finding was that chairs prioritize resources for junior faculty before faculty at other stages of the researcher career.

Developing department funds. Most chairs discussed a need to develop the department's discretionary funds to provide support for faculty research. In describing their department's available resources, chairs used terms like "flush (Adam)" or "strapped (Dana)" to indicate available funds. Several chairs suggested that funds from their dean were insufficient to cover department research-related expenses such as travel (Dana). A few older chairs suggested that finding funds for faculty use was easier at SRU in previous years (Mark; Merle). Chairs turned to different methods to increase departmental funds, such as meeting with donors and exploring new revenue streams.

Participants explained that the primary method chairs have available to build a department's funds for resources is course fees. Karl contended that resources from course fees allows his small department to fund conference travel. He was proud of the gradual accrual of discretionary funds during his tenure. He indicated: "I've done a lot to build up the amount of money we have in course fees to be able to facilitate the faculty. Our actual travel budget is miniscule. It's non-existent essentially with 5 or 6 faculty." With so few faculty to teach, available funds would always be tenuous. He confessed, "We're always just like almost in the red, just in black."

Although not a prevalent responsibility, a few chairs mentioned they reach outside of the department to meet with donors to build department funds. Chairs' willingness to engage with donors varied. John enjoyed the responsibility. He contended that, "I wouldn't say 'I have to'… I kind of 'get to'…and I don't do a lot." Referencing the competiveness of programs in the field, John was currently raising funds to grow the department's PhD program. He indicated that his goal for the department was to create an endowment as a permanent funding source for general programming. For researchers, the endowment would make funds available for PhD assistantships and research-related travel. He remarked, "I just picked the number $10,000,000 out of a hat, that's like for stuff, a $10,000,000 endowment for things other than compensation related stuff. Just so the place is protected." For other chairs, the responsibility of fundraising takes a mental and physical toll. Michelle recently assumed associate dean responsibilities for her school while continuing to serve as a department chair. She expressed discomfort with the responsibility, "You know, the nights and weekends, and remembering that so-and-so is the son of such-and-such and they're a big donor." The responsibilities of attending donor events did not necessarily fit her personality. She contended, "I am, by nature, an introvert. And anytime I go to one of those big handshake events… I come back just exhausted."

Participant responses reveal that developing new revenue streams is an option for chairs to increase the department's discretionary funds. Dana's department began the process of developing an online degree program to generate more resources. She was excited about the predictability of the revenue stream throughout the year but carefully considered the implications of a new online program to ensure enough demand continued for traditional classes. She pondered the consequences, "So I have to be very utilitarian about some of those decisions. Once I got a real handle on that and said, okay, now I know this is the range that we can anticipate…You might get more, but this is what we can definitely get.” Sam revealed his unconventional approach to building resources. When he accepted the role of chair, the dean offered him $9,000 a year for 5 years in additional salary. Instead of accepting the money as salary, Sam accepted it on behalf of the department as discretionary funds. Sam contended that course fees alone do not cover the needs of his small department. With the discretionary funds, Sam is able to provide travel funds and conference fees so that faculty can share research. He is also able to contribute to the events other departments hold. By demonstrating that his department is a “good citizen”, Sam accrues goodwill that he can use in future collaborations. He also accrues the goodwill of his dean.

Challenges of managing funds. Chairs across schools and colleges declared that they lacked direction on the use of their discretionary funds. James suggested that he could use more clarity on how he could use course fee money. He explained, “Basically what we're told is, be kind of aggressive with what you use. But that's not a direction. And so I don't know if it means nobody's ever going to check, so do whatever you want...” Andrew’s dean expected year-by-year budgeting, limitations on which expenses could use certain buckets of funds, and a “use it or lose it” approach. According to Andrew, “But other than that, the dean does not peer over my shoulder or ask for an accounting or anything. It's really kind of surprising. I can do what I want with my money.” He was pleased that, as a department with a substantial service component, he had a large pool of resources to use. To him, this was one of the best parts of the job.

Recent changes to SRU’s budget cycle added complexity to chairs’ ability to manage resources. John used the metaphor of a game to describe how he managed changes to the department’s funding model as the university shifted the yearly fiscal calendar year from August to October. The change affected the department’s course schedules for the semester. In turn, course fee revenues shifted by two months. John contended that this reliable revenue stream would be unavailable to fund the startup research packages he could provide incoming faculty in the fall. He remarked, “I always thought this game is one that we win, because we have higher salaries and… [later] the reckoning will come. It's like, okay, the reckoning came, but can't you do it first semester, where I have control over changing?”

Prioritizing faculty resource requests. Participant responses suggest that most chairs try to adhere to a strategy of equitable prioritization and distribution of departmental funds. For Dana, being able to fund a small $200 request for travel for any faculty member “helps with morale.” Charles likewise rewards faculty members who work towards the “larger well-being of the department” regardless of whether it is through research, teaching or service. He remarked that saying “yes” to requests as a reward for effort creates incentive for the faculty to continue their investment in the department. Jennifer deferred prioritizing requests for funding to a faculty committee. One of the changes she initiated as a new external hire was also to establish a standing committee specific to equipment purchases. The committee added transparency to the prioritization process as well as put decision-making in the hands of the experts.

Chairs also invest funds back into the department for the benefit all faculty members’ research. Steven tried to “orient the resources” to build a department-wide graduate student support infrastructure. He worried that the current model, where individual faculty members assumed responsibility for graduate students, introduced risk to the department. He explained, “So like someone can be a hot shot faculty member and have these grad students working with them and they may leave, and then what? So you've got to build a structure.” Steven believed that creating the “mechanisms of support” for graduate students “at the structural level” helps with faculty retention. Graduate students supported by the department are more likely to remain. In turn, faculty that rely on graduate students for research support will have students available.

Chairs admitted that funding might not always be equitable among faculty members. Matthew believed that demonstrating a funding balance among departmental programs was often difficult because of differing research requirements of the subfields. Considering two programs in his own department, he remarked, “It requires lots of money to maintain… equipment and machines and things. Whereas, you know, [redacted program] doesn't need any of that. Most of their research is pen and paper.” Chairs also cited differences in the cost of conferences (Ray), publication costs such as rights to reproduce images (Adam), availability of funds at particular times of year (James), and variability of contributions to sponsored events (Charles) when discussing inequitable distribution of funds among faculty members.

Prioritizing junior faculty and productive faculty. Regardless of the level of available department resources, chairs prominently mentioned junior faculty and productive faculty as the highest priority for resources. Edward’s approach to funding the junior faculty was direct. He declared, “I'll give them every resource I can get my hands on to the exclusion of clear favoritism.” Walt insisted that the “lion’s share” of available general funds goes to junior faculty. To Steven, prioritizing junior faculty is important for departmental research cohesion and retention. He believed, “Because I think if junior faculty feel supported, they will stay.” Dana directed departmental resources to efforts that support junior faculty. She recently set aside department funds to pay for a copy editor for junior faculty after talking to a faculty member in another department. While she made the copy editor available, she conceded that she could not force junior faculty to use the service. Despite prioritizing junior faculty, a few chairs declared that there was a limit to their investment. Jennifer recalled one request she recently received, "I had a junior faculty member that asked for $13,000 in funding requests… I had a little talk with her and I said, "Look, I'll do the best I can do. But c'mon now, we have to be realistic."

Despite claims of equitable distribution, some chairs also admitted that they were more likely to give extra funding or higher priority to productive faculty member's requests. To Mark, helping "good researchers" with requests is a strategy that yields further productivity because:

> … if the researchers know they've got sort of a backup safety net in case things go wrong then they take more chances. If you have a system where something goes wrong and they say I need help with this and you're like, sorry', then they get a little more conservative and they won't take that chance again and you lose out on opportunities.

Mark let productive faculty know that he would find a way to cover their expenses, whether sending students to conferences or buying new lab equipment, "no questions asked."

Research instrumentation and other lab resources provided special challenges to department chairs' resource strategies. Having proper instrumentation to conduct research is essential, but expensive for some fields. The findings indicate that chairs think about research impact when funding equipment. Margaret admitted she considers how to maximize faculty research productivity when using departmental funds for equipment. She ensured faculty funds were available to repair instrumentation and to pay miscellaneous lab charges. When requests came to her to purchase new lab equipment she deliberated, "How do we leverage the money we've got to get instrumentation in that will instantly impact how productive people [will] be?" So I think it's money well spent to go into our resources and also to write… equipment grants." Margaret remarked that she had recently collaborated with the chair of a STEM department to write a successful grant for an expensive instrument the departments would share. Margaret wished that more costs were shared "up line," contending that funding was "tight at every level."

Michelle discussed how she was more likely to petition the dean for additional funds on behalf of a productive faculty member. She discussed working with a faculty member on a request for an expensive instrument requiring the dean's sign-off. Michelle asked the faculty member to find an alternative source for a much needed $150,000 dollar piece of equipment. Her method of supporting funding requests followed the logic of, "If it's something large dollar, then the first thing that I do is say, "Do we have one on campus? Can we collaborate with somebody?" Especially if it's something that's specific to one researcher." Michelle and the researcher could not find another instance of the equipment on campus. When the researcher found a refurbished piece for less than half the price with the same warrantee, Michelle was satisfied the faculty member had done due diligence. She escalated the request to her dean and justified the purchase by showing the costs of a new and refurbished item with the same warranty.

Managing workloads. Time to perform research was the most prominently mentioned resource available to chairs for allocation. 'Everybody talks about money all the time and thinks about getting funding. But unless it can translate into time, it doesn't really help for [sic] us," opined Ray. He argued that the rapid growth of the student population over 10 years at SRU requires departments to teach twice the number of students. Additional students also bring, "twice as many problems and people need those problems solved." Ray contended that faculty jobs become more complicated as the responsibility for committees and other student support services increase. For Ray, the increase in students was the biggest risk to the department because, "That takes time and that eats into time for research and writing."

To counter the trend of increased faculty commitment to students, chairs use a variety of strategies to create uninterrupted time for faculty to research and write. While some of these strategies stem from college or school policy, chairs often develop strategies outside of the constraints of policy. Participants discussed three main strategy to create time: (1) adjusting course schedules, (2) providing faculty a course release, and (3) experimenting with innovations.

Chairs adjust course schedules to create blocks of uninterrupted time for faculty to focus on research and writing. Jennifer believes that junior faculty ought to receive special consideration when scheduling courses. She tries to schedule junior faculty to teach only two days a week with three-hour class blocks. She also tries to limit administrative functions to one day a week. On days when junior faculty do not need to teach, Jennifer offers them the opportunity to work from home. Jennifer recalled how her experience working from home as a junior faculty member enabled her to meet tenure requires in a timely manner. Chairs also adjust course schedules from semester to semester to accommodate the demands of research. Faculty working on grant proposals or performing archival research, intensive lab work, or fieldwork often require uninterrupted time to travel or perform experiments. To accommodate research, chairs may overload a faculty member's teaching during one semester in order to provide them a semester available for research without other obligations. Many chairs did not hold faculty to a particular schedule. Margaret's answer was typical of chairs when she remarked that, "As long as they're contributing their annual share of the instruction, that [course overloading] seems an easy solution to getting them to the point where they're more productive."

In some cases, chairs remarked that they provide faculty course releases to alleviate teaching responsibilities. Chairs often used course releases as both a reward for productivity and as incentive to complete research. John discussed an instance where a productive faculty member requested two course releases in order to initiate a new research effort. The faculty member had exhausted his previous research with several successful publications. John intimated, "There's a formal workload policy and then there's an informal workload policy." John and his dean worked outside of the school's formal workload policy to develop a strategy to cover the classes with other faculty while justifying the two course releases for the productive faculty member. In contrast, Mark valued being "brutally honest" about the criteria for receiving a course release in his department. From his perspective, it was, "…much easier to walk in and teach a class… than it is to do the equivalent amount of research." Accordingly, faculty were aware that Mark reserved course releases only for productive researchers. Mark argued that the chair needed "to make sure that the reward system for doing that is very visible to your faculty." Chairs also suggested that they often provide faculty a course release as a "thank you break" (Charles) for performing a substantial administrative task for the department as well.

Chairs also experiment with innovative strategies to reduce workloads. After his dean stymied a formal request for a professor's course waiver, Adam took the suggestion of a faculty member and developed a petition to teach a 3-3-0 course load. A faculty member would teach three courses each in the fall and spring semester while having the next semester free for research. The dean struck down his petition, insisting that faculty must always teach at least one class. Without the authority to change course loads for faculty, Adam explored alternative ways to provide the same benefit. His solution was to develop and pilot online courses that would take the place of regular courses, but required less classroom time. The new online class did not require for the dean's approval. Adam was quite proud that he had found a solution that favored ingenuity over unaccommodating policy to help faculty be productive. Adam admitted that the strategy would only be available to one or two faculty members a year, but he expected the online course option to be popular.

Facilitating Disseminating Results

While it was not a prevalent finding, Karl and Charles discussed how they used their professional connections to facilitate faculty publication of research. As established senior scholars and nationally known figures in their fields, Karl and Charles contended they had a network of contacts at book and journal presses they could query to publish faculty research. Karl wanted his professional standing to provide his faculty any advantage it could. As a journal editor, he acknowledged, “I found as chair I had to be a little proactive also with finding publication venues for faculty. So I've managed to get or to facilitate in them getting book contracts.” Charles discussed his experience editing books and journals as an advantage to “cooking up opportunities” for his faculty to publish research. He remarked that his editorial experience created a network of relationships with publishers and other publishing personnel who helped to get his faculty published. Charles relayed his experience providing opportunities for several of his faculty to publish in a recently released anthology. He admitted that the publications were not enough to give anyone tenure, but the opportunities sent a message to the faculty that Charles’ professional connections were a departmental advantage for research.

Supporting Researcher Careers

According to participant responses, department chairs support faculty researcher career advancement. I asked participants questions designed to capture their experiences, attitudes, and beliefs regarding chairs’ responsibilities supporting faculty through the researcher career lifecycle. I anticipated that, chairs’ roles and responsibilities supporting faculty career advancement informed a department’s research productivity. SRU’s tenure and promotion (T&P) process for faculty career advancement and yearly faculty activity reports (FAR) for merit pay raises provide chairs opportunities to engage faculty in discussions of research productivity expectations. Through the processes, chairs also have opportunities to reward productivity, address underperformance, and provide guidance and advice in support of improving faculty productivity. Participant responses suggest that chairs support faculty through these formal processes of assessment. Chairs also use informal processes, such as monitoring and mentoring, to facilitate faculty career advancement.

Assessment of Faculty at SRU

Participants described how their college or school assessed faculty for tenure and promotion and yearly merit raises through the T&P and FAR processes. While each college and school has different requirements, SRU requires faculty to compile a yearly report of teaching, research, and service activity for chairs and deans to review. For career advancement through T&P, chairs review the initial assessments of T&P committees, editorialize as needed, and forward to the dean for final review.

Chairs at SRU review each faculty member's yearly faculty activity report (FAR) with the faculty member to begin the process of distributing merit raises. Colleges and schools approach FARs differently. In general, the FAR serves as a running narrative of the faculty member's career accomplishments. It includes teaching, research, and service assessments, awards, and other notable details. Chairs assign points to a faculty member for yearly activities based on priorities in the rubric. Chairs referred to this scoring rubric by various descriptors, which affirm its codified importance among departmental processes, The rubric is a "long shaggy document (Ray)", "more like guidelines (James)", an "outdated" faculty handbook (Jennifer), and a "spreadsheet-based algorithm" that "goes way back (Edward)." The rubric provides the guidelines by which chairs rate and rank individual faculty members. Chairs then report the rankings to the dean for final approval and distribution of raises.

Participant discussions of research-related scoring rubrics used in the FAR centered on the production of academic reports of research including peer-reviewed book publications and journal articles, awarded grants, and participation in conferences and other research reporting activities. Measures of productivity vary by department and reflect the priorities of the particular field. For example, some fields focus on book publications and others favor peer-reviewed journal articles based on the prestige rating of the journal or book press. Chairs referred to the activities most valued for promotion, tenure, and merit raises as the “coin of the realm” (Merle; Dana; Ray). Publications often had an “exchange rate” (James). For example, tenure and promotion committees often accepted a certain number of published articles in lieu of a book. Exchange rates create scoring complexities, however. According to Adam, “If an article in a major journal is worth 25 points, and a writing a book review is 2 points, well okay if you write 10 book reviews is that almost the same thing as an article? No! ... [its] just not that big a contribution to the field.” The evidence suggests that exchange rates problematize how chairs assess faculty.

Some participants struggled with the quality or applicability of the assessment rubrics they inherited when faced with the new productivity realities of institutional striving. Charles considered the limitations of his program’s rubric, “It's fairly detailed, but it doesn't … rank presses, it doesn't specify things like that. So if that's a guideline, it's not a lot of help in some ways.” As a response to putting research analytics into practice, Dana updated the department’s rubric as one of her early tasks as chair. The intention was to tie productivity to the annual evaluation in a clear manner. She remarked:

> I think the only thing that I've done that really wasn't shared governance to reach that point was setting up rubrics for annual review… I just felt it made my life easier and also

> gave really clear information to the faculty. So, you know, this is a one, this is a two, this is a three, four, five… My old department, it was so far shared governance that our Executive Committee did all the annual evaluations. So the five or six people with the Chair sat down and went over everyone's material and came up with the scores. This department was like, hell no.

Dana conceded that, despite the field's clear focus on articles, the interdisciplinary nature of her department ensured that she could not cover every possible productivity scenario in her rubric.

Participants with limited experience in creative activity described the challenges they faced making sense of attempts to assess these activities. When the outdated departmental faculty guidebook offered no standards for scoring creative activity, Jennifer engaged the senior faculty to establish new policy. She summarized the value to her and the faculty of the effort: "I have a document that the faculty have seen and understand and say, 'This is what you need to follow. This is what I'm going to give you guidance on.' So, the more documents I have, the better I feel."

Supporting Faculty through the Career Lifecycle Phases

The findings reveal that chairs change how they support researcher careers as faculty progress through the career lifecycle. Junior faculty, associate professors, and senior professors present chairs with unique support challenges. For junior faculty, the chair's primary focus is ensuring progress towards tenure. According to participants, chairs must motivate and support associate professors so that they continue to produce and achieve the milestone of full professor. Participant responses suggest that some associate professors lose the momentum of their research agenda. As a result, they risk stalling in their progress towards full professor. Without an active research agenda, associate professors contribute less to the department's productivity. Chairs also face a new challenge as senior faculty lose career milestones and risk losing momentum for their research agenda. To address these risks, chairs enact different responsibilities to assess, reward, and motivating faculty. Chairs also enact informal responsibilities to monitor and mentor faculty through the career stages.

Support of junior faculty through T&P. Participant responses suggest that chairs engage in the careers of junior faculty to varying degrees. According to Merle, stewarding junior faculty through the T&P process is “one of the most important things I do.” He echoed the beliefs of many participants who remarked that junior faculty were easy to motivate because they have a career “do or die decision” to make progress towards tenure. For chairs with responsibilities for a large department, supporting junior faculty careers often passes through an assigned associate or senior faculty member. This faculty member serves as a mentor to the junior faculty and a liaison to the chair. The preparedness of junior faculty to perform without close mentorship determines the level to which the chair directly engages with the junior faculty. Dana, who assigned faculty mentors, compared mentoring junior faculty at SRU with other institutions, “My experience here is that I have been working with junior faculty, but it becomes a much heavier mentorship relationship than I can do.” Ray noted the limitations of a hands-off approach, and saw it as “something that I've wondered whether I should do more of, but then there is a lot going on.”

Participants suggested that mentoring junior faculty was only as effective as the junior faculty member’s willingness to communicate. Matthew explained that it was often difficult to tell if a junior faculty member faced challenges or was unhappy with an assessment score because “junior faculty do not speak up as much.” Matthew considered his own experiences when describing why junior faculty often remain silent about their assessment scores in particular, “Part of it, I think, was always being there and I'm like trying to tread carefully and not burn bridges and realizing that these people might be evaluating you for tenure promotion. So, you know, I didn't really rock the boat and most of ours [junior faculty] don't either.”

Productivity concerns reinforced some participants’ contentions that support for junior faculty is essential to faculty retention and overall departmental productivity. Steven submitted that chairs desired to see junior faculty make tenure but walked a fine line as they mentored them. According to Steven, institutions need productivity, but no institution wants to be a researcher’s “stepping-stone”. He contended that departments engage in a “weird sort of tension” between creating a faculty “strong enough that other people want them” without letting the junior faculty treat the position as a “glorified postdoc.” Steven suggested that he focused on ways to retain faculty. For junior faculty that involved directing them to perform their required service obligation for a professional association instead of local departmental service. Steven believed the strategy offered junior faculty two valuable advantages as they made progress towards tenure. First, it shielded them from the tedium of departmental service obligation, which tended to consume effort better spent on publishing. Second, professional associations also provide junior faculty an opportunity to earn an external reference letter required for tenure. According to Steven, receiving support during the tenure process improves the chances of a faculty member feeling involved in the department and staying.

Participants also monitored junior faculty’s progress towards tenure to ensure they were on track to meet the research productivity requirements. Andrew saw monitoring as a way to align expectations between the chair and junior faculty, “They got their motivation and they know that… I'm on their side but they know I have expectations. So that's good.” For the first year in particular, some chairs monitor junior faculty as they establish their research routines.

Thomas assessed his junior faculty's momentum through their reported research activities, "Are they submitting proposals? Are they attracting students? Is their research moving forward? He also indicated that patience was essential since junior faculty, "…may not have measurable metrics yet because it takes a while to get the first papers. It takes a while to get the first grants." Like many chairs, Margaret uses her one on one reviews with junior faculty each fall to evaluate their progress. During the spring, she reviews their activity reports, paying particular attention to "look for situations in which productivity is falling off. I look at what they're doing and whether or not they are trying to engage collaborators, so overall just evaluating one on one and making suggestions or asking how I can help them be more productive." As a corollary, participants also indicated that chairs try to guide junior faculty along the most direct path to tenure. For fields that accepted both books and articles, Jennifer suggested that junior faculty follow the path of least resistance to meeting their publication quota. She warned them that, while publishing a book was an option, publishing journal articles represented "the cleanest way" to tenure since it is an "easier sell" to the tenure and promotion committee.

A few participants provided stories about advocating on behalf of junior faculty to the tenure and promotion committees and associate deans. Engaging junior faculty to talk about their progress and successes before going to committee helps the chair to represent them during the tenure process. Charles saw the pre-tenure probationary period as a time to coax junior faculty to inform the chair of any accolades or milestones in publications or grants. Charles could then communicate those accolades to the school's retention committee whenever opportunities arose. He contended, "I don't want to learn things in the FAR… I don't want [the department's T&P committee] going into the FAR learning things. I want them already to have, hopefully, a narrative of success in mind."

Participants did not share many stories about failed tenure reviews, but the ones they shared seemed to make an impression on them. Dana characterized a failed review she witnessed at her previous institution as “painful”. She considered how the experience informed her approach to addressing the productivity of two struggling junior faculty at SRU by prompting her to engage more with faculty mentors. She commented that, “…well before it was required, we instituted senior mentors. And then, I talked to the senior mentors too. To kind of, informally, ’This is where we're at. What can we do?’” While one junior faculty member responded to the intervention, the other remained unresponsive. Dana believed she tried every strategy possible to engage the underperforming junior faculty member short of “hit you [the junior faculty member] over the head with a baseball bat.” Dana understood that a lack of research productivity often forced out otherwise productive colleagues. She ruminated, “And these are people that I don't want to leave, that contribute to the department in many ways, but this is the way you have to contribute. This is what tenure relies on.”

Supporting associate professors. Participants suggest that chairs primarily engage in the careers of associate professors as researchers within the context of productivity underperformance. Once junior faculty receive tenure and advance to the rank of associate professor, they enter a stage in their careers where they “try to make a mark in the field (Adam).” At this stage, associate professors ideally continue their research agenda as they make progress towards the rank of full professor. Chairs offer career advice and discuss progress towards full professor as a component of yearly assessment. Using “sticks and carrots” (Adam), chairs reward faculty for good productivity and attempt to motivate underperforming faculty who have “gone off the research trail” (Merle). Chairs perceive rewarding and motivating as a means to advance departmental productivity.

Academic responsibilities change once junior faculty achieve tenure. According to participants, expanded teaching interests, committee work, and other service expectations the department holds back while the junior faculty member work towards tenure can suddenly expand to consume an associate professor's time. Steven remarked, "But it is challenging, because people need to take that breath. And as soon as you get tenure, it's like 'Congratulations on tenure, here's all your committee assignments.'" According to Merle, most associate professors stay on track. He acknowledged, "I don't have a problem with catching your breath, but then, sort of, some decide to go into survival mode. But others, 'Okay, I've reached this milestone now. Here's the next one.' And then they get to it."

Chairs offer advice and guidance to help new associate professors transition into the next career stage. For example, Steven met with associate professors to help them conceptualize their career path to achieving the rank of full professor. He explained, "The post-tenure blues are real, because you're like now what? And so you have to sort of allow people that recalibration." According to Steven, the best way to facilitate faculty recalibration is to help them to see a research "narrative" that encapsulates the steps needed to achieve the rank of full professor. Steven explained:

> So I try to do that by asking them to give me their narrative of what they should be doing and why, where they should be publishing. The standard line is, you go up for full, you need to be internationally known. You go up for associate; you need to be nationally known. So then, I would say like, "Okay, so what do we need to do to get you internationally known? What does that look like in your field?"

Steven conceded that differences between fields in his department challenged the effectiveness of his strategy because of unique publication and research expectations of the different fields.

Walt acknowledged differences in his career coaching strategy between junior faculty and the "more mature" associate professors who do not require motivation. To Walt, his career coaching transforms from a more hands-on approach with junior faculty to engaging once a year with associate faculty to talk about the "big cornerstone things."

Associate professors who lost research momentum were a major concern of chairs. These professors often continue to serve the department as excellent teachers but cease to perform new research or publish. Participants used a variety of terms during the interviews to describe associate professors who have lost research momentum including, "career associate professors" (Jennifer), "stalled associate professors" (Adam), "deadwood" (John), and "dead weight" (Thomas), James described the tenure as one of the biggest threats to the productivity of his department. The lack of a "sense of urgency" by some associate professors confounded James, who exhorted, "That's my problem, too. So how do you make them feel a sense of urgency without being an asshole?" Thomas reflected on the challenge of identifying why some associate professors lose momentum: "Right…I don't know that I've found particularly successful ways of doing that. I think the things that you try to do are, just encouragement." He discussed his strategy during assessment reviews, "I usually try to understand, 'What are the roadblocks? What are you devoting your time to and is there a way that we could remove some roadblocks?'" According to Thomas, external factors, such as family responsibilities, consume portions of a faculty member's available time for research and writing. These factors may contribute to a loss of research momentum.

Chairs suggested that they walked a fine line discussing underperformance with their colleagues during assessment activities. They were mindful about sending the wrong message. Some chairs worried about coming across as "their mother nagging them (Merle)." Edward considered the optics to the rest of the department if the label of "underproductive" applied to older faculty who are slowing down but still publishing: "But the challenge is, it sends a bad message to the younger faculty in that we're going to throw you under the bus first chance you get. So it's tricky." Most faculty contended that they always tried to find something positive to talk about in their reviews so that "nobody feels like they just got balled out" (Bill).

Participants also identified other challenges that shaped how they engaged underperforming faculty. For Adam, the character of his discipline works against chair intervention in productivity issues, "I think in a particular field like [redacted] we spend a lot of time alone, you know? It's easy to kind of… insulate yourself. It's tricky as a chair to break through that." Matthew suggested that it was a challenge for him to engage faculty in difficult motivational conversations because he is "not really a confrontational person." Other chairs simply saw underperforming faculty as a lost cause. They suggested that some associate professors simply might not have the ability to progress further given their attitude, work ethic, or life priorities. For John, it was a part of the department's cultural reality. It was something for him to work around, not change, "Yeah, there what can you do, and then there's, what *can* you do?" John considered two of the extreme cases in his department, "…one guy's just big talk and whatever I tell him, you know, bully back. And the other guy is just… 'You're a mess, how'd you get so far? You don't know how to manage your time.'"

Participants indicated that, when confronted, some underperforming associate professors deflected blame for their lack of research progress on departmental or school changes to assessment rubric. Dana witnessed this behavior at her previous institution. Stalled faculty would vociferously defend their lack of progress because of how the chair measured it. Dana recounted the typical stalled professor's litany: "I can't do this because the criteria, the standards have all changed. I shouldn't be held accountable for this. None of this has any legitimacy!" She was thankful she had not encountered this behavior at SRU. A few chairs conceded that they were at a loss as to how to help associate professors rebuild career momentum when advice and guidance offered during assessment failed.

Supporting full professors. Faculty that achieve the rank of full professors pose another set of challenges to department chairs as they facilitate faculty careers. Participants suggested that chairs consider senior faculty as unlikely to change their productivity at this stage in their careers. Adam suggested that productive associate professors tend to continue along that path as full professors. These faculty members become endowed chairs, continue to publish research, or assume important administrative duties. Adam defined a second tier of senior faculty that fall into one of two categories: those that you can rely on to be "moderately productive" every year, and faculty who are "slowing down" as they neared retirement. Chairs tended to describe the latter group as "on the back nine" (Edward) or "long in the tooth" (Sam), Often, these full professors remain productive in ways other than research, such as serving as director of graduate or undergraduate studies.

Chairs complained that they have limited opportunities to engage in the careers of full professors. Chairs generally agreed that, "… there's no more milestones for them that can either be a threat or reward" (Edward). Michelle relied on her department's full professors to serve as teaching mentors to junior faculty but understood the dangers of pairing senior and junior faculty. "If it's a younger faculty member, then I will assign them a senior mentor of another faculty member. But, when it's a senior faculty member, sometimes they don't take so kindly to a junior. Even if the junior is a fantastic teacher." Daniel, a recent external hire, discussed his concerns regarding new junior faculty taking their productivity cues from less productive senior faculty. He worried that junior faculty would buy into the “older model” of values in the department even as he attempted to instill a new research ethic in the traditionally weak department. He was still working on a strategy to address the perceptions junior faculty have of the unproductive senior faculty.

When chairs engaged in the careers of senior faculty, it was often under difficult circumstances. Edward dreaded the conversations he needed to have with a few senior faculty that were consuming department resources while producing less:

> Where it's tougher is you get faculty that have built up a significant legacy. Like they were very dynamic early in their career, have established several labs on campus, maybe have contracts that they run samples for other people, and then they begin to taper off. I'm loathed to take away what they've built, but I'm increasingly feeling pressure to do so, to be honest.

Andrew discussed the difficulties of trying to convince a senior faculty member to publish a paper instead of pursuing a grant he was not likely to receive, despite the senior faculty member’s insistence. “I mean we're peers, and so we can have these conversations, but also I realize… if you spent that time you'd probably write another paper this year so I'll take the publication over the grant application.” John’s experience illuminated the limitations of the chair’s ability or desire to intervene in senior faculty careers. He recounted writing an evaluation letter he wrote for an endowed chair’s dossier that cast the endowed chair in a less than flattering light. John recalled, “He's been here like 8 years at the time and I said,… ‘Since you got here you haven't published an article in a journal.’ The endowed chair took offense at John’s insinuation, “And he comes barreling in like, ‘You know how hard the publication process is? I don't want that in my letter.’ And I was like, ‘Alright, who gives a fuck? I'll take it out of the letter.’”

Despite Edward, Andrew, and John holding the title of senior faculty, they encountered resistance engaging in the careers of their peers, even though the engagement ostensibly benefitted of the department's research productivity.

Associate professors serving as chairs face an additional challenge exerting authority over full professors. While collegial departments ostensibly do not support a formalized hierarchy of authority, Matthew contended that the difference in prestige and experience between the career stages of associate and full professor serves a similar purpose in some contexts. He displayed some discomfort explaining the implications of this difference on his ability to assess and help senior faculty. He intimated:

> But some of them you could probably go so far as to call it bullying a little bit, you know, academic hazing. …it's, they want what they want, and they're going to get it, and you're not going to stand in their way.

Assessment meetings with the senior faculty members had left Matthew raw at times. He reflected on the senior faculty responses to his scores, "Well, you haven't been here as long or accomplished as much, and you're trying to tell me what I've earned and what I've scored?" Matthew believed achieving the rank of full professor would help him level the field. Matthew's story implicates the deans in placing an associate professor into a position of failure without the authority to affect productivity.

Carrots & Sticks

I asked the participants questions regarding chairs' responsibilities to reward performance and address underperformance as part of the annual assessment process. Chairs revealed that rewarding high performing faculty and motivating underperforming faculty were key strategies to building departmental productivity. Several chairs referred to the twin motivational strategies of rewards and punishments as “carrots and sticks” (Adam; Merle, Jennifer; James). Participants from Arts and Sciences indicated that the dean used the term occasionally during annual chair retreats and in e-mails. Chairs from other colleges and schools also used the term, however. Chairs conceded that a limited number of “carrots” exist to reward productive faculty. They also did not consider “sticks” to be a response used except as a last resort. Instead, chairs preferred positive motivational techniques.

Chairs contend that the most formal “carrots & sticks” available to them were merit raises. Chairs do not provide the raises directly. Instead, they work through the established FAR process to influence merit raises for high performing faculty. Participants suggest that chairs first ensure that productive faculty receive positive annual activity report scores. Chairs saw the research productivity score as a place where they could exert influence. According to James, research productivity is the factor that most affects variation in scores on activity reports. Variation in teaching and service scores is relatively small. Andrew revealed, “If you're producing, I'll drive up your research FAR [faculty activity report] score and that translates directly into merit pay because the dean takes those things. He wants to numerically rank everybody.” Once chairs rank FAR scores, they advocate on behalf of productive faculty members to the dean so that the dean can then defend “extra-large raises for the people who are really productive” (Brian) with the Provost. Despite their best efforts, several chairs admitted that they were disappointed in the actual efficacy of the merit raise as a means to reward performance. Chairs suggested that institutional factors out of their control might pare down an expected merit raise to where it is not significant enough to matter to the faculty member. Edward considered raises to be, “not a super-efficient way to promote research.”

When used as a stick, a low merit raise had little impact to restarting faculty research productivity. Merle contended, "If we're talking like 2 1/2 percent raise anyway, there's not a whole lot you can do." Merle knew of one associate professor who made less than a starting junior faculty member because of a career of low merit raises. Mark considered how ineffective reduced merit pay was at SRU, given that cost of living was so low, "At a certain point and time you reach in this town where, Okay, I can live on what a faculty member makes. So then how big is the stick?" Thomas expressed a similar sentiment indicating that the department did not use merit pay as incentive. He contended, "I can tell them, 'Okay, I really think you do a great job. This is one of our higher raises.' But qualitatively it's… maybe hard for them to evaluate how significant that really was or not."

Chairs also discussed teaching schedules and course loads in terms of "carrots & sticks." According to participants, productive faculty occasionally ask for teaching schedules that maximize their available time for research. Andrew suggested that he tried to accommodate a researcher's request, provided the request was within reason. Several chairs indicated they had the ability to provide course releases. Michelle contended that the dean had provided her flexibility to provide productive faculty with additional resources including course waiver and additional graduate assistants. However, she intimated that occasionally waivers occurred only because the faculty member's research fully funded the position.

Chairs contended that they occasionally had no choice but to assign a larger teaching load to consistently underperforming faculty. Adam called it "the biggest stick." For him, the discussion was at the dean's level of decision-making. He explained that in departments where he knew it occurred, rumors of the decision generally caused panic among the faculty that required the chair's intervention to quell. The punishment strikes at the heart of scholarly identity. James considered the powerful effect of teaching a third class each semester as a tenured researcher, “I view myself as a scholar, and if a college is telling me I'm no longer in that class, then that hurts me. So… I've honestly seen people change and become more active and send more stuff out.” Some chairs considered the mixed message of adding more coursework as punishment for a lack of research productivity. Merle contended, “I tried punishing them by making them teach more. Sometimes that, in itself, is counterproductive because they have less time [for research].”

Chairs agreed that the reward strategy most available to them was to recognize faculty for career successes. Chairs discussed a number occasions for communicating a recognition including receiving a grant, being published in a prestigious journal, achieving a career milestone, publishing a book, and receiving a nomination for an award. In addition to congratulating the researcher personally, chairs recognized faculty career successes through multiple channels including circulating memos and e-mails (Bill), making announcements (Michelle; Andrew), providing a write-up in the department newsletters (Bill; Ray), using social media channels (Ray), and holding special functions (Ray). Several chairs discussed the importance of ensuring that deans heard of any successes because of how it reflects on the researcher and the department. Margaret indicated that, “its evidence that the effort is there and people are doing a good job.”

Some departments maintain a tradition of displaying new publications in a trophy case or hanging a signed print of the new book’s cover outside the department offices. Ray discussed how he purchased a copy of each book faculty published with department funds. He placed the books in a display case outside the department’s office so that, “…when you walk into [redacted] Hall it's the first thing you see. And that's important to people, you know?” Ray contended that the symbolic value of the book prints reaffirmed faculty productivity. He commented, “So it's really more of that sort of cultural stuff as a way of signaling to people, ‘Good job. That's what you're supposed to be doing.’”

Figure 2. Photograph of typical display case with faculty publications. Students, faculty, and guests must pass by the display in order to enter the department offices. According to participants, display cases reaffirm productivity as a department value.

Sam recounted how his dean had started the tradition of purchasing prints of faculty book covers to frame and hang in their hallway. Chairs only picked up the responsibility for it when the dean’s support began to lag. Sam saw the practice as a successful motivation strategy. He set aside specific departmental funds to continue the tradition. The practice captured the faculty’s imagination, “And then others were saying, ‘I gotta write a book.’ And we've had more than four or five books, [the books were] additional ones that they hadn't been even thinking about, so they'd get on the wall.” Faculty must pass through the hallway to get to the central suite of department offices. The effect is that of a literal “hallowed hall” reinforcing the importance of productivity to the department as well as serving as a reminder of the rewards of productivity.

Figure 3. . Photograph of typical hallway book cover display. To get to the department offices you must pass through this literal “hallowed hall” displaying the importance of productivity to the department as a value. Faculty also receive the message that one of the rewards of productivity is a place in the pantheon of department scholarship.

Participant responses also suggest that chairs also used their role as faculty advocate to administration as a “carrot” to reward productivity. Chairs engaged their deans and associate deans to nominate productive faculty for institutional awards. Sam insisted that it helps to remind faculty that, “They know that this chair position is an advocate for them.” Daniel submitted that requests for nominations among faculty built camaraderie through the development of “mutual appreciation and respect.” He contended that, “In some way on a day to day basis that might be more valuable than a piece of paper hanging on the wall - knowing that you’re seen by your colleagues. That that's an important and successful part of your job.” In additional to lobbying for faculty awards, chairs also advocated to the dean for faculty sabbaticals. Sabbaticals place extra strain on the department. Chairs must account for the teaching and administrative load of departing faculty. When stalled faculty request sabbaticals, chairs are naturally skeptical. Adam considered the pros and cons of supporting one "career associate professor's" request for a sabbatical ostensibly to work on research. "I said I can support a sabbatical application for you, but you need to do something. If you just apply for a sabbatical but you can't demonstrate that you've written a chapter or two? You're not gonna get it." Adam also looked at it from the perspective of administration, "I'd look at that and I'd be like, 'This dude isn't going to do anything. He hasn't done anything in years. Why would I pay him to go do something that he's not going to do?"

In recent years, some chairs saw changes to the "carrots" available for incentive and rewards. Merle, who was retiring at the end of the semester, reflected on how carrots once available to chairs, such as distributing choice office and laboratory space, diminished as responsibility for many resources moved to the Dean's Office. Steven also noted this shift, recalling that he used to have resources available to provide faculty with a "tweak" when needed. He pinpointed the source of the change as SRU's increasing expectations for departments to create their own funding beyond typical operational expenses. For Steven, these new expectations reduce many forms of rewards to "all I have in the back of my pocket." Chairs prominently mentioned space for labs and offices as an available asset chairs distribute for reward (Thomas; Michelle; Edward; James). Even offering token rewards provide benefits according to chairs. For example, James used departmental funds to install new bookshelves in a faculty member's office. James made the allowance because the researcher was a "valuable member of the department" and, "…there's people you want to keep happy." Andrew remembered faculty members' birthdays and gave them a card. He witnessed the positive effect of the small gesture on the morale of older senior faculty in particular. Other chairs contended that "praise and recognition" (Thomas) was about all they had left to offer.

Motivating Underperforming Faculty

As a corollary to rewarding faculty for productivity, I asked department chairs how they addressed underperforming faculty. Respondents admitted they had limited options for motivating faculty. "I think that's, if I had to pick a tough problem to solve as a higher education faculty member, that would be a good one", declared Merle. Ray echoed Merle's response. "That's something I think about. I don't have a good strategy for that and I wish I did." The role of tenure as a protection for faculty careers limits chairs' options to address underperforming faculty. Unlike junior faculty, departments cannot refuse to retain underperforming tenured faculty based on a yearly assessment. Correspondingly, most chairs in this study held the view that few "sticks" exist that force tenured professors to be productive. The two punitive methods chairs most mentioned included giving low merit raises during assessment and assigning a heavier teaching load to faculty without an active research agenda. Participant responses more often focused on non-punitive strategies to engage tenured faculty such as identifying obstacles in faculty careers and finding people's passions.

Participants tended to agree that the chair requires flexibility to address underperformance. A few chairs talked about how they could understand a professor's performance challenges better through a personal discussion. Merle tried to identify motivation for a faculty member's lack of momentum, "I've tried... 'Don't you want to become a full professor?' Try to encourage them that way. I try to help them if they need to go to a conference, visit Washington, do…some sort of a Kickstarter thing." Talking to faculty occasionally reveals that researchers struggle with challenges that give the false impression the faculty member is not productive. Andrew considered the case of a tenured faculty member who had not published in a while. During the assessment process, Andrew discovered that the researcher had research underway but was in a holding pattern for a lack of funds to finish. Instead of punishing the professor, Andrew chose to boost morale, “We talked about what he was doing and well, we basically cooked his FAR to look a little more productive”. As a result, the professor was not “screwed out of a merit raise”. Andrew provided the faculty member money to complete the research. According to Andrew, “He took his travel money and the next year his project was productive and he got a couple good papers out of it. Graduated a PhD student. There you go.”

Echoing a typical managerial trope of other professions, chairs believed that finding a person’s passion improved their productivity. Chairs recounted numerous stories of individuals who were unhappy as researchers but productive as teachers or administrators. Chairs’ expectations for these faculty members are that they contribute to the department by assuming a greater share of teaching and service responsibilities, not as a punishment, but as a means to move the faculty member closer to career they prefer to have. Mark suggests that chairs increase the overall productivity of the department when they take this tact with underperforming or unhappy faculty because “other productive people don’t have to worry about it.” He firmly believed that everyone could contribute to the department through the method they preferred, whether teaching, research, or service. Mark, Merle, and Walt provided the example of managing accreditation recertification as one area where less research engaged faculty members might contribute to the department in a way that increases research productivity.

To Walt, underperformance was a symptom of alienation from the department. He approached fixing the issue by increasing a faculty member’s level of responsibility in an area he identified as one of their passions. He contended, “Nine times out of ten, when there's an underperforming faculty member, it is generally because, at some point for some reason they have been or have at least felt excluded from the team.” To Walt, providing that new level of responsibility sends a message to the faculty member that they are a “valuable member” of the group.

Regardless of how they engaged faculty through the processes of tenure and promotion and outside of that process, respondents suggested that they had a responsibility to manage faculty throughout their careers while serving as chair. Fostering researcher careers leads to positive work conditions and benefits the research profile of the department. Charles summarized the perspective of his responsibility as chair for faculty careers:

> I think that you're trying to help create conditions in which they will thrive and be seen by colleagues throughout the country or elsewhere as relevant, as interesting. And so it's kind of a delicate thing. You're trying to help people do well enough that they might go elsewhere. And while I don't want them to leave, there's all kinds of reasons. You want, I think, one wants to work with people who could leave, if, by leave, it means go to the bigger job. Because that means they're productive. They're relevant. They're interesting. They're pressing your field in a new direction.

Negotiating Roles

The second research question to this study is: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders? Three sub-questions arose from the research question.

a. Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?
b. Sub-Q2: How do department chairs perceive and experience the administrative value of their research?
c. Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

I asked participants a series of questions to understand how chairs negotiate the dual roles of department leader and career researcher while performing administrative service. I focused on how chairs engage in their active research agenda, professional identity and reputation, and career aspirations in order to make sense of the challenges chairs face maintaining multiple roles. I expected to find that chairs' negotiation of the dual roles of department leader and career researcher inform how they enact research-related roles and responsibilities in support of faculty productivity. Three major themes emerged from the participants' responses: (1) maintaining research productivity, (2) perceiving administrative value to research, and (3) growing professional identity and career aspirations. The data suggest that, while not all chairs maintain an active research agenda, those that do perceive value in continuing their research as chair. Chairs also perceive that their research reputation and agenda provides some power and authority to enact research-related roles and responsibilities. Finally, chairs professional identities and career options and aspirations grow as they maintain dual roles as career researchers and department leaders.

Maintaining Research Productivity

Participant responses indicate that the time spent in service as chair reduces the time, resources, and opportunities available for an active research agenda. While deans expect nominal research productivity from the chair position, the loss of research momentum often leads to feelings of anxiety, frustration, and guilt for many chairs. Associate professors serving as chairs expressed concerns regarding a loss of time for research necessary to advance to the rank of full professor.

Many chairs desire to engage in research and remain productive. To maintain a research agenda and contribute to the productivity of the department, chairs create time for research productivity. Chairs also transform their research projects, collaborations, processes, roles, and agenda to accommodate the available time they create for research productivity. Differences in departments, disciplines, and personal characteristics inform how chairs continue to engage in research. One interesting finding from participant responses is that some chairs reported that they experienced more research productivity serving as chair than prior to serving as chair. However, productivity did not necessary equate with the continuance of the chair's research agenda.

Deans' Expectations of Research

The majority of the chairs indicated that they received no formal message from the dean regarding expectations of research productivity. Through the formal changes to Full Time Equivalent (FTE)[4] headcount and contract stipulations, most faculty members understood that

[4] Full Time Equivalents (FTE) refers to the percentage of an employee's work dedicated to particular tasks or roles. For example, a chair with a .25 FTE towards research spends 25% of a workweek (i.e. 10 hours of a 40-hour workweek) on research tasks. At SRU, department chairs generally dedicate .5 FTE towards administrative duties.

assuming the role of chair would reduce time for research. When chairs received messages from their dean, they generally focused on placing the research of the department above their own. The advice Brian received was to, “Move your faculty along on the research side and yours also needs to stay somewhat current. But it takes a backburner.” Dana indicated that, “There was much more guidance in terms of thinking about developing and fostering and nurturing the department's research profile. Michelle received advice from her mentor she carried with her, “She said, ‘It's no longer about you. It's about helping everybody else.’ And I like doing that.” The messages chairs receive imply that deans do not perceive a correlation between a chair’s active research status and the chair’s ability to develop the department’s research profile and performance.

Negotiating research support with dean. Some participants indicated that they negotiated research time and resources with their dean as part of their chair contract. Chairs discussed nine or 12-month contracts as standard offers. Dana preferred her 9-month contract because it provided her time to work on her grant-funded research during the summer. Matthew worked on a hybrid 12-month contract that provided him two summer course waivers that also cleared his summer for research. Most chairs indicated that they worked on 12-month contracts. For those chairs that discussed their FTE, the most common percentages for research were .2 (Brian; Jennifer; Edward) or .25 (Matthew). Bill’s dean provided him a .35 research allotment. Some deans also offered chairs research assets and accommodations. Chairs reported receiving a $3,000/year travel budget (Steven), post-docs (Thomas; Edward), and “alternative workspaces” to perform chair duties while the researcher was in the field collecting data (Bill). Participants also remarked that new chairs generally receive course waivers from deans in order to ease the transition into administrative duties. In some colleges and schools, the course waivers are limited to a single course a year or expire after the first year of service. Most tenured faculty teach two courses a semester, while chairs teach one. Chairs tended to associate course waivers with more time to dedicate to research.

Messages to associate professor chairs. In contrast to full professors serving as chairs, the findings suggest that deans expect associate professors to continue to work towards full professor. The associate professors who served as chair I interviewed, Edward, James, Ray, Steven, Matthew, and Michelle, indicated that progress towards full professor was a struggle. Steven, who made full professor while serving as chair exclaimed, “It sucked. I would just say, I think that was a mistake. I shouldn't have done it. I just work my butt off.” James believes that administration wants to “give him the opportunity” to reach full professor. However, he contended that they did not reduce his administrative workload enough to accommodate progress towards that goal. According to James, the dean told him to make time for research by staying away from the office. While that was a successful strategy for a semester, the burden of work made it impossible to sustain. Despite providing messages of support for associate professors research productivity, chairs contended that they do not receive enough material support from deans to advance to full professor without considerable difficulty.

Negative Effect of Serving as Chair on Research

Despite negotiating provisions with the dean to maintain personal research, most participants reported that service as chair reduced the time, resources, and opportunities available for research activity. Participants suggested that the administrative responsibilities of chair expand to fill all available time (Andrew). In considering her research productivity, Dana concluded, “It killed it.” Sam contended, “Anyone that thinks that they're going to be in this position and can keep going on the same level that they did before with their own individual input into that, it isn't gonna work." To James, the loss of research aligned with the fears typical of all researchers: "I bet every academic believes they never get as much done as they hope to or wish they could, or think they could. Think they even reasonably could. So that was true even before I became chair."

Loss of time. The most common complaint from chairs was a loss of uninterrupted time to dedicate to research activities. For Thomas, becoming chair affected all aspects of the research process: "the other challenge is just finding the time to write proposals, write papers, and just kind of think about research and finding, you know, sort of the uninterrupted blocks of time …" Charles pointed to the overhead of administrative and bureaucratic work as the main culprits. He blamed the rapid bureaucratization of the university through the centralization of services. According to Charles, centralization should "diminish the things that land on your desk, but it actually works the exact opposite." Instead, the chair has more administrative work that competes for attention with teaching and research. James saw a significant change in administrative burden in the brief time he had been chair. He observed, "There's these little increases. Hiring proposals now have to have three or four more sections than they did last year. It doesn't take that long, but every one of them, the diversity outreach for hiring has to have more." For James, some administrative tasks, such as new faculty searches, require the chair's attention because of their time sensitivity. To Mark, being a chair means you choose where you focus your energy. He contended that limited options for splitting effort exist, "if you read our … signs as you walk to campus that say 'Teaching. Research. Service'. Well, if you say okay the chair position is service to the university, you can really do only one of the other two decently."

Despite receiving course waivers, some chairs voiced concern that their continued teaching responsibilities did not allow time for an active research agenda. According to Dana, the institution will eventually have to address research time for department chairs since the current arrangement to her is “not a sensible arrangement.” She insisted that a one class a semester teaching load was still too much and did not allow time for her research agenda.

Some chairs complained that their dean was too inflexible in providing additional course waivers to support a chair’s continued research agenda. Adam had just starting writing a book when the dean approached him to be chair. He negotiated to teach fewer courses to make time to finish his project, but the dean only offered him the opportunity to buy his way out of teaching one class a semester. Every semester, Adam uses his fellowship money to buy out a class and provide time to work on his scholarship. He perceived the arrangement as untenable in the long term. He warned, “The truth is they can't make me be chair. If I told them tomorrow, like I'm resigning this chair, that's their fuckin' problem. Not mine.” Adam contended that his position as the only viable option for chair in the department ought to have provided him some advantage to negotiating for research time. Nevertheless, Adam was only able to support his research through his own resources. Similarly, Andrew requested a reduced teaching load after his first year to continue focusing on his research. The dean turned him down. He knew from his social circle of department chairs that other faculty members received more course waivers than he did. He found this profoundly unfair:

> It's ridiculous. I mean, you can't be serious about me wanting to maintain an active research career and then not give me the time to do it. You just get this pious shit about you know, teaching and fairness and equity and if I do it for you, I have to do it for all the other chairs and I'm like, well then do it for all the other chairs.

Dana, Adam, and Andrew’s stories suggest that some deans choose teaching over research within the scope of what is best for the school or college when prioritizing chair responsibilities. The findings suggest that deans do not share the reasons for this prioritization with the chairs.

Difficulty starting new research and publishing. Starting new research projects was a challenge for chairs. Edward had just initiated the process to step down from the position as he neared the end of his tenure. He insisted that he “didn’t want his research to wane” as the main reason for rejecting an opportunity to stay on as chair. He found generating new research projects difficult: “The idea of me sitting down and creating something truly out of whole cloth is, I don't want to say it's impossible. I've done it. But, it basically means nights and weekends and summers…” Karl reflected, “So it's really hard for me to generate the research. That's the distinction. As opposed to people saying, ‘Hey you want to do a book chapter?’ … And I go, ‘Yeah.’” Edward and Karl’s responses suggest that for some chairs perceive less involved ways of being productive than advancing new research agendas and projects.

As a corollary to an inability to continue existing projects or start new ones, participants alluded to the struggle to meet deadlines while chair. Edward was well beyond the deadline for a paper a journal had invited him to write. He lamented, “And I haven't had time to do it. I've had, to just beg to postpone it because I can't, I can't administer that or delegate it, it's all me.” Edward felt so panicked about failing the deadline that he elicited the help of a colleague at another university to co-author the article. He contended, “if I was not Chair, I would have 90% [sic] sure it would be already published. And it'd just be me, I'd be the only author.” Karl described his challenge meeting deadlines with an anecdote about bumping into his editor at a conference: “I haven't gotten to it in a year and a half. So I saw the guy in August at our National Conference. He's like, ‘Dude!’ I'm like, ‘I know, what the fuck do you want me to do?’" Edward and Karl's stories suggest that the pressure to meet deadlines and failure to meet deadlines causes anxiety and embarrassment to chairs.

Loss of proximity to lab. For some researchers, the loss of proximity to research spaces affects their perceptions of productivity. Thomas and Sam both discussed relocating to the central department offices as a reason for their inability to be a presence in their labs. Before becoming chair, Thomas's office and lab were next to each other. The proximity allowed Thomas to "pop in" to check on graduate students and his research. As a chair, he sat on the opposite side of the building in the department's central offices. The loss of proximity made it harder to "wander over and spend half a day talking to people." He tried compensating for the loss of proximity by creating a formal meeting schedule to ensure he made time to receive updates. Similarly, Sam's loss of proximity to his lab meant that he could not spend time performing data analysis or managing his graduate students and still perform chair functions. He looked forward to becoming an emeritus so that could continue his research.

Frustration, Anxiety, and Guilt

Participants reported that they felt frustration, anxiety, and guilt regarding the loss of dedication to their active research agenda while serving as chair. Cycles of motivation thwarted by interruptions characterized chairs' experiences working on their research agenda. Adam admitted he carried a lot of anxiety trying to finish his book manuscript while serving as chair. To Adam, the issue was not about being behind on his book contract, but just trying to complete the manuscript as an outstanding task. He declared, "I don't want to be writing this book for the next 3-4 years. I want to knock this thing out and be done." He calculated that he needed to write a chapter a semester to complete the book in a timely manner. He also acknowledged that it has been hard, "getting into the groove of things" after the winter break. He reflected, "I've only written about eight pages.… It's been very frustrating. I haven't been able to settle in to writing every day." Dana conceded she felt ineffective: "I'd like to be able to say I carve out a day a week … I don't. I fit it in when I can and largely driven by other people saying, you have to get this to me now." Sam similarly perceived a "guilt factor" which motivated him to complete his section of co-authored papers with students, who he did not want to disappoint.

Worries about career and family. Chairs also acknowledged they worried about the effects of serving as chair on their careers and families. Andrew believed serving as chair has hurt his career. He explained that he had come from an institution with a higher teaching and service load. He expected to have fewer teaching responsibilities in his new role as chair so that there would be some time for research. That scenario had yet to materialize. He opined, "So, I'm getting done less work than I feel like I ought to be getting done at this stage in my career." Walt considered the implications to losing time to practice his creative activity as chair. He pondered, "Am I as good a [performer] as I was 15, 20 years ago? I try every day to be. I work at that. I hope I am." He acknowledged that it was a challenge maintaining his level of performance skill, "Simply because of the schedule … it is challenging to keep myself at the same level that I once was. But that's just the reality of the situation."

Chairs also struggled to balance family schedules with time for research. Michelle worried about the effect on her family of serving as chair while maintaining active research. She considered her husband and herself to be co-caretakers. Finding time for research meant Michelle negotiated with her husband to manage the children in the evenings so she could focus on research. In turn, Michelle negotiated with her dean to allow her extra time in the morning to attend to her daughter while her husband worked. Because of her young children, Dana came into the office earlier in the mornings to have status meetings with the dean. As a result, she was free to leave work when children were coming home from school.

Disciplinary and Career Factors Affect Research

The findings also indicate that disciplinary and career factors inform a chair's ability or desire to maintain an active research agenda. Participants indicated that some fields accommodate an active research agenda better than other fields. Brian was able to maintain some active research as chair because in his field, "You can kind of hop around to different elements of [the subfields] and since markets change so fast, research agendas tend to change pretty fast, and it keeps it interesting." One trade off to this agility, according to Brian, was that big projects in his discipline tended to be "few and far in between." While he did not maintain an active research agenda, Mark believed the applied nature of his field created opportunities for multiple smaller projects, should he choose to start his research again. He considered, "fortunately the field I picked it wasn't one of those things where it took 18 months in effort to generate one scholarly artifact."

Some participants reported that they did not desire an active research agenda due to career decisions. Some senior faculty serving as chairs step away from their research in order to focus on administrative responsibilities. Merle, Bill, John, Mark, and Margaret all suggested that serving as chair near the ends of their careers was a natural transition away from their research. Chairs nearing or at that milestone tended to look positively back on their careers as researchers. Bill mused, "I could never publish a single paper again and I think I will have been considered to have a successful research career. It's just ego."

Other chairs were comfortable taking a break from their research in order to focus on administrative duties. Ray had recently completed a number of writing projects and felt he was at a “natural pause” in his research. According to him it was, “A sense that it was an opportune moment in my career path.” These responses implicate personal choices as a key factor influencing whether chairs maintain an active research agenda.

Productivity Strategies

Despite the loss of time and resources for an active research agenda, chairs develop strategies to maintain research productivity. Chairs make time for research. They also transform projects, research processes, roles, and occasionally reframe their agenda in order to continue to be productive researchers. The participant responses indicate that new research projects were small and/or collaborative in nature instead of large, heavily funded projects. Chairs also relied on publishing the results of old data in order to contribute to the productivity of the department.

Chairs make time and opportunity for research. Chairs reported that they most require blocks of uninterrupted time to be productive researchers. Chairs characterized a desire for “chunks of time” (Steven; Sam) as essential for “devoted thought” (Edward), or to “really crank through something” (Thomas). Participant responses indicated that chairs engage in a variety of strategies, often at once, to create uninterrupted blocks of time to dedicate to research. Chairs also remain opportunists in order to take advantage of time as it becomes available. Chairs reported that they have to be aware of what they can accomplish and to set their expectations accordingly.

Prioritizing administrative tasks. According to Charles, learning how to prioritize administrative tasks is a skill that helps him to create time for research. Charles characterizes departmental tasks as “eggs” or “rubber balls” because they are “things that will break when you drop them juggling and things that will bounce.” According to Charles, focusing on eliminating the eggs first allows the chair to manipulate a “soft deadline” or use the “back burner” to push out “rubber ball” tasks that do not need immediate attention. The time created in between the eggs and rubber balls is then available to the chair to use for research.

For many chairs, being an opportunist meant finding moments to accomplish small research tasks. Edward talked about the strategy as doing research “in the cracks of the day.” He characterized his recent effort writing a small grant as “squeezing in five minutes.” Learning which tasks he could fit into the brief respites during the day from administrative work became a skill he fostered. Charles similarly fitted research tasks into opportune moments during the day. He cited the example of finding a new stock photograph to use in his new collection of essays when his publisher rejected the cover image as too expensive. He explained that finding a cheaper photograph was, “not major work, but that nicely fit into about a 20 minute slot … I think that's how my work week goes.”

Working off-hours and weekends. Participants believed that a primary means of making uninterrupted time for research was to work off-hours and weekends. Hours outside of work tended to provide the best opportunities for time without interruptions. Walt conceded that this strategy made for “some very long days.” Chairs discuss specific strategies that fit their lives, personal preferences, and phase of the research lifecycle. While Adam worked on processing his collected archival materials and notes for his book, he maintained a schedule of waking up at 5:30 AM every morning. He described his routine:

> I would work for maybe an hour to an hour and a half while my kids got up and got ready for school. I'd see them off to school. I'd go to the gym and then I'd go to the office. I'd get to the office around 10 o’clock. And that's what I would do every single day, And I did that for about a year.

Thomas contended that weekends and nights were the most productive for him: “I tend to find that those are the times where I can kind of be my by myself, write, and really be productive in doing something that requires some serious attention.” Some chairs were also quick to point out that the strategy did not work for them. Michelle confessed, “If I could be a ‘get up at 5:30 in the morning’ person, I would. I hate mornings.” John’s interest in working late to be productive waned as he went through his career, “I've had to do a little bit at night, but I'm not good at night anymore.”

Managing time. Participants suggested they create uninterrupted time by limiting other’s ability to manage the chair’s time while in the office. I observed during the interviews that chairs’ offices tend to be centrally located within the department’s office suite. This central location at the hub of department activity tends to attract faculty and staff wanting to stop in and socialize. According to James, part of creating time is to limit these interruptions: “It's important to get confident enough to sort of say, no, I have other things to do. Because it's a very time consuming job.” Brian remarked that covering his door’s window was the signal not to be disturbed. He offered, “Every once in a while the jacket on the door moves from left to right. And so if I'm here, and, … I have something on my mind that is research related, that's the weak strategy that I have – (Laughs).” In addition to physical limitation, chairs also use their online calendar to create “self-appointments” (Steven) for research. Setting aside blocks of time in the online system allows chairs to show faculty in a transparent manner that they are dedicating uninterrupted time in their office to research.

Chairs also create flexibility in their work schedules in order to make time for research activities. Several chairs recommended scheduling classes in contiguous blocks so that they have a morning or afternoon free to perform research (Adam; Jennifer). Other chairs simply avoid the office by scheduling one day at home a week for research at a home office where they are able to analyze data or write without interruption. To claim his .20 FTE for research, Steven established one day a week with his dean to work from his home out of town. He recommended the strategy to junior faculty. He remarked, "'You can go home to write and do research, or you can go to your lab, or you can do whatever." I try to sort of model that … I am working. It's a work day for me."

One interesting finding that emerged was the value of office administrators as a support system to help the chair make time for research. Jennifer declared that administrators are good "about keeping crazy people away" from her office. Adam intimated that his office administrator knows the finances of the department. "She's fantastic. She knows where the bodies are buried. She knows how to move the money around", he declared. Adam was more confident of answering requests for resources because he knew his office administrator could tell him how much and from where the funds would come. According to Bill, "If you've got a good office staff and you can get functional committee structures - that takes a huge load off of what the chair has to do." Bill contended that, outside of the need for his signature, "if I disappeared for a few weeks probably no one would notice. Because 90% of the routine stuff gets handled there."

In support of limiting access while at the office, observations from the interviews revealed that chairs use offices as a space to perform research tasks. During the interviews, chairs often pointed to research papers, unprocessed specimens, half-edited manuscripts, and penciled-up data sets stacked on desks, chairs, and shelves around their offices. Chairs' offices also have shelving to hold books, journals, and other relevant teaching and research materials within reach. File cabinets were common fixtures in offices as well. As with all research faculty, the chair’s ability to have supporting research materials at hand creates opportunities to use limited time for research more efficiently.

Transforming research. According to participant responses, creating time for research is only one part of the equation to maintaining a research agenda as chair. Chairs also adapt their projects, roles, publication behaviors, and the nature of their research to fit the limitations of available time and resources. Chairs cite transformation of their research as the means by which they can continue to contribute to the productivity of the department.

Transforming Projects. Participant responses reveal that chairs adapt the characteristics of their research projects to accommodate limits on the time available for research activity. Chairs suggested that they are more selective about the projects they undertake. Bill remarked that he was no longer seeking a new research direction at his age. As a result, he says no to requests to join projects more than he had in his youth. He contended, “I know what I want to do, what I want my last four or five years of my career to look like. So that's allowed me to get rid of a lot of the distractions and focus on this area.” He also remarked that he became more selective with whom he was willing to work on projects. By declining opportunities from other researchers who pursued topics in which he was not interested, Bill believed he was able to “stay a little more focused on what you think your core areas are.”

Like Bill, Steven also acknowledged an increase in selectivity of his projects. Becoming a chair had forced him to prioritize. He offered, “I used to have six different projects going and working with all these people and now … I'm working on a book right now … I just have to say to people, ‘I'm so sorry …’" Steven’s strategy for making progress on the book was to focus all his research effort on the one publication. He insisted, “Every conference presentation I do, anything I do is now all towards the book. It's a chapter out of the book or whatever.” He acknowledged he missed the "energy" that came from working on multiple projects: "It's seductive in that sense you're like, ah this is cool. I got all this stuff going on."

Charles discussed the importance of thinking about teaching and research as "mutually informing" activities when developing projects. He perceived that faculty experience of teaching was "frustrating to them and unrewarding" because it took time away from research. According to Charles, faculty should instead see teaching as "one of the great places to experiment with ideas that they end up writing about, so that they start to see these two as, in no way, separate." Small research activities, such as teaching new material or reading an undergraduate class's blog posts could lead to an idea that eventually becomes an article. He contended, "too many faculty I think … see these things that we do as competing with what their real love is." Charles firmly believed instead, that those small moments pursuing ideas through teaching and even service helped faculty to "swim against the compartmentalization" that many of them feel in their research. According to Charles, too many faculty do not perceive that "We are the ones that benefit the most from service."

Transforming research roles. Participant responses reveal that chairs' research roles transform because of the loss of time to administrative responsibilities. Chairs with established research labs relinquish some independence as a "hands-on" researcher to assume an oversite role. Those chairs depend more on their graduate students and post-docs to maintain research momentum. Chairs in fields that focus on collaborative projects relinquish a primary PI role to assume a co-PI responsibilities with post-docs or colleagues that align more with the realities of administrative time constraints. Chairs also perceived opportunity to start new collaborations with junior faculty as a way to maintain research productivity as well as support the junior faculty’s efforts towards tenure. Continued collaboration inside and outside the department provides chairs opportunities to publish as co-authors and maintain some research productivity.

Role with graduate students. Participants who continued to mentor graduate students while serving as chair acknowledged that they relinquished a hands-on research role to focus more on oversite, in particular with lab-based research. Chairs commented that graduate students and post-docs are critical to providing them continued opportunities to stay active in research. Sam suggested that students are the key to maintaining research momentum as chair. He explained, “If a professor wants … to keep an active program going, research program, it would be best if they still have lots of doctoral students, so that you are living vicariously through your graduate students and their projects.” Sam was proud that his students had active, funded projects across the country he could visit. He indicated that he moved to more of an oversite role than active involvement in his lab. To Sam, having students work on research kept him involved in new projects, grants, and co-authoring paper as a “junior author.” Similarly, Mark contended that becoming chair means that you have to, “trust the doctoral students to operate a little more independently on their own because you don't have the time or the energy to be down there with them all the time….”

Sam’s story illustrates the role transition some chairs undertake as researchers from primary investigator to an oversite role. Being able to relinquish research project management as primary investigator provides greater freedom to graduate students to lead the research. John described his transition: “I used to be ‘in charge guy’. Then it's just, naturally, as I've gotten older and worked with PhD students, you know, it's *theirs*. It's theirs until they pass what they pass. And then it's a co-author thing.” John perceived that, “Now I'm ‘editor guy’ because … that's a strength of mine. And so sometimes my co-authors don't want me to know what they're talking about, so that when I read the paper, I can read it - sort of -." Throughout his career, Bill trained his students to be project leaders so that he could transition to an oversite role. While Bill established the practice of encouraging students to be the project primaries well before he became chair, the practice demonstrated its value as he served as chair. He contended, "I think I'm lucky that I've done this, I've got a very short attention span."

Not all chairs felt confident leaving their research in the hands of students and transitioning to an oversite role. Thomas contended that an inability to visit his lab as chair limited his interactions with his graduate students. After worrying that he was not attentive to student project needs, he established regular meetings with them. Thomas felt as though the meetings had helped to ensure that he stayed on task and assisted students to stay on task. Nevertheless, he conceded that his lack of oversite as chair reduced his productivity. "I don't feel like I do as good a job, or at least as active a job of mentoring students as I did before I was chair.", he contended.

Depending on collaborations. Participants with previous research collaborations continued to depend on them for productivity after becoming chair. Some chairs with existing research collaborations indicated that having co-PIs served as motivation to maintain productivity. After becoming chair, Dana continued to maintain her long time collaborations with her co-PIs. She valued these relationships for providing her motivation to continue her research and telling her when she has fallen behind on her commitments. She suggested that, "that is what keeps me going, is that other people pushing me to do my part." She believed, "I think if I was the type of scholar that my work was just independent, … I don't know if I'd be able to keep myself on track." Thomas admitted the value of keeping his collaborations at SRU active as chair was to "help sort of leverage effort." He considered his collaboration with a researcher in a different department at SRU to be productive, even if only through "casual interactions" while he was chair because it provided opportunities to talk about "some problem we're having in my lab … and coming up with different ideas of how to get around it." Even independent scholars perceived value to collaborating while serving as chair to maintain productivity. Karl admitted his stature as a national figure in his field generated offers to collaborate from other scholars. He remarked, "So it's easy to kind of just on fumes put [out] a book chapter a year. I probably get two publications a year just by sitting where I am as opposed to generating from me."

Letting go of a primary PI status and allowing others to assume responsibility for a project was often difficult for chairs. Edward echoed this sentiment when discussing the perceived limitations of his collaborations while chair. He argued, "I've always worked a lot with collaboration, but now it's like my lifeline." Edward's long-term collaborators and their students visit SRU in the summer to work in his lab. Having collaborators in his lab provided opportunities to continue his research. However, Edward also expressed frustration regarding the limitations to collaboration compared to being the primary researcher: "they can do the things that I can't. In a way that's going to look, you can see it on my CV, my authorship has dropped. I'm more likely to be a third or fourth author …" As a new chair and external hire, Daniel simply worried that his well-developed collaboration relationships would not last. He expressed concern that, "I think that the challenge will be to stay in touch. It's harder to imagine having the time and opportunity to carve out a new big project."

Collaborations with junior faculty. A few participants remarked that they initiated collaborations with the department's junior faculty members as chairs. Chairs assume a variety of roles in their collaborations with junior faculty. Participants believe the arrangement benefits the chair and the junior faculty member. The chair maintains research productivity while the junior faculty member earns grants and publications towards tenure. The department also benefits through improved productivity scores in Academic Analytics®.

When Dana became chair, she parlayed her “very good” startup money to continue her research using the department’s junior faculty. Her perception was that the collaboration benefitted everyone. She explained, that the collaboration as, “trying to take my research, building off of some of my other research, … pulling in people that do similar work and trying to … double duty me and plus the department and them as well.” Brian’s engagement with junior faculty assumed a different form. He observed that his role changed in collaborations with junior faculty. He commented, “I've gone from, I guess I've become more of an idea generator instead of doer.” He discussed having a conversation with a junior faculty member about a research idea that he “had on the back burner for about 4 years.” He contended that, “within a few weeks we were building a data set together.” Brian eventually handed off the project to the junior faculty member when administrative tasks increased but was excited about the preliminary work.

As a chair, Jennifer raised an ethical issue with using her department’s faculty for collaborations. I observed during the interview that Jennifer expressed worry about a recent research collaboration she was currently pursing with a faculty member. Jennifer admitted that the faculty member brought important expertise to a grant proposal. However, she felt conflicted about whether the faculty member was helping her because she wanted to participate on the project or because Jennifer asked her as chair. Jennifer fretted, “I feel like she's doing this because I'm the chair and I'm bothered by it. I don't like it. I just, that's not what I wanted, it's not working out the way I wanted to.” While Jennifer indicated she got the faculty member involved in the first place because she was underperforming, Jennifer also was concerned that she overstepped her authority. She perceived that, “I feel like that's an ethical line that I'm not comfortable with.” Jennifer considered that, as a relatively new external hire, she still felt “like I'm external to the process. So it's that relationship difference.”

Transforming publication behavior. One trend I noted among participant responses was that many faculty members change their publication behaviors while serving as chair. Participants described adapting their publication format or publishing data and scholarship from research completed prior to assuming the role of chair. These strategies allowed chairs to maintain productivity while they held the position.

Transforming publication formats. Some chairs supplement or substitute longer form article and book submissions with shorter pieces. Chairs turn to essays, blog posts, and popular magazine and newspaper opinion pieces as a means to maintain the momentum of their research agenda. Charles wrote regular posts for his department blog as well as a few professional blogs as part of a 2013 research initiative. He argued their importance to research: “They become little petri dishes where you can kind of experiment with an idea in four paragraphs, something pithy and writing it for … somebody who doesn't think about the study of [research topic] the way we do.” Charles also realized he had become more of an essayist over time. He was currently editing a set of recently written essays for a new volume under contract. Chairs did not discuss the implications of using peered or non-peer reviewed outlets for testing research ideas.

Steven contended that the lack of time for research as chair had an opposite effect on his publication format. He explained that other chairs he talked to noted how they shifted to writing short form articles and blog posts when they assumed chair duties. Steven preferred to maintain the focus of a long article or book. He argued,

> It's easier for me now to write a book than to write short things, because I need to have the sustained argument that I'm working through in a book. That is what keeps my research momentum going. If I was doing different blogs or if I was taking on different issues, it would feel [like] my administrative work. I would just be too scattered to focus in, so the book has really helped me. And, you know, the contract has a deadline. You've got to get it done.

Publishing previously collected data. One common practice chairs used to maintain productivity was to publish data and scholarship from research completed prior to assuming the role of chair. Publishing previously collected data allows chairs to contribute to the publication analytics of the department while keeping a research agenda afloat until the chair's tenure ends. The strategy affected all aspects of the research process according to Bill. He spoke of a lack of urgency starting new research because, "I know I can write the papers. I've got tons of old data. Early this morning, digging through field notes from 2011 … there's another nugget there … So I don't have to do that fieldwork." Daniel discussed the "backlog" of data he was mining for papers. He conceded the sheer volume of previously collected research to pore through informed his decision to become a chair: "(laughs) Yeah, and I think that was part of why I felt like the timing wasn't bad. I was between projects and had collected a lot of data but hadn't written about the data." As a new chair, Daniel anticipated that his time for data collection would be severely limited in the near future. He was confident he would have data enough to continue publishing throughout his tenure. Chairs also described publishing old conference papers (James), "stuff already in the pipeline (Karl), and travelogue journal entries (Sam).

Transforming research framework or focus. A few participants indicated that the framework or focus of their research changed as they assumed administrative duties. Some chairs move away from empirical studies, which might require time-intensive data collection processes, such as fieldwork or laboratory work. In speaking about his current book research, Steven wondered whether his shift away from empirical studies towards conceptual research[5] was due to having less time for fieldwork and processing interview transcripts. He acknowledged a natural tendency in his career arc towards conceptual work, but suggested that administration "forced me in that direction." By shifting to conceptual research, he could stay at home alone and work on the "philosophy stuff." Other chairs perceived a shift in research focus as a poor trade-off for being chair. Andrew considered the types of research questions he addresses as part of his agenda. He contended his biggest concern was, 'I'm bouncing from small project to small project mostly with co-authors, graduate students, post-docs. I do not feel that I have the time to sit down and engage with some of the really deep problems." Despite feeling as though he had a strong idea for an NSF grant, he did not believe he had the dean's support to pursue it because of the time commitment.

A few participants discussed taking on different types of research-related projects. Adam started work on a digital humanities project after becoming chair. He we proud that the project pulled in a half-million dollars in grants. Adam conceded that most of the grant money was not going to the college, but that its success to the college's administration, "keeps me on their radar." For Sam, editing a journal and focusing on research without a fieldwork component allowed him to remain active until he retired and could return to his lab. He explained, "That's one part of my research, but there's plenty of other [parts] of my research that does not involve fieldwork at all. And that is the kind of stuff that I do right now."

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[5] According to Goodwin (2005), empiricism is the "the process of learning things through direct observation or experience, and reflection on those experiences." In comparison, conceptual research focuses on concepts or theories that describe a phenomenon under study.

Positive Perceptions of Productivity

Given new strategies to cope with the lack of time for research, some participants described research productivity successes while serving as chair. When discussing productivity, chairs always qualified the claim with a concern to temper the success. Edward's response was typical: "If you look on sheer paper counts, last year was my best here. But I wasn't lead on any of them." Daniel saw great progress on publishing over the first six months as chair but conceded, "It was the honeymoon phase so to speak. I'm not teaching this year, so when I start teaching that's where it's going to be more of a crunch." Michelle had submitted five manuscripts in the last year. Jennifer received her first external grant. John declared, "I have never had a run of publication success better than since I've become Chair, but it's all stuff that's finishing during that period of time. So it looks like I'm this amazing multitasking machine." He qualified his success by indicating that he only had "one or two" active research projects. John's comments suggest that once a chair publishes all their extant research, productivity might wane as the chair engages less in new research endeavors.

Some chairs were surprised at their unexpected level of productivity. Adam was pleased with the amount of progress he initially made on his book while chair. The progress was satisfying to him because his peers in the field told him how difficult of a task it would be to complete his manuscript and perform administrative work. His strategy was to complete a chapter each semester while teaching and serving as chair. He spoke with pride about his productivity:

> Getting two chapters done is beyond…. I couldn't believe how much I got done. It was more than I've been ever able to get done before.… ironically, I find that being chair so far at least has made me more productive. I have to work harder and I have to work more

hours and I have to be a little more disciplined, but the thing about being chair that I do like is because I only have to teach one class, I'm able to parse out my time a lot. … I'm able to direct my focus on a lot of different things whereas when you're teaching that regular 2-2 load, even though it's one more class, it fills up your life, and somehow even if they're classes you've taught before it doesn't matter.

Perceiving Administrative Value of Research

Chairs perceive that their researcher reputation and active research agenda helps them enact research-related roles and responsibilities in support of faculty productivity. I anticipated that a chair's reputation as a researcher and active research agenda might influence their power and authority as they support faculty productivity. According to Gmelch (2016), service to faculty and administration limits the power and authority of the chair. Furthermore, a chair's expertise as a researcher or scholar informs how faculty perceive the chair's legitimacy (Chun & Evans, 2016). Three primary themes of findings emerged regarding the administrative value of chairs' research. According to participants: (1) chairs perceive themselves, and believe faculty and administration perceive them, as at least satisfactory researchers; (2) chairs perceive that their research reputation informs how they enact research-related roles and responsibilities with faculty; and (3) chairs perceive only limited benefit from their research reputation as they enact their research-related roles and responsibilities with administration.

Perceptions of Research Reputation as Satisfactory

Personal perceptions of reputation as researcher. Based on participant responses, most chairs assess themselves as having at least a satisfactory reputation as a researcher. I observed that many participants often carefully articulated their beliefs around reputations during the interviews. Chairs tended to think about their reputation within their community of colleagues in their field. Chairs also agreed that their reputation as a researcher is a central to their professional identity. Walt described the importance of reputation to all faculty as they aspire to leave a mark on their field.

> It's about reputation. It's about how vast is that reputation, is it international? What is your influence on the discipline, and how can that be documented? Are we being encouraged to do that? Yes. But like I said, are we doing it because we're being encouraged to do it? No, we're doing it because that's who we are anyway.

Walt’s statement suggests that reputation derives from the chair’s professional identity as a researcher and not as an administrator or department leader.

Most chairs hesitated to describe themselves as having an exceptional reputation as a researcher. Dana submitted, “I'm not that ivory tower scholar. So, I've never seen my work as kind of being very esoteric or philosophical, or I don't see my work that way. It's much more applied.” Michelle saw herself as a “mid-level scholar.” She remarked, “I will probably never cure cancer. But everything that I've done, has been solid, good work that contributes to the body of literature.” Ray was a slightly more positive about his accomplishments: “I managed to assemble a pretty good record of productivity in my time here. … I produced a good deal. I got some recognition for the work that I did.” Similarly, Bill contended that among professionals in his subfield he had a “strong academic reputation.”

Older chairs without an active research agenda often conflated their current reputation with their career reputation. Mark reflected on his successes as a faculty member, “I had more money than anybody else in the department, was published and stuff like that. So I've done that in the past. So people look back and yeah he's done that.” Chairs nearing the retirement milestone tended to look back positively on their careers as researchers. Merle contended that he was a good researcher for much of his career. However, he acknowledged that, “Certainly, that's not the case today, but, I did do well. There are several of my junior faculty members that are going to be associate professors for life…”

Charles and Karl indicated that their research informs the scholarship and direction of their fields. As a result, they held international research reputations. Charles remarked that he was critical of a particular model of studies in his field and had gained a reputation for challenging that model. He noted, “It's always been interesting to hear, especially newer faculty, when they … tell me that they've met people at conferences who want to know what it's like working with me because I'm trying to kill the field.” Karl contended that his “national profile” stemmed from being “connected to the different political - social stuff happening around the country … and the activism that comes from being part of the department ….”

Perceived reputation among faculty. Based on the findings, most chairs believe that their reputation as a researcher among faculty is at least satisfactory. Chairs indicated that they based these assumptions on their daily engagements with faculty members (James). According to Margaret, respect as a researcher was a prerequisite to serving as chair. She offered, “Yeah. I think if they had not had a reasonably positive view of my own abilities as a research scientist, I don’t know that they would have had as much confidence in me.” Steven mused that the faculty perceived him as a “scholar and researcher” first. He acknowledged that not all faculty would know his reputation. When discussing recent hires to the department, he pointed out, “The people that I have a shared history with recognize like, oh, he does good work and he's been doing good work and he's churning it out.” However new hires did not have that professional history with him. Steven’s point illustrates the point that different contexts enhance or diminish the status of a researcher’s reputation.

Most chairs who were recent external hires tended to see their reputation with the faculty more positively because the department had expectations of their reputation when they hired them. Jennifer mentioned that she knew a number of the faculty prior to accepting the position. She contended, “So I know I have the reputation to be a decent scholar, I'm not the top scholar, I'm certainly not the bottom. So I'm somewhere in the middle, and I'm okay with that.” Andrew suggested he was bringing his “international reputation” to the department. He declared, “I think my colleagues recognize my research chops. I think that figured heavily in what they were looking for.” According to Brian, the research faculty were “all in” when they hired him. Many of the faculty already knew him from professional organizations. He contended, “I have my reputation, deserved and undeserved ... And they were excited about that, because they knew that I'd bring a greater emphasis on research and instruction.” Not every external hire was as confident in the faculty’s perceptions. Dana submitted, “I don't feel in any way that people don't think I'm a legitimate scholar, I just don't think that anyone even sees me in that role. So it's not negative, it's just absence of.”

Older chairs also tended to focus more on their career reputation as a researcher among faculty over their current reputation. Mark acknowledged that faculty likely perceived that his research agenda was no longer active as a full-time administrator. In his defense, Mark contended that the faculty could examine his career to see that he had the capability to make full professor. He contended that reputation was critical to how he interacted with faculty because, “If you didn't have that, then I think you're in trouble because people need to know that you've been able to do this on your own.” Similarly, Walt perceived his reputation among the faculty after 14 years as an “evolution.” As younger faculty replaced older faculty, only three original faculty members remained that would remember him primarily as a performer. According to

Walt, “So, I mean, at this point in time it's somewhat impossible for people in the building to have a perspective of me not as chair, because they've never known anything other than that.”

Administration’s perceptions. Few chairs reported any direct interactions or communications with administration regarding their professional reputation as researcher. In the absence of direct evidence, most participants used indirect methods to ascertain that they maintained a satisfactory reputation as a researcher with their dean. Brian’s response was typical of chairs: “There were never any concerns about my ability to do just fine in the field.” While Andrew’s dean had some critique of his funding productivity during his last review, he acknowledged that, “I think the Dean has some respect of my research credentials. It helped that he knew my advisor back in the day.” Michelle’s dean often requested that she participant in hiring committees for other departments. According to Michelle, the dean relied on her to assess new candidate research presentations when, “it's kind of out of our area and we're not really sure if it's solid." From these engagements, Michelle assumed that the dean valued her expertise as a researcher.

Andrew contended that the dean believed he was a “good research fit” for the department. Andrew had previously mentored one of the department’s rising academic stars who recommended him for the open position. He suggested the dean might have been trying to capture that successful mentor-student dynamic to enact change in a department, which had failed to meet the dean’s research productivity expectations.

> I suspect that [the Dean] was looking for major changes in the department and the other, from what little I've been able to glean from what the other candidates were, they were more status quo kinds of people whereas I made it clear that I was gonna rock the boat the day I showed up.”

Steven made an association between his research reputation among administration and putting Academic Analytics® into practice. He observed, “So I think my administration sees me as a researcher, [sic] this new Academic Analytics® movement. Apparently, I score pretty well.” He suggested that the several year lag in the school’s analytics data likely gave his reputation a boost because he was “still riding the momentum” of previous productivity. In contrast, Bill did not know if his school administration examined the analytics data to assess his research. He remarked, “No idea. I mean, you look at my annual activity report every year but they've never said, for example, compared to the chairs of this, you're better or worse or the same.”

Despite generally positive perspectives of their reputation as researcher among their college or school’s administration, some chairs indicated that the school valued their reputation as an administrator more. Dana recounted an early meeting with the dean where they discussed expectations. She recalled, “This department had issues.… So, I think the focus much more is on the running of the department.… I think that the college sees that as more valuable than what I would bring to the table as a researcher.” Thomas also suggested that his school, “probably see me primarily as a chair, and that's the most important thing.” He did contend that the school looked favorably on his ability to be an effective teacher and researcher while chair. He suggested that the school preferred that he maintain an active research agenda because “that's contributing to the greater whole of the department maintaining research productivity.”

Reputation Informs Responsibilities with Faculty

Participant responses suggest that reputation as a researcher informs how chairs enact research-related roles and responsibilities with faculty. Based on their reputation, some chairs serve as role models of departmental expectations of research expertise and productivity. A chairs’ reputation also enhances the authority of the chair with faculty and serves as a resource to help faculty to improve productivity. Some chairs believe their reputation improves faculty retention. A few chairs suggested that their reputation has no effect on faculty productivity.

Chairs role-model productivity expectations. Chairs discussed how their reputation as researchers served to role model departmental research expertise and productivity expectations. Ray speculated that his college preferred that chairs are productive. He considered, “because then they figure that that person can be something of an example to their faculty. And that they have the respect of the discipline. I'm sure that they appreciate that.” Matthew shared his experiences publishing in high-end journals with his faculty. He acknowledged that he had been fortunate to have a number of high quality publications on his CV. He anticipated that his faculty perceived, “So he's at least able to do the science thing decently well. And then, I think when they work with me on a committee … they really see it. It kind of validates maybe what they were already suspecting.” Thomas desired his faculty to see that he was maintaining productivity. He believed that continuing to be productive as is important in the sciences, “Because that's one of our big missions. And I think it's more difficult to have the power to say, ‘This is what I think we need to do as research,’ if you're not tied into the research mission.” For Jennifer, the equation was simple, “I can talk the talk and walk the walk. That's good.” Steven contextualized his productivity within administration’s recent research productivity initiatives. He argued, “I can't ask folks to amp up their research, if I'm not doing it myself. So right now, it helps. I can see down the road, where, if I don't keep it up, [it] would be a hindrance...” Steven suggested that the need to role model research productivity provided him with motivation to maintain an active research agenda. He contended, “You can't last, I think, in any administrative position that privileges research… unless you're doing it. And I'm a big believer that you got to walk the walk." In these cases, the chair's research experience and active research agenda sends a clear message to faculty regarding the expectations of productivity.

Reputation enhances authority. Matthew, Thomas, Jennifer, and Steven's perspectives also suggest that an active research agenda and reputation enhances the chair's authority with faculty. Some participants contended that reputation as a researcher lends more weight to the chairs' requests to faculty to meet the demands for improved productivity. Adam offered that a research reputation puts chairs in an advantageous position when entreating faculty to be productive. Adam subscribed to the idea that being productive gave a chair a "moral authority" to tell a faculty member, "Hey man, you gotta get your shit together. We're expecting you to do more." According to Adam, negative perceptions of research reputation and productivity serve an antithetical purpose. He contended that unproductive chairs were at a disadvantage when asking faculty to be productive because "Nobody wants to work for a lazy boss."

Andrew held similar sentiments regarding the value of his reputation as a researcher. He acknowledged having a strong reputation and contended, "Also, when I start talking about research, and funding, and expectations, they know that I'm speaking from experience." Andrew perceived value to his reputation when aligning faculty to new productivity requirements. He contended that, because he had built his research career at a small liberal arts school with a heavy teaching and service requirement, the faculty at SRU had no room to complain about the research productivity demands at SRU. Andrew remarked, "I think lurking in the background is the fact that I can always say, 'Look at what my teaching load and service load was before I came here. You're teaching two sections of the same calculus class. so...'" Chairs did not indicate that their reputation provided any direct authority to demand improvement to productivity or to affect departmental change in support of productivity.

Junior faculty use of chair's reputation. Some chairs described how junior faculty approached them to review work or seek advice because of the chair's reputation as an experienced researcher. From Michelle's perspective, junior faculty members' requests for guidance confirmed that she had a "solid" reputation as a researcher. She considered, "on a regular basis they bring me their grants and their protocols and …'I'd really like your feedback on X Y Z.' And 'Hey, I'm thinking of this study design but, I'm worried about the power for this.'" Daniel offered that junior faculty had come to him to receive guidance on the decision to spend their time pursuing grants or publishing. He observed, "It seems that part of that is coming to me as a chair and part of it is coming to me as somebody who's been successful seeking grant funding ..." He considered their attention "a bit of a commendation." On balance, he perceived it as, "some of it is because of expertise and success and exposure and that part of research live, but it's also a part of kind of understanding how applying for a research grant fits into their dossier in terms of proposals and timelines." In Daniel's case, the dual roles of chair and researcher inform one another as the chair helps to guide junior faculty through the tenure process.

Chair's research informs department. Karl and Charles, who indicated that they had international reputations, also contended that their research agenda informed the research focus of their departments. Karl clarified the relationship between his research agenda and the department's research focus: "So it means … my work … was directly the subject of the department … there's no gap between the work I would do as a writer or researcher and the department." Karl characterized the department as a "testing ground" where he and the other faculty informed each other's research. He suggested, "we have a constant kind of push, sort of the new concepts flowing, pushing through the department…." Referencing how he was changing the field, Charles suggested that the faculty understood that they were participating in “something novel” in the department. He contended that the department was starting to gain a reputation “for a variety of things happening here and not just for some apparently infamous department chair.”

Improves retention of faculty. The findings also suggest that the research reputation of some chairs helps retain faculty. As an external hire, Brian discussed how his hiring was contingent upon assurances that the junior faculty would not leave for other schools, as had been the trend prior to his arrival. He recalled discussing his plan to grow the research reputation of the department during his job talk, “So I talked with them last year and said, ‘Are you all planning on staying? And if I come here it's with the understanding that I expect that you all are committed to staying and will build something.’” Brian contended that his message provided a clear signal to the faculty that the direction of the department was changing. According to Brian, one new hire was waiting until after they knew that Brian was signing on before taking the job.

Chair’s research agenda and reputation not that important. Some chairs presented a countervailing view of the importance of a chair’s research reputation and research agenda. As an admitted “full-time administrator” who did not maintain an active research agenda, Mark argued: “If they're looking at [chairs] to be the shining example of the ultimate researcher you're looking in the wrong place. That's the endowed chairs and all the other folks you bring …. that's where the leadership research comes in.” Mark contended the chairs role was to “make sure people are successful, but that's different than being a leader in research.” As an associate professor serving as chair of his department, Matthew did not perceive any authority to exert his expertise as a researcher in his chair duties. Instead he contended, “I kind of call it a middle manager just jokingly, but really it's more of a facilitator. I'm on equal ground with all these people.… I don't have any real authority.” Steven acknowledged that his growing international reputation was important part his professional identity. He indicated that the “recognition” from his research shaped how other researchers engaged him at professional conferences. He believed that research reputation also informed his engagements on campus. However, he did not see where that recognition helped him enact his administrative functions in his department. He argued that a lack of authority overrode any benefit from reputation. He concluded, “we're in a position where we don't have enough sort of ability to enact change, that it doesn't carry. Like a dean - I think it does. But I think the chair - you just don't have that capacity.” Participants did not discuss the importance or unimportance of reputation as a product of individual, department, or school differences.

Reputation issues of associate professor chairs. Associate professors serving as chairs experience conflicts when directing departmental improvements in research productivity. Some associate professor chairs worried that faculty might question their legitimacy as researchers due to their status when directing departmental improvements to research productivity. Matthew admitted that other researchers could question his legitimacy based on a perfunctory look at his accomplishments. He admitted he lacked experience with large sponsored research. Matthew contended that, even though he did not win sizeable external grants for his own research, his experience working on multiple NIH grants early in his career with senior researchers legitimizes his authority when discussing grants. This credibility extended to his interactions with the dean. Not every associate professor serving as chair shared Matthew’s experience. James submitted that he believed his department’s senior faculty respected him as a researcher despite his lower-ranked status. This perception was important to James because it meant that the faculty believed that he was qualified to evaluate their scholarly work.

Reputation Informs Responsibilities with Administration

Compared to chairs' experiences of the value of their reputation with faculty, participant responses suggest that chairs perceive negligible value to their research reputation and active research agenda with administration. Chairs observed no influence of their research reputation on the school's resource allocation processes. Adam doubted his reputation as a researcher held any weight with the dean during resource allocation. He contended that, "When they make decisions about resources it's much more thinking systemically across the college." He suggested that a chair with a research reputation that could influence that process would have to be a "freakin' superstar, in which case they're not going to be chair of the department." Adam thought a chair's poor performance, such as failing to provide budgets on time or requiring constant reminders to complete tasks, would be a larger factor affecting resource distribution. Thomas affirmed that the chair's reputation as researcher would only serve as an inconsequential influencer among many factors. He offered, "I think probably the department as a whole probably has a bigger impact on that than my individual productivity." In particular, Thomas thought that, while the school appreciated the department's research productivity, the department's substantial teaching mission would be more of a factor. Jennifer similarly saw departmental factors as influencing the school's resource allocation. She suggested that the status of her department as the largest in the school had more of an influence on the dean's resource decisions than any individual characteristic her as the chair.

One participant's story suggests that a chair's research reputation does not stop administration from intervening in a department's research activity. When I asked Andrew whether his reputation influenced the dean's resource allocation decision, Andrew relayed his experience with his dean's unexpected intervention in his department. Andrew identified as having a national reputation as a researcher. Andrew’s dean was once a faculty member in Andrew’s department. Andrew suspected that the dean did not have full confidence in him. He declared, “I think he thinks he can do a better job running my department than I can.” Andrew also remarked that, “I think the biggest problem we have in [the department] is I think we're held to higher standards than other departments because the Dean is a [member of the department].” Andrew related a story as to how this status overrode the chair’s reputation as a researcher during a new hire for the department:

> I think this really came to a head at the end of my first year here. He launched a move to hire a senior [faculty member] in this department without discussing it with me. And then, after I found out I thought, ‘Oh this is really great.’ And basically I found out when the Dean's Office dropped the details of organizing the interview on me. And then at the last minute [the dean] terminates the negotiations and wouldn't tell me. Or didn't tell me. I got a message from one of the associate deans saying, ‘Oh you can't talk to this guy anymore.’ … Yeah, and when I called him on it, I got a lecture about well you say that I don't trust, well you have to trust me [Andrew]. And I'm like... tell me what's going on.

Andrew contended that his relationship with administration improved when the school hired a new associate dean. Unlike the dean, who Andrew characterized as “not a big communicator”, the associate dean at least would provide Andrew answers to his inquiries. Andrew’s story suggests that even a chair with a national reputation as a researcher carries limited influence to stop administration from interfering in departmental business decisions.

Professional Identity and Career Aspirations Growth

Participant responses suggest that researchers experience growth to their professional identity and career aspirations while serving as chair. Chairs carry their experiences and beliefs as faculty members and career researchers to the role of department leader as they enact research-related roles and responsibilities. The findings also show that exposure to new experiences as chair informs how they perceive their role as researcher in limited contexts only. However, serving as chair exposes the researcher to new skills, environments, and career opportunities, which informs career aspirations and choices. Those career choices have implications for the departments and institution's support for faculty research over time. One interesting finding was that associate professors struggle with career concerns while serving as chair. Based on observations, chairs' offices also reflect their dual roles as researchers and administrators. Despite experiencing growth in professional identity, most chairs continue to place highest value on the researcher role as their primary professional identity. However, some chairs' observations of career choices contested that assumption.

Perceptions of Preparedness for Role

Participants' experiences as faculty members shape their perceptions of preparedness for the role of chair. Some chairs contended that they had no formal support or guidance with the skills necessary to be a successful chair. Andrew characterized his experience as being "thrown in the deep end without a lot of support." John recollected his experience to be "here's the flash drive, and this is my office and these are the drawers and I'll leave the files here." Walt similarly contended that his dean "handed the keys to the car and a manual on how to drive and said, 'off you go.'" For chairs who articulated they had no formal training, some contended that they at least read books on being chairs or used on-line resources to prepare (Daniel; Edward).

Even when they received no formal training, many participants indicated that they prepared for the role of chair through other socializing experiences. Nearly all chairs commented that the institution made formal training available to them. Chairs often attended training sessions with SRU's Human Resources department (Brian; Edward) or an academic leadership program (Thomas; Jennifer; James; Steven). Some deans hold retreats during the summer (Adam; Dana; Edward).

Participants revealed that mentors and colleagues serve an important role in the preparedness of chairs. Bill, Dana, Edward, Michelle, and Steven all commented the importance of their mentors as models of effective leadership traits. Bill's mentors taught him to how to say "no" to faculty requests in a transparent way. He recalled the power of one mentor:

> He had this talent where I would walk in and you know, I'm arrogant. I'm a young guy. I think the world is my oyster. I want this, I want this, I want this. And then we'd have a conversation I'd walk out down the hall, pretty happy. And I think maybe halfway back to office I'd realize he told me 'no', but I feel good about it.

Other mentors taught Bill the importance of being consistent and honest. One of Mark's mentors was his father, who had served several rotations as chair at his institution. Through observations, Mark learned the expectations of serving as a faculty chair. Brian depended on weekly calls with his brother, who serves as a chair at a different institution, for guidance.

Many chairs cite previous administrative positions as important stepping-stones to becoming a chair. Dana contended that as Director of Graduate Studies in her department she had been "earmarked to be department chair." Daniel had served as an associate chair in his department at his previous institution. Along with his duties as a graduate coordinator and an undergraduate coordinator, he believed he had exposure to many of the administrative responsibilities of chair. Other chairs commented that experiences managing a master's degree program (John), a research center (Adam, Sam), professional organizations (Sam), and a restaurant (Michelle) provided some experiences and administrative training that prepared them for the role of chair.

Chairs also suggested that time as a faculty member provides a perspective on being a successful chair. According to Adam, "A lot of what you need to be chair you've learned from being a professor for a long time and paying attention." Walt believed he had accumulated a wealth of institutional history as a faculty member before becoming chair. He remarked, "We all have the experiences observing the inner workings of programs and departments and maybe develop our own perspectives on what does work and what doesn't work, what is effective, what's ineffective." Walt remarked that he had worked with five different chairs before becoming one and had witnessed firsthand successful and unsuccessful approaches to the position. As faculty member, he also had the history of editorial commentary from other faculty members on the relative successfulness of those approaches.

Perspectives on Department Leadership

Participants perceive that a successful chair has the agency to support faculty and improve the department. Charles characterized the role as a "really nimble, creative place within the administration." He perceived the chair as "the last level … where you can work, hopefully creatively, to directly impact a specific group of faculty members and students' lives." For Walt, the focus of the chair's leadership is about "Keeping everybody looking forward to the future. And not focusing, for good or bad reasons, on the past." Sam perceived his role is to "keep the party going, ship afloat, and leave it better than when I got it." Participants also associated the role of chair with supporting the development of faculty careers (Mark; Michelle) and serving as a faculty advocate to administration (John; Matthew; James). Adam understood his position between the faculty and administration as a “go between” but argued that, “To the extent that I have an allegiance, it’s to my department. I feel a responsibility. They're my colleagues. They're people I see every day. Many of them are my friends. But I also have a job to do.” John contended that every faculty member should serve as chair at some point in his or her career, if only for a few weeks, to understand the chair’s perspective on the university. He contended, “So you realize, even a little bit … just the kinds of constraints you're under and who makes what decisions and how the money really operates.”

Participant responses indicate that chairs with active research agendas are aware that they enact dual roles as researchers and administrators. As a new external hire at SRU, Daniel reflected on how his colleagues in his field perceived him in his position compared to his new colleagues at SRU. Daniel observed that he engaged as both a chair and a researcher on campus depending on the context of the engagement. He considered, “it's hard for me to disentangle kind of how people see me as a researcher from how they see me as a chair .... sometimes, I feel like I take off my department chair hat and put on my researcher hat when I go to another meeting on campus.” Steven also acknowledged a difference in roles depending on the context. As his international reputation increased, Steven contended that his role as a researcher took precedent internationally, but locally his reputation as a chair was more important. Nevertheless, he contended that, “I think my job benefits from me having a strong research profile … both on campus and then within my field…. So, I hang my hat on my research reputation, not my administrative reputation right now.”

Researcher Role Informs Chair Role and Responsibilities

Some chairs draw upon their experiences as researchers to inform how they enact their research-related roles and responsibilities as chair. Chairs indicated that the attitudes, values, and beliefs they hold as researchers influence how they perceive the responsibilities of chair. Some chairs identified beneficial experiences and personal traits drawn from their researcher identity that were useful to performing administrative functions as chair.

Seeing commonalities. Jennifer and John described commonalities they found between serving as chair and engaging in research. Jennifer posited, “I like it because it's challenging. It's a puzzle in the same way that research is a puzzle to me. How can I solve that? It's the same kind of thing of, "’Crap, this is not what I expected.’” In discussing how he reviewed a faculty member’s paper for a conference, John remarked that he applied his research skills to resolve issues with the paper. He contended that as chair, the difference now is that he has to solve the issue without spending an afternoon researching an answer.

Some participants suggested that chairs rely on their experiences and conceptions of research to inform their approach to serving as chair. Karl, who came to the chair position as a faculty member in another department, offered that his previous research experiences helped him to establish the research standards in his new department. Reflecting on his experience as a researcher, he remarked, “You write everything yourself. You produce books. We're really a book-focused disciplined. And so it means that I've brought that type of organizational stuff into being chair and also how I support faculty.” Similarly, Dana believed that managing the project logistics as the PI of her large, funded project that tracked the movements of 500 people helped her organize as a chair. She remarked, “So in terms of setting up systems for graduate students to try all that sort of stuff, keeping track of money, the budget that all did. So that was a very good transition into being a chair." For some chairs, their conceptions of research informed how they put into practice Academic Analytics®**.** Brian remarked that his focus on analytics in his own field was "how I approach everything, including being a chair." Brian indicated that he tells stories through analytics. He contended that analytics would play a large role in changing the department's research underperformance. He was confident that, "in that next annual report, show casing what we're doing the way that I typically approach my research, it's going to help change that narrative in the college."

Applying researcher traits. Participants suggest that some of the traits required to be a successful researcher also apply to being a successful chair. Chairs emphasized the importance of bringing thoroughness and organization to the role of chair. Matthew indicated that he was meticulous and detail oriented "to a fault" in his research. He contended that those traits often helped but sometimes hindered him as chair. He admitted, "I'm slow… This can be a detriment in situations that require quick decision-making but also serves to ensure that critical tasks are completed." Sam held a similar attitude, "So it doesn't matter how smart they are in terms of their scholarship. If they aren't organized and can't follow a calendar and make it so that this department can go on without them being there, then that's not a person that I would want." Walt, the chair of a department with creative activity, suggested that an effective chair requires "a lot of creativity." Walt believed his performance experiences have informed his approach to being a chair. He asserted, "Do I hope… I think I'm a more effective administrator because of the experiences that I have gained as a [creative performer] and how those inform that? Yeah, there's a lot of cross-pollination in those conversations." He cited an understanding of the "pack animal" social nature of his performers an important trait to being a successful. John asserted that being a researcher has given him equal amounts of empathy and cynicism for researchers and the challenges they face. He suggested that:

> I understand what people are going through and I also understand when a guy tells me, the reason he hasn't published and gets an ungodly amount of money … and he started here 8 years [ago] is because he's had bad luck. That's an awful lot of bad luck.

Chair Role Informs Researcher Role and Responsibilities

While chairs tended to attribute some influence of their researcher experiences on their approach to serving as chair, they identified only a limited feedback loop of influence from chair to researcher roles. Many respondents observed no influence on their role as a researcher. Chairs who did perceive an effect, cited how serving as chair influenced their perceptions of research productivity, efficiency, and collaboration. Some chairs also reported that they experienced growth in personal and interpersonal skills such as entrepreneurialism, communication skills, and extroversion that would help them as researchers. Some participants also identified that serving as chair expanded their understanding of the university as a political environment through friendships with other chairs. This new network informed their sense of professional identity and provided them information and support in an uncertain environment.

Participants who did not perceive the influence of serving as chair on their researcher role noted a strong division between the roles. Ray suggested that the roles of chair and researcher are “Very different parts of the brain and different attitudes and a different style of work entirely.” Andrew laughed while discussing his perspective, “I've often treated those two as pretty disjoined parts of my life. Chair is what I do and like doing but being a researcher is something else that I do.” Karl contended, “I'm still just as disorganized.” Sam thought it was unfortunate the two realms did not intersect more. He conceded, “Yeah. The administration doesn't tap back into me being a researcher unless I was looking for specific places where, you know, grants were. But no, it doesn't go that direction. That's kind of sad.” Examining the skills that he learned as chair that could serve him as a researcher, he considered, “So you don't learn organization from this job, you get this job or do a good job because you're organized.”

Research productivity as a concept changes. This study has previously explored the effect of serving as chair on research productivity. As a corollary, a few participants acknowledged that how they perceived the concept of “research productivity” changed while serving as chair. Chairs cited experience with vanity journals and tenure and promotion processes as contributors to their understanding of their conceptions of research and research productivity. Matthew discussed how a conversation about predatory and vanity journals with other department chairs expanded his understanding of the importance of journal impact scores. Originally, he was of the opinion to “just get it out, just get the publication out.” He contended that now, “I'm realizing more and more the importance of *don't* just get it out, actually be really selective and try to get it out to the very best outlet you can first. If you fail there, well then move on.” James, another associate professor, shifted his opinion in the opposite direction: “Frankly … It's not as important to me as it once was to have my work published in the top journals in the field. It's more important to just get it done and get it out.” He contended that reviewing other faculty members’ activity reports for tenure and promotion made him more “pragmatic” about the effort the most prestigious journals required for publication compared to other tiers of prestige.

Mark contended that serving as a chair changes the focus of research productivity from the self to the faculty. He recommended that senior faculty serving as chairs ought to let go of furthering their research reputation in favor of mentoring and guiding other faculty. He contended that as a senior faculty member, “your job is more facilitating and helping other people be successful rather than just farther promoting your own success. Because if all you're in it for yourself then what are we doing here?” Mark’s attitude aligns with the message some chairs received from their deans regarding their responsibilities as chair when negotiating the position.

Steven’s experience as chair reinforced his respect for the academic researcher profession. Where once he joked about it, Steven now loses patience for faculty he perceives as taking advantage of the profession by failing to be productive or engaged faculty members. He spoke candidly about how his attitude had changed:

> Yeah, I have less patience with faculty who don't do their jobs. You get behind the scenes and you see it. That can be really frustrating, because the number of times I want to walk down the hall, and, this is just my personality be like, ‘Listen, being a faculty member is a pretty good gig and it can easily blow up on our faces, so could you please just do your fucking job.’ Otherwise, we're not out in the August heat on a roof.”

Steven expressed frustration that some faculty members perceive avoiding productivity as a privilege of the profession. He contended that this privilege affected other faculty members and staff. He offered examples of colleagues refusing to fill out paperwork for assessment or accreditation, which forces staff to complete the tasks instead. He opined, “You see the privilege of faculty existence so much more when you're on this end, and it's frustrating when people take advantage of it.”

Perceptions about research efficiency. In contrast with changes to concepts of research productivity, participants seemed ambivalent about whether serving as chair improved their research efficiency. Ray postulated that administrative tasks might compel him to become a writer who is more efficient. He pondered whether improved time management would affect his writing process but hesitated to comment definitively: “Writing is a weird thing and I've always found that my writing process was sort of four hours of wandering around followed by 15 minutes of writing. Ray left open the possibility that serving as chair might make him a “more on-task writer going forward.” James also intimated that he was becoming “more focused” as a scholar. He contended, “So I don't surf the Internet … I still look at Twitter sometimes … - I just don't spend time kind of aimlessly, you know, like people do.” While he suggested that he was becoming “a little more efficient” with his time, he also acknowledged that there was more to do as chair. As a result, he might not perceive much efficiency gain as a researcher.

Personal and interpersonal skills. Some participants observed that serving as chair taught them new personal and interpersonal skills applicable to their role as a researcher. Chairs discussed becoming more entrepreneurial, developing communication skills, becoming more collaborative, and demonstrating more extroversion. Development of these social skills not only helps chairs to function as administrators but also informs how they approach research tasks such as applying for grants.

Some chairs suggested they became more entrepreneurial as chair. While Dana contended she was always had an interest in business, serving as chair had underscored that aspect of her approach to her applied research. She contended, “I've been much more entrepreneurial in terms of seeking out [funding] - this is the issue that I think we need to address. How can we mold that to be able to kind of get the funding to be able to do so?” John claimed, “I consider myself a businessman now.” While John maintained a modest research agenda, he understood from serving as chair that personal productivity drove the money of the department, “But the magnitudes of dollars and - I don't know if things are more complex - It's just scaled up in magnitude." John suggested that the department's top-ten research ranking made his position highly visibility and required him to become more comfortable making major financial decisions than before he was chair.

A number of chairs discussed how their communication style changed as chair. As a new external hire, Brian was still acclimating to the department and his relationship with the faculty. As a result, he offered that he had become more careful about discussing departmental business with others. He suggested, "There's a real difference between the persistent regular faculty member who wants this change or that change and pushing for it, versus what I'm doing now. And some of my words are more measured." Brian contended he would be careful until he had a better sense of "the lay of the land."

Other participants contended they gained experience becoming more persuasive as communicators. As Jennifer's department saw improvements to productivity, the dean recommended that she learn how to present the accomplishments. Jennifer commented, "I know what we do, but I need to make sure others know what we do…. I need to be selling it internally around the university as well as externally to our donors." She contended that she was starting to become strategic about selling the department. Similarly, Bill recommended that chairs need "well thought out requests and justifications for things" because they receive few second chances to defend their requests before administration. From his previous experiences as chair before coming to SRU, Bill admitted, "I learned the importance of writing memos carefully, trying to be very careful to make sure that I wasn't writing sentences that can be misconstrued or ambiguous…." Andrew's old associate dean taught him that, "'It's okay to say no. That's your job. Sometimes you have to say no.'" More importantly, Andrew believed that maintaining a reputation for being fair helped faculty understand his reasoning for declining a request. Andrew implied that, “there's a subtle but important difference between ‘He said no, but this really sucks’ and "He said no, and *HE* really sucks.’”

Some chairs observed that they were becoming more collaborative as chairs. According to Brian, serving as chair changed how he thought about collaboration as a means to maintain his research. He recounted how, as a new external hire, he put his research agenda on hold for a year while he focused on the department. A casual conversation with a faculty member about a research idea grew into a new project directed by the young faculty member. Brian admitted, “I honestly just didn't expect to be able to mention an idea that I've been thinking about, and a couple of months later have it all laid out better than what I could do. … And so, I'm shifting my thinking into how to work with others who do the work that I used to do, only they do it better.” Dana acknowledged that becoming a chair improved her research by removing silos that made collaboration difficult by giving her a sense of who was available for collaboration. She submitted that her “opportunities for interdisciplinary work” were more abundant than had ever been as a faculty member. She contended, “And that gives me more ways of thinking about my own research and reaching out for collaborations, but also doing that for the department as well.” Dana looked forward to SRU’s research centers gaining momentum over time. She acknowledged the centers were still in their nascence. However, she believed that the centers had already helped the faculty start to think about “things interdisciplinary.” Jennifer offered a similar perspective. To her, serving as chair had led her to have “I had no idea this was even out there” moments. She tempered that by suggesting that the discovery of opportunities was the only way she could discern serving as chair had informed her research.

John insisted that he had become an extrovert while serving as chair. I noted during the interview that John was gregarious and talkative (See Appendix G). He contended during our interview, “I don't get exhausted by people anymore. I do feel like I gain energy from people.” He attributed the change in part to being “too busy to be nervous” as chair. He also pointed to the chair’s constant requirement to speak to groups of people as a source of his transformation. He cited daily interactions with large crowds, such as groups of prospective accounting majors and introductory classes as an influence to be more outgoing. He also pointed to meetings with important departmental visitors, such as accreditation teams, for the change in his personality.

Experiencing the institution as a political environment. Serving as chair provides researchers new opportunities to expand their knowledge and experience of the institution as a political environment. One common theme of participants’ responses regarded the importance of relationships they developed with other chairs. Chairs rely on other chairs to help navigate the political landscape of the university. Chairs exchange information, collaborate, and commiserate with other chairs as they experience the institution.

According to Adam, the relationships a chair develops with other chairs are “important for your own survival.” Adam’s friendships with others chairs helped make sense of departmental issues because “A lot of the shit we deal with I think crosses disciplines. I think there are certain personnel issues that are particular to each department that I think in most departments are more nightmarish.” Hearing of the challenges of other departments helps Adam to understanding that his department had relatively few personnel issues compared to others. Michelle contended that her predecessors had written down department procedures, such as approval processes, for Michelle to follow. As a result, Michelle relied on the other department chairs to help her gain her footing in the department. Sam pointed to his expanded professional network of other chairs as a resource he could use to support his faculty. He acknowledged, “I feel that I've keyed into so many other departments that I could go to the chairs because we're friends. And help my own faculty or something." He contended that he did not take advantage of this network often. When Bill first became a chair at his previous institution, he observed other chairs to learn the social expectations of the position. He contended, "And just watching how these guys behaved, the one thing I didn't have a good handle on is how to deal with upper administrators, because I was sort of the bottom of the totem pole." Bill suggested that learning how to behave appropriately was primarily "trial and error."

Andrew contended that chairs at research universities tend to want to talk to each other. He remarked, "All you have to do is say the dean is saying - blank - to me. And that is like a magic key that opens up." Andrew candidly discussed the "semi-organized caucus" of chairs that meet over beers to discuss mutual issues. He admitted that the caucus meets with the deliberate intention of "circumventing the dean." Chairs compare notes on what the dean tells them individually to get a more complete picture of an initiative or decision. Information from the caucus has served to frustrate Andrew at times. He provided the example of learning that other chairs had received "side deals" with 4-year course releases to support their own research when they agreed to become chairs. The dean refused to allow Andrew more than two years of course releases. He argued, "If we were going to be into this, I would have asked for four years." Andrew also relied on his network of chairs outside of the institution to know that other institutions allow their chairs to set the amount they choose to teach.

Offices Reflect Multiple Roles

One observation I made during the interviews was that department chair offices often reflect chairs' roles as administrators, teachers, and researchers. Faculty members tend to carry their research, personal lives, and teaching passions into the department's administrative spaces as chair. Objects on the walls, desks, and shelving in chairs' offices tend to reflect the faculty member's career narrative. Most offices contained shelves of scholastic books and journals useful to research. I also observed items from chairs' personal and professional support structures such as photographs of family and research teams (Margaret; Bill; Brian). Chairs prominently display pedagogical items such as molecule kits (Edward), field specimens (Sam; Edward), archival photographs (Sam), and maps (Bill; James). In discussing his prolifically decorated office, Charles declared that, "everything on the wall has a story." He pointed out a poster of "cultural revolution era rhetoric" hanging on the wall from a student from Missouri who went to China for a weekend on a whim." Branded mugs and sports paraphernalia from SRU and other institutions (Edward; Charles; Jennifer) symbolically reflect chairs' institutional allegiances and career paths. Acrylic logos and awards from professional organizations denote membership in research networks and reinforce research legitimacy (Mark; Bill; Matthew; James; Steven). Chairs pointed out gifts and tokens from graduate students, colleagues, and hosts across the world including vases (Margaret), a stained glass window (Sam), statuettes (Walt) and t-shirts and gag jokes (Charles). Most chairs displayed their academic diplomas on the wall. Charles displayed his academic regalia. Chairs interests and passions also emerged through more unique items that reflect their broader personal identity. One chair maintained a substantial collection of Marx Brothers and Beatles memorabilia in his office. Chairs also displayed gumball machines, toys, a sno-globe collection, Santa Claus figurines, and various framed prints and posters.

In contrast to shelf spaces, desks in department chair offices tended to reflect the delineation between researcher and administrative roles. I observed that stacks of papers often concealed the surface of the desk. Some chairs commented on the messiness of their desks (Margaret; James). I observed objects of the administrative role or shared roles on desks. All desks had typical office supplies, folders, reference books, and desktop computers. A general inventory of more unique items revealed copies of The Chronicle of Higher Education (Dana; Matthew), resumes for job searches, teaching syllabi, class tests and papers, emergency phone number lists, institutional brochures and memos, daily planners, work schedules, personal effects, and numerous sticky notes, one that said "Breathe."

New Career Opportunities and Aspirations

The findings show that serving as chair exposes faculty members to new career opportunities and aspirations. As chairs expand their professional network across campus, interact with administration, and learn new administrative skills, they evaluate their professional identity and career goals. Some chairs perceived their time as chair to be a crossroads in their career. Participants suggest that the career options for a full professor are limited. Chairs decide whether to return to the faculty as full-time researchers, continue as administrators, or forge a new path. Regardless of the choice, serving as chair allows faculty members to consider full-time administration at a later point in their career as a viable career option.

Career disruption. According to some participants, becoming a chair disrupts careers and creates uncertainty. For faculty members serving as associate professors, serving as chair disrupts the career faculty lifecycle at a critical time. This study previously described disruption to chairs' active research agendas. Accordingly, some chairs also worry about the status of their careers as researchers while enacting the responsibilities of chair. Edward admitted that he missed just being a professor and considered the profession rewarding. In contrast, serving as chair is "not so rewarding" to Edward. He feared that any contribution of service more than one 5-year term would "obliterate my research." He contended, "I've noticed looking at chairs who have been in the position for eight or 10 years, they usually quit their research.… the career trajectories is, just after a while they stopped writing papers, stop advising students, and um, yeah.” Dana worried about what the lag between “big funded projects” would mean for her career. However, she contended she had found the “little niches” to do her work and remain “relevant and involved.” She also compared her career trajectory to others in her cohort who “moved into more leadership positions within the discipline, so that network has kind of been enriched as they've grown.” As a result, she was not particularly worried about the long-term effect of serving as chair on her career.

Associate professors expressed concerns that they would be unable to meet the requirements for promotion to full professor. James remarked that, “it's something that's on my mind and that motivates me.” He indicated that he could not find time to work on projects without interruption, which often required him to figure out where he left off in his research. He recognized, “After two weeks I don't remember very much what I was doing.” For Michelle, serving as chair was “not on my bucket list.” As a condition to accepting the dean’s request to serve, she established that, if the position interfered with her ability to reach full professor status then, “I’m going to have to step out.” Before accepting the position, Matthew recalled that his dean acknowledged it was an inopportune time to serve as chair from a career perspective. The dean impressed upon Matthew his need for help: “’Can you give me … like 3 to 5 years, and then we'll reevaluate, see where we're at? I don't want you to feel stuck in this forever, but you know, I could really use your help.’” Matthew insisted he was persuaded by the dean’s argument and provisions to support his progress towards full profess as chair. The career interruption for associate professors comes at a phase in the research lifecycle when many associate professors struggle to maintain research momentum.

Experienced chairs, such as Jennifer and Sam, entreated associate professors to avoid accepting a position as chair. Sam contended that serving as an associate professor, “puts you into a position with [full professors], so you really aren't on the same level in terms of negotiations and all that.” Jennifer also did not consider it fair to ask an associate professor to evaluate the scholarship of a full professor for yearly reviews. Before accepting a position as chair at her previous institution as an associate professor, Jennifer requested that she receive full professor status. The school agreed. However, Jennifer felt as though skipping the effort to reach full professor might have been a mistake. She confided, “So it was a huge help for me in terms of administration. But maybe that's something that I lost in the - Because I didn't actually do it. I just, I had the credentials to do it.” While she declared that she could still take out her tenure packet to show her accomplishments, she immediately qualified that statement by clarifying that by indicating, “funny, you know, what it said 10 years ago.” Based on the tone of her voice, I interpreted her response to suggest some regret that she did not complete the requirements for full professor.

Career options for full professors limited. Coupled with disruptions to faculty careers as researchers, participants also noted that limited career options available to faculty after attaining full professor status exist. Steven contended he was still early in his academic career despite his status as a full professor and a department chair. “Well, what next?” he reflected. He recognized that scholarship ought to serve as its “own intrinsic motivation.” However, attaining the status as full professor was Steven’s goal for such a long time that, “it changes those sort of thoughts about what [sic] can do, what does advancement mean, that type of thing in this profession.” Merle laid out his perceptions of the career landscape for full professors, “I had decided that there were three things I could do. It could be a department head. I can be a productive instructor, or a researcher. And I've pretty much decided I've done my research." Other chairs offered that moving ahead means moving away. Adam acknowledged he had a great job at SRU but his career goal was to find an endowed chair position. He was realistic about the odds of that happening given the small number of available openings in his field. He admitted, "If it's at a place I want to go, the odds are a place like that is going to have choices, they might not pick me. Doesn't have anything to do with me. It's just what they want, right?" Participant responses reveal chairs' fears over career stagnation because of limited career options and the competitive nature of hiring in academia. No chair mentioned leaving academia for other industries.

Reconsidering career aspirations. Steven, Merle and Adam's focus on career choices points to the chair position as one crossroad in a faculty member's career. To Ray, serving as chair created a protected space to think about his next career steps. He observed that being chair provided him "cover." He contended that keeping productive as an administrator meant that the faculty would perceive him as useful. From his perspective, the end of his term as chair meant, "that research element becomes front and center, sort of exposed and everybody's like, 'Well, what's going on with your writing?' Nobody's asking me right now what's going on with my writing, except for you." Ray characterized his tenure as chair as "kind of a moment where I can think about that in a kind of protected environment, I guess in a way. Think about what it is I want to do."

Steven believed that he was at "a fork in the road" between deciding to pursue administration and returning to the faculty after his tenure as chair was over. Steven sensed that his goals for serving as chair had changed as he served in the role. Initially, he wanted to create a "comfortable" departmental environment he could return to as a full professor. Given the pressures he experienced from administration, he perceived that becoming a dean might provide him, “more agency in the administrative side” to change things. The dilemma to Steven was whether stepping permanently into administration was worth giving up his identity as a researcher. He declared that he was trying his best to maintain both identities, but did not believe it was sustainable. He acknowledge to me, “So I don't know where I'm headed. You've caught me in a moment of decision of, like, what do I want to do?”

Some participants suggested that they would be unable to return to the same faculty role. They felt a sense of transformation. Adam refused to be “that guys that’s teaching for 50 years.” He was not as enthusiastic about carrying a full teaching load again since he had been chair. Adam had previous experience as director of a research center (See Appendix G). He contended that, “My aspirations haven't changed but I think what I imagine as possible for the future has changed.” The difference to Adam was that over a career, “you accumulate that administrative experience and that's worth something. It opens up other kinds of doors for other kinds of jobs that you're not going to get a chance to do as just a regular professor.”

Other chairs experienced new opportunities that informed their career aspirations. Jennifer recently received an administrative Fulbright Grant to Germany. She considered the award as a moment to reconsider her career goals as a researcher and administrator. As a researcher, she perceived the Fulbright as an opportunity to expand her social network and become more international in her research focus. As an administrator, she wondered, “will I be able to just go back and be a faculty member? I don't know. I just know that I could keep my hands out of it. And as a Chair, I appreciate that former chairs who have been in this are not in my face.”

No interest in further administration. The majority of participants did not declare an immediate interest in pursuing an associate dean or dean position as the next step in an administrative career. Typical reasons chairs relayed included wanting to maintain autonomy and independence (Andrew), being too near the end of their career (Bill), and having no further career goals as an administrator (Brian). Older chairs in particular were more interested in retaining their position as chair until they retired. Charles offered a more esoteric answer: "I think that a chair who is paying attention to how things work would not seek that. … maybe this should be part of your study. Put that in your study." Andrew suggested, "You know, the job here is bad enough with the Dean thinking that I'm his tool. No. To be in the Dean's Office where I'd actually *have* to be the Dean's tool?"

Particular characteristics of the position of dean did not align well with some participant's interests or perceived strengths. Mark felt that, becoming a dean would remove him too far from the students, faculty, and "what the university really is." Mark equated losing contact with faculty and students to being unaware of faculty and student needs. He argued, "And I'm sorry but there are all sorts of Associate Provosts running around that are completely out of touch with what this campus is doing." Michelle and John believed that the time commitment for social events required of deans was not an attractive incentive. Michelle did not want to dedicate her off hours to "socializing, schmoozing" with donors. John contended, "your meals are not your own to a large extent."

Future role in administration. Despite acknowledging the negative aspects to serving as dean, some chairs still expressed interest in pursuing a future in administration. Chairs qualified their interest by suggesting that they would need to meet certain personal criteria in order to move to administration full time. Daniel was open to eventually becoming a dean, but was also “keeping the options open” to returning to research. For Edward and James, family considerations influenced the timing of career decisions. Edward admitted he has considered being a chair again or dean in the future but wanted to first, “get back into the real trenches for a few years, get my fuel back up, watch my son get a little older.” James was also open to the possibilities of continuing in administration as a dean or department chair depending on his family’s needs. He indicated that an opportunity in administration would have to be at the right geographical location for his family.

Chairs who expressed an interest in pursuing an associate dean or dean position felt as though the position of chair was preparing them for that possibility. Jennifer commented, “I see myself, at some point, as being a research dean or a graduate dean. I don't know that I ever see myself being a dean-dean. Although I feel like I'm kind of getting mentored in that way.” Steven was surprised to hear himself articulate a future role in administration. He conceded that serving as chair had “opened a door” for that possible career step. In examining why he changed his opinion, Steven contended he was trained how to be a researcher and a scholar, not an administrator. Through serving as chair, he received a different perspective: “So it was trial by fire.… That's been a shift to me.”

Researcher Identity First

Regardless of how serving as chair informed their professional identity, most participants considered their researcher professional identity more important than their identity as an administrator or department leader. Steven remarked, “There's a social expectation that we're all researching. … I think our administration here most values their researcher identity.… lets put it this way, you get a pat on the back for administration, you get a handshake for research.” Steven contended that he still “thinks like a faculty member.” Participants used very firm language in describing their primary professional identity as a researcher. Despite indicating that he worked very hard as an administrator, being a performer was "an integral part of who I am and why it is I do what I do." For Andrew, "It's like … [an] addiction. I don't do it because I want to. I do it because I have to. I think that's the bluntest answer possible."

Some chairs offered perspectives that softened the assumptions about the researcher as primary professional identity. Dana contended that her professional identity is more fluid. Serving as chair changes a faculty member. She suggested that she had known enough chairs to see how they adapt to different career choices after serving as chair in support of their own happiness. She remarked:

> So people who've moved on to other administrative roles where it's been, you know, that is exactly what they needed to do and makes them happy, and other people that have been able to transition back to faculty and go back to their research, but also still keep that bigger picture in terms of what they're doing in the University, but on the research side of things. So I think I have some good, good models to follow whichever direction.

Similarly, Margaret reflected on how serving as chair at certain times in a faculty member's career influences how they think about their professional identity. In examining her tenure as chair near the end of her career, she identified how that service had enabled her to make life transitions. She offered:

> I think one of the most difficult things for someone who's really centrally focused on research is stepping away from it, and knowing when it's time to step away from it, and I felt like this would do that effectively, and indeed it has.

Conclusion

Using data collected from interview questions, observations, and documents, this study focused on department chairs' enactment of research-related roles and responsibilities at one public research university undergoing institutional striving. The findings help to explain how chairs enact research-related roles and responsibilities within the department and in external environments in support of faculty productivity. The data suggest that chairs assess department research productivity, foster the department's research environment, facilitate faculty research processes, and support researcher careers in support of faculty research productivity. Chairs engage faculty, colleagues, research networks, administration, social networks, and business processes within the department and in external environments as they enact their roles and responsibilities. One surprising finding was the central role that chairs play in putting Academic Analytics® for research into practice to support the institution's participation in a prestige research economy.

This study's findings also show how chairs negotiate the dual roles of career researcher and department leader as they enact their research-related roles and responsibilities. The findings suggest that chairs use different strategies to maintain research productivity. Creating time for research and transforming research agendas were the two primary strategies chairs use to maintain research productivity. Chairs also perceive administrative value to their research agenda and reputation as they support faculty productivity. Participant responses did not indicate that research agenda and reputation helped them as they engage with administration. Chairs report that their experiences, attitudes, and beliefs as a researcher inform how they approach their research-related roles and responsibilities as chair. Serving as chair shapes a faculty member's perceptions, attitudes, and beliefs about research, but does not necessarily shape their professional identity as researchers. Faculty negotiate serving as chair by developing new perspectives about career possibilities and opportunities, but maintain an allegiance to their researcher identity.

CHAPTER 6

DISCUSSION AND CONCLUSION

Department chairs' research-related roles and responsibilities served as the focus of this explanatory case study. In this chapter, I discuss the findings of the study. In Chapter 1, I identified two research questions. The first research question addressed was: What are department chairs' research roles and responsibilities as department leaders? Two sub-questions arise from this primary question:

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

The second research question addressed was: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders? Three sub-questions arose from the research question.

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

I used an explanatory case study based on Yin (2013) to explain how department chairs enact research-related roles and responsibilities at one public research university. Organizational role theory serves as the theoretical framework for the discussion. In this chapter, I examine the findings within the context of role negotiation and socialization, boundary spanning behavior, and role stressors, such as role conflict, ambiguity, and overload.

Summary of Findings

The findings from this study reveal that department chairs enact research-related roles and responsibilities within and outside the department in support of faculty productivity at one public research university undergoing striving. Chairs support faculty research productivity by engaging in institutional research and administrative processes. From their vantage point between faculty and administration, chairs make sense of and reframe institutional messages and initiatives about research productivity on behalf of faculty. Chairs assess productivity and make departmental changes based on these messages. Chairs also foster an environment conducive to research productivity. They assume responsibility for creating a common departmental research identity in part by aligning the faculty to new institutional research values such as collaborative research and publication quality. They also celebrate successes and defend the boundaries of the department and discipline. Chairs also support faculty through the different phases of the research process. The findings show that chairs help faculty generate new ideas for research, use their professional networks to facilitate collaboration, monitor and remediate junior faculty research activities, and occasionally help faculty to publish results. Chairs also support faculty by removing challenges to research productivity such as reducing administrative overhead and managing resources and workloads to make opportunities for research. Finally, chairs support faculty through the faculty career lifecycle. In this role, chairs update assessment rubrics, assess faculty, reward productivity, and attempt to help underperforming faculty regain research momentum.

One interesting finding that emerged from participant responses was the central role that chairs play putting academic business analytics into practice. The deans at SRU recently tasked chairs with putting Academic Analytics® reporting services into practice within the departments. Efforts to operationalize research assessment initiatives inform many of the chair's activities supporting faculty productivity. For example, some chairs adjust tenure and promotion processes based on Academic Analytics® reports.

The findings of this study also help to explain how department chairs negotiate the dual roles of career researcher and department leader as they enact research-related roles and responsibilities. Chairs experiences, attitudes, and values as researchers inform their support of faculty research such as previous experience with analytics, personnel management, and project management. In contrast, the findings of the study showed that serving as chair informs the researcher's role and professional identity only within limited contexts. For example, some participants perceived changes to their concepts of research and research productivity while serving as chair. Chairs offices tend to reflect their diverse roles.

The findings show that administrative service affects a faculty member's active research agenda. Participants reported that serving as chair greatly reduced the time and opportunity to perform research. However, chairs find strategies to make time or transform aspects of their research in order to maintain some productivity. Chairs perceive personal and departmental value to maintaining their research. Productivity and reputation reduces the frustration, guilt, and anxiety that comes from diminished research agendas. According to participants, a chair's research also contributes to personal authority and legitimacy with faculty as a representation of their chair's expertise. Chairs research experience serves as a resource for the department. For example, chairs offer advice and mentoring to junior faculty, use their professional networks to find opportunities for faculty research, and facilitate collaborations. Chairs also perceive that administrative service provides new career opportunities and informs career aspirations. While service does not necessarily change a chair's professional identity as a researcher, it exposes the faculty member to new skills, experiences, and perspectives on the institution. The role of chair ultimately creates a space for chairs to reconsider their career aspirations and potentially choose a new career direction.

Discussion of Findings

One explanation that accounts for the study's findings considers the department chair as a central organizational role in institutional efforts to create a culture of research assessment. The major themes that emerged from this study suggest that chairs serve as change agents in this role as they make sense of and put into practice initiative to improve faculty research productivity. A chair's ability to engage in research-related roles and responsibilities as a department leader and career researcher determines how effectively they align the department to the institution's new research values. According to the literature, faculty serving as chairs struggle with a lack of preparation, tend to avoid political environments, maintain only contested authority and power, and endure role conflict and ambiguity as they navigate the dual roles of department leader and career researcher. By exploring chairs' lived experiences, this study attempts to explain how the dual role of career researcher and department leader prepares the chair to meet these challenges. The importance of the chair's research agenda, reputation, and productivity suggests that negotiating the dual role of department leader and career researcher is a critical step to serving as a change agent within an institutional culture of research assessment.

Creating a Culture of Assessment

One explanation to how chairs enact research-related roles and responsibilities is that they serve as change agents in institutional efforts to create a culture of research assessment. To date, the literature of chairs as change agents focuses on their role in implementing faculty diversity initiatives (Chun & Evans, 2015; Su, Johnson & Bozeman, 2015; Green, Lewis, Richmond, & Stockard, 2011), adopting technology innovations for pedagogy (Van Horne & Murniati, 2016), and putting into practice a culture of student learning assessment (Feuerstein, 2015). This study extends the literature of the chair as a change agent by situating the chair's support of faculty research productivity within institutional efforts to create a culture of research assessment. Feuerstein (2015) contends that institutional efforts to create a culture of student learning assessment make institutions accountable to external stakeholders, introduce transparency into practices and assessment, and drive improvements to teaching and learning quality. As applied to research, one interpretation of a culture of assessment is an institutional culture that creates and fosters conditions to improve and measure research productivity by means transparent to stakeholders. As with a culture of learning outcomes assessment, a culture of research assessment requires consistency of assessment among faculty. In turn, consistency necessitates chairs to align faculty to the same research value system.

Organizational role theory provides one framework to help explain how chairs engage in creating a culture of research assessment as change agents. In order to serve as change agents, chairs span boundaries as they align a department's culture and processes with administration's new research values and assessment methods. Support for research productivity at SRU requires the chair to engage in organizational and research processes within the department and across organizational boundaries into external environments. Three main processes require chairs at

SRU to engage in boundary spanning behavior: making sense of and reframe institutional messages about research productivity, putting into practice Academic Analytics®, and facilitating inter- and intra-departmental research collaboration. Chairs also function in external environments to reduce administrative overhead. Berdrow (2010) categorizes boundary spanning as a transformational leadership skill along with serving as a catalyst for innovation and managing change. According to Berdrow, communication/representation reflects boundary spanning behavior. According to Chun and Evans (2015), chairs serve as boundary spanners when they mediate between faculty and administration. As chairs engage boundaries as a representative of the faculty, they codify boundaries, reaffirm social bonds, facilitate collaborations, change and edit boundaries, and construct meaning through new experiences.

Making sense of and reframing productivity messages. As chairs receive messages about research productivity from administration, they make sense of those messages within the context of their department's culture and reframe the messages to prepare faculty for the new research values and assessment. According to Feuerstein (2015), department chairs reframe and redefine issues for faculty and administration in order to address institutional goals. Those chairs who are successful at this responsibility are capable of improving the department climate, reputation, and the quality of the department's teaching and research output. This study affirmed Feuerstein's conclusions. As boundary spanners, chairs serve as conduits for information about productivity and assessment. Some chairs provide a positive spin on the messages they receive from administration. Others chairs chose to be transparent or role model capitulation to administration and internalize the new values and assessment methods. As chairs communicate messages they receive at the department's boundary, they often assess the legitimacy of the directives to ensure that they made sense. For instance, Adam compared the time expectations for book publication in the institution's new values and assessment with expectations at other institutions. Discovery of message conflicts between the directive and the chairs' perceptions of effective application of the directive create anger, anxiety, and frustration in the chair and faculty. Participants discussed the need to resolve conflicts as they considered the implications to the department of the productivity messages.

Putting Academic Analytics® into practice. Based on the participant responses, one of the most important directives chairs engage in as change agents at SRU is putting Academic Analytics® reporting services into practice. According to the Educause 2018 Horizon Report, analytics technologies are one of the top educational technology developments that has a one to two year time to adoption (Becker, et al., 2018). The report identified key areas of application in higher education among which is research productivity (p. 38). The implication of the report is that business academic analytic technologies like Academic Analytics® is an anticipated sea change expanding across analytic domains in higher education.

One of this study's contributions to the literature is explaining chairs' lived experiences as they put Academic Analytics® into practice. According to participants, chairs quickly identified administration's directives to use Academic Analytics® in their departments as a "culture change" (Bill). As they align faculty with new research values and assessment methods, chairs serve as change agents. The findings of the study show that chairs build faculty consensus to commit to the culture change by communicating and negotiating with faculty. They also revise existing processes or created new processes to support the integration of analytics into the department. For example, participants mentioned that they develop analytic benchmarks, remediate quality issues with journal prestige and predation, update tenure and promotion requirements, and promote the department to external stakeholders. Efficiently carrying out these roles and responsibilities requires the chair to engage the faculty, administration, and occasionally external stakeholders.

Facilitating research collaboration. Chairs also participate in boundary spanning behavior as they facilitate research collaborations among faculty within the department, across campus, and into environments external to the institution. Participants suggested that direct facilitation of collaboration was circumstantial. Chairs mediate collaborations primarily to remove obstacles, such as personality differences, and negotiate resources among researchers. Chairs cited that the primary purpose of intervention was to ensure that faculty effort returned value to the department and demonstrated evidence of productivity. Some chairs facilitate collaboration by using their professional and research networks to make connections on behalf of faculty. Chairs also hold events, such as workshops and external speakers, which provide opportunities for faculty to make research connections (Karl). Chairs contended that faculty still serve as the primary drivers for research collaborations. However, as SRU's Resource Centers gain momentum, and the institution continues to emphasize collaborative research, deans may require chairs to play a larger role in these engagements.

Challenges to Effectiveness Supporting Faculty Productivity

Chairs face challenges that contest their effectiveness in the role. The literature of department chairs and faculty cites a lack of preparation for the responsibilities of the position as an influence on chairs' experiences. Limitations on power and authority as well as an aversion to engaging in the political environments of institutions also challenge chairs as they respond to faculty research needs. The department chair's dual roles as department leader and career researcher also challenge the chair's effectiveness. Negotiating these challenges position chairs to be more effective as they support faculty research productivity and help the institution create a culture of research assessment as a change agent.

Lack of preparation for the role. As chairs enact research-related roles and responsibilities, a lack of preparation might reduce the effectiveness of the chair to support faculty research productivity. The literature suggests that chairs are unprepared to assume administrative responsibilities. For instance, Whitsett (2007) suggested that department chairs have the authority to make most departmental decisions but have little experience and training necessary to make informed decisions. The literature also suggests that incoming chairs do not understand role expectations, task complexities, time demands, and the potential negative effect the role will have on their professional and personal relationships and identities (Aziz et al., 2005; Czech & Forward, 2010; Armstrong & Woloshyn, 2017).

The findings of this study do not refute that faculty members perceive a lack of preparation and understanding of expectations as they assume the role of chair. Most participants admitted that they had concerns about assuming administrative service. The findings also problematize that conclusion. Participants discussed a variety of formal preparation strategies available at SRU, including chair retreats with deans, one to one discussions, HR training courses, and online information resources. These opportunities for knowledge transfer indicate that training chairs has advanced since the last scholarship meta-analysis on chair backgrounds and preparation. A review of these preparation strategies and their efficacy bears further study. Participant also pointed to previous experience in other administrative roles, such as directors of graduate studies and directors of undergraduate studies, as stepping-stones to the chair position. Participants further drew from experiences directing research centers, managing labs, managing graduate students and post-docs, and previous non-academic career experience as viable preparation for assuming the role of chair.

The findings of this study also contextualize the chairs preparedness within other socializing factors. Merton (1968) defined role socialization as the process by which a new member of an organization becomes aware of the goals and procedures that are associated with the role. Through a process of assimilation, groups gradually inculcate individuals into the values, norms, behaviors, and relationships of the role. Organizational socialization is a life-long continuous process. Participants discussed the importance of mentors and other transitional support relationships, such as family and faculty to socializing into the chair role. For example, participants mentioned management communication strategies they learned from mentors and professional and personal relationships as important to understanding how to be a department chair. The evidence also suggests that some chairs rely on office administrative assistants to facilitate processes and provide task expertise until chairs learn these areas. Chairs cited the departmental budget as one area that other administrative support staff and faculty co-managed with the chair.

Contested Power and Authority. The study findings affirm that the role of chair possesses only contested power and authority to enact research-related roles and responsibilities. Participants contended that deans did not clearly negotiate levels of authority with the chair during negotiations for the position. Many of the chairs suggested that their deans had not provided clear direction regarding initiatives to improve departmental or individual research productivity. However, this ambiguity of messaging also provides chairs flexibility to enact changes in the manner that best fits their department. For instance, some chairs considered how they could meet the requirements of the deans while still fulfilling the day-to-day needs of the department.

External hires. Based on the participant's responses, deans tended to provide externally hired chairs more "top down" authority to enact departmental change in support of creating a culture of research assessment. External hires contended that they often inherited unproductive departments or departments structured to meet the teaching mission. In order to correct research performance, chairs realigned the department's research focus. Often this transformation required the chair to address other issues. For instance, Andrew focused on correcting course schedules and workloads in order to make more time for faculty to focus on research. Jennifer supported a departmental merger as one of her first responsibilities. She also directed the reevaluation of creative activity productivity in preparation for a greater emphasis on research analytics. Brian used his background in analytics to reframe the narrative of his department's historical emphasis on teaching in order to shift the department's efforts and resources towards research. Starting these larger initiatives to correct productivity issues likely carried the combined weight of the dean's authority and the chair's authority to enact these changes.

Associate professors as chairs. One unexpected finding was the challenges that associate professors serving as chairs face enacting research-related roles and responsibilities. In contrast to the authority attributed to external hires, the evidence suggests that associate professors serving as chairs struggle with a lack of authority in some contexts. According to participants, senior faculty may question the legitimacy of associate professors to assess their research productivity. Matthew encountered this behavior during yearly assessment of his department's senior faculty. In Matthew's case, the senior faculty also extended their delegitimizing activity to include bullying Matthew to get their way. Unsurprisingly, Matthew perceived himself more as a manager of his department than a leader with authority. Other associate professors serving as chairs exerted authority only where it made sense. For example, James identified the aspirational and peer institutions for his department's Academic Analytics® reports without involving the faculty.

To complicate matters, serving as chair disrupts the associate professor's career lifecycle. Participants perceived their careers to be in limbo until they reach full professor status. While deans tended to protect time for associate chairs to work on research more than full professors, most associate professor chairs contended that they still struggled to find time for research activity. As with other chairs, a lack of progress lead to feelings of anxiety and frustration. Some associate professor chairs worried about their research reputation among faculty suffering as a result. Chairs perceived this might affect how faculty come to them for advice and mentoring.

The experiences of associate professors serving as chairs suggest that skipping a step in the career lifecycle before assuming department leader responsibilities introduces risk to the faculty member and the department. With additional limitations on authority and legitimacy, associate professors may struggle to serve as agents of change in aligning departments to an institution's new research values and assessment methods. Within that context, associate professors may not be the best choice to help administration create a culture of research assessment. Responsibility for resolving these challenges to associate professor chairs rests with the deans.

Engaging in political environments. In order to enact research-related roles and responsibilities, chairs must engage in the political environments of the university. According to the findings, many research-related roles and responsibilities, such as facilitating collaborations, breaking down research and administrative silos, dealing with administration, and defending the department's boundaries require chairs to engage in political activities. The findings from this study did not refute the conclusions of Lawrence and Ott's (2012) quantitative study regarding faculty's reluctance to participate in politicized decision-making. Participants expressed frustration with certain political decisions and environments. For example, Andrew struggled to stop his dean's overreach into the department's new researcher hiring processes. The persistent rebuke of Edward's concerns regarding the quality of the labs at SRU left him exasperated and without recourse. These experiences indicate that chairs may struggle with politicized environments where they may not have authority or power to enact change.

The findings from this study also suggest that chairs' administrative experiences and exposure to new social networks helps to socialize the chair to the political landscape of the institution. Participants indicate that chairs rely on their professional connections to negotiate the unexpected. This was true of chairs' engagements with researchers and chairs in other departments, discussions with deans, and colleagues outside of the university. Chairs look to other chairs, mentors, colleagues, and friends to understand, in part, how they should enact research-related roles and responsibilities. To engage in political environments, chairs must demonstrate the ability to engage in social environments through communication, collaboration, and networking (Riley & Russell, 2013; Armstrong & Woloshyn, 2017; Feuerstein, 2015). The strong responses of Adam, Andrew, Edward, and others also suggest that some chairs express opinions and attitudes on issues that are important to them or their department regardless of the perceptions of administration or faculty. Adam elucidated one possible reason for these attitudes when he suggested that he could walk away from the position and return to faculty at any time. While Adam would have expended substantial social and political capital to turn the chair position over to dean for receivership, he still considered the option.

Role conflict, ambiguity, and overload negotiating dual roles. Faculty members attempting to maintain an active research agenda while serving as chair encounter role stressors as they attempt to negotiate the dual roles. According to role theorists, role stressors, such as role conflict, role ambiguity, and role overload contribute to job dissatisfaction. Role stressors reduce the sense of personal accomplishment, create issues with communication, lead to a loss of productivity, and erode organizational commitment (Örtqvist & Wincent, 2006, Greene & Organ, 1973; Posig & Kickul, 2003).

This study confirmed the findings of Wolverton and Ackerman (2006) regarding chairs' frustrations with role conflict and ambiguity. The researchers found that chairs had difficulty finding time to focus on their own research interests. A lack of time for scholarship contributed to a sense of impasse in their professional development. Similarly, the participants of this study expressed frustration, anxiety, and guilt as they attempted to maintain an active research agenda or research productivity as chair. While chairs negotiated formal time for research with their deans, few chairs considered the percentage of Full-time Equivalent (FTE) headcount to be adequate to maintain research productivity. Instead, administrative tasks pushed against available time for research and often consumed the hours set aside for those tasks.

The study also confirmed and extended Smith, Rollins, and Smith's (2012) research on chairs' anxiety about reconstituting an active research agenda after serving as chair. Study participants worried that their research agenda would "wane" (Edward) while serving as chair. Some chairs also expressed dissatisfaction with progress towards career goals, such as achieving full professor status or engaging in the "really deep problems" (Andrew) of the discipline. Returning to the faculty after service allows chairs to reinvigorate their research agenda. In an extension to the literature, this study found that some chairs who maintained modest research productivity did not anticipate issues reconstituting a research agenda post-tenure. For example, Dana suggested that her active engagement in small grants would lessen the effect to her research agenda of serving as chair. Evaluation of the extent of this chair belief requires further investigation.

Maintaining research productivity. One contribution of this study to the literature is providing a window into the experiences, attitudes, and beliefs of chairs as they develop strategies to maintain research productivity while performing administrative service. Maintaining research productivity potentially serves as a means for a faculty member to mediate role conflict between the career researcher and department leader roles. Continuing to engage in research ostensibly allows chairs to exert their researcher professional identity. Gmelch (2016) argued that department chairs still perceive their primary professional identity as researchers and teachers, not as administrators. As Walt contended, creative activity is “an integral part of who I am and why it is I do what I do.”

Participants described diverse strategies to continue to be productive as chairs. Chairs make time for research such as prioritizing tasks, working off-hours and weekends, and managing available time. Chairs also transform elements of their research agenda or processes such as changing their project types, research roles, and publishing habits. Chairs collaborate more and transform their research framework and focus. While most chairs contended that they could not maintain an active research agenda, some chairs claimed that they were as productive or more productive while serving as chair. This finding was unexpected. Some of the chairs who claimed increased productivity relied on previously collected data for new publications. Most chairs did not anticipate maintaining long-term productivity. Perceiving an end to viable productivity from older research may influence some chairs' career decisions as they assess whether to continue to serve as chair or return to the faculty.

The productivity successes of some chairs also suggest that more formalized strategies to support research of department chairs might benefit departmental productivity and reduce role conflict and role overload. According to Posig and Kickul (2003), role overload leads to exhaustion and poor work performance. Removing role stressors ostensibly should allow chairs to be more effective as they support faculty research productivity and serve as change agents on behalf of institutional efforts to create a culture of research assessment.

Importance of Dual Roles of Chair to a Culture of Research Assessment

Based on the findings, balancing the dual roles of career researcher and department leader enable chairs to be more effective change agents as they support institutional initiatives to create a culture of research assessment. This study found that the dual roles help chairs to enact research related roles and responsibilities in support of faculty productivity. Chairs experiences as researchers inform how they enact research-related roles and responsibilities as a department leader. Faculty also ascribe authority and legitimacy to chairs for their research reputation and productivity. Chairs' sense-making regarding their careers provides one window into how they make career choices based on their perceptions of balancing the two roles. Chairs' career choices also help to contextual the chair position within the culture of research assessment.

The findings of this study identified that chairs experiences as researchers inform how they enact research-related roles and responsibilities as department leaders. According to Rhodes and Lees (2016), deans expect chairs to use their experiences and skills as researchers to facilitate faculty research. In particular, deans expect chairs to support interdisciplinary research collaborations. For example, the establishment of interdisciplinary research centers at SRU ostensibly serve as one factor that informs the deans' expectations of chair support for faculty research collaboration. Other factors participants mentioned that might inform deans' expectations include improved quality of research faculty and improved quality of publication journals in support of higher analytics scores. Attention to collaborative research, faculty quality, and improved prestige rankings reflect a cultural of institutional striving for greater research prestige.

The findings from this study confirm Rhodes and Lees' (2016) assertion that chairs who fail to maintain active research credentials are unable to offer faculty their expertise in contemporary research practices. These chairs are also less likely to offer faculty a professional research network of emerging scholars/researchers or knowledge of the current sponsored funding landscape. At SRU, many chairs use their professional networks, research expertise, and experience with sponsored research to assist faculty productivity. In particular, the findings revealed that junior faculty benefit from a chair's expertise derived from an active research agenda and productivity. Most chairs commented that they provide junior faculty the highest priority of support so that they maintain progress towards tenure. A chair's active research agenda and productivity ostensibly influences the junior faculty's engagement in the researcher career lifecycle. Given this influence, failure of the chair to maintain an active research agenda or productivity disadvantages the department's junior faculty in tenure and promotion processes. As the focus on research increases at SRU, a chair's lack of a research agenda becomes increasingly detrimental to faculty researcher careers.

The findings also confirmed that a chair's research reputation and productivity provides legitimacy as a department leader. According to Bryman (2007), faculty positively associate the chair's academic credibility and role modeling of positive academic behaviors with effective departmental leadership. Participants indicated that they maintained at least a satisfactory research reputation among faculty. They perceived administrative value to this reputation as they role modeled productivity expectations. Even established chairs who had stepped away from an active research agenda understood the value of reputation. For example, Mark contended that demonstrating he had once pulled in the most money in the department added to his credibility as chair. Chairs also indicated that their reputation and productivity provide a type of “moral authority” (Adam) to tell faculty to improve their productivity. In the cases of Karl and Charles, their active research agendas informed the research focus of the interdisciplinary programs in their departments. Legitimacy informs chairs effectiveness as change agents. Without legitimacy or credibility, chairs may have a difficult time building consensus among the faculty for departmental changes that support institutional research striving.

Alternative perspectives regarding the importance of a chair’s research reputation and productivity also emerged from the data. Few chairs indicated that research reputation and productivity were important when engaging administration. Instead, participants suggested that other factors, such as department size or emphasis on the teaching mission, were more likely to influence interactions with administration. Andrew’s story regarding his dean’s overreach into the department’s research mission serves as a reminder that a chair’s reputation does not necessarily carry weight with administration. In Andrew’s case, his self-identified international research reputation did not stop his dean from intervening in the researcher hiring responsibilities of the chair.

Why a chair’s research reputation does not seem to be as influential with administration as faculty remains unexplained. One possibility is that deans do not perceive the value of a research reputation to the chair’s leadership of the department. The fact that deans continue to select associate professors to be department chairs despite their inchoate research reputations lends some validity to this interpretation. Alternatively, some deans and chairs may define their leadership strictly in terms of administrative functions instead of a union of researcher and department leader roles. Deans may also prioritize teaching responsibilities over researcher responsibilities for chair. Most deans required faculty members to teach while serving as chair. The roots of this perspective are unknown, but may reflect generational or college/school differences in prioritization of administrative, teaching, and research responsibilities. This perspective might also reflect the priorities of higher levels of administration.

This study contributes to the literature concerning faculty members' lived experiences as they make sense of their career choices and aspirations while serving as chair. Chairs' sense-making about their careers provides a window into how they negotiate research-related roles and responsibilities as researchers and as department leaders. According to Woloshyn (2017), faculty participate in a larger social and political world when they serve as chairs. Entering this new landscape transforms a faculty member's perceptions of their identity, their department, and the institution. This study affirmed Woloshyn's findings. Participants perceived that they acquired new skills and perspectives while serving as chair. Participants also engaged in new social networks. These experiences inform their perspectives about their role in departmental and institutional leadership. While most participants contended that, their professional identity as a researcher did not change while serving as chair, some participants acknowledged that they would pursue further leadership positions either by continuing to serve as chair or serving in administration later in their career.

Chairs' receptiveness to pursuing further leadership opportunities may demonstrate a reassessing or rebalancing of department leader and career researcher roles. Given the effect of serving as chair on a faculty member's active research, further focus on leadership may require sacrificing the researcher role in order to reduce role stressors. Studies of women balancing work and life roles as department chairs provide some precedence for this interpretation. For example, Perrakis and Martiez (2012) examined the influence of work and life roles on how women conceptualize their career aspirations and choices to pursue administrative leadership positions. The researchers contended that mentorship, in particular from deans, empowered woman to balance roles as they enact administrative responsibilities as chair. Wharton and Estevez (2014) further contend that chairs have the autonomy to balance work and life roles provided they meet work responsibilities. While balancing work and home life roles are not the equivalent of balancing two work roles, the comparison does show how negotiating multiple roles requires concessions and influences career choices.

Chairs' conceptualizations about their careers also helps to contextual the role as an agent for change within the culture of research assessment. According to Berdrow (2010, p. 500) chairs develop new cognitive frameworks that help them to conceptualize the role and inform their decision-making. Serving as chair provides the faculty member new experiences and attitudes towards faculty research. Chairs with long-term commitment to the department ostensibly offer greater organizational stability and organizational experience with institutional research initiatives than chairs without a long-term commitment. Stability help departments to manage changes such as transforming faculty productivity and departmental processes to align with a culture of research assessment. Long-term commitment allows chairs to overcome the transitory nature of serving as department leaders to see through change initiatives. According to Bryman (2007), the temporal nature of the position limits effectiveness. Commitment to longer-term leadership reduces this limitation on chairs' effective enactment of research-related roles and responsibilities.

Alternative Explanations

This explanatory case study offers one explanation for how department chairs enact research-related roles and responsibilities in support of faculty research productivity. Other possible explanations that fit the data exist. In order to manage the scope of the study, I did not delve into the role that motivation to become chair plays in influencing chairs' activities or efforts. It is possible that faculty who unwillingly came to the chair position refuse to exert effort to support faculty productivity. Evidence of these subversive activities exist in the data but was not explored fully. Chairs are also just one organizational position with a role in supporting faculty research. Other research-related institutional roles such as associate deans for research, provosts, research compliance officers, and deans exert influence and inform the extent to which chairs enact research-related roles and responsibilities.

Implications for Practice

According to Bess and Dee (2008a, p. 174), institutions adapting to external forces require organizational designs that offer flexibility and are capable of changing. Institutions rely on role of chair to ensure that organizational processes run effectively in the academic departments (Wheeler et al., 2008).The findings of this study may help institutions to improve organizational processes and increase institutional agility as they engage in striving for research prestige. Based on the findings, the following recommendations serve to enhance chairs' support for faculty research productivity in a striving research environment.

Recommendations for Deans

Increase time for chairs' research. One of the major complaints from chairs was the nominal FTE percentages negotiated with deans for personal research. Some participants complained that insisting chairs continue to teach one course a semester consumed time better spent on maintaining active research. In light of chairs perceptions of the value of an active research agenda to supporting faculty research productivity, deans ought to ensure that chairs receive dedicated time to continue research. Removing teaching requirements from chairs' FTE increases the time available for focused research activities. Deans may balk at removing chairs fully from teaching requirements due to public and legislatures' perceptions that a faculty member's primary responsibility is to teach (Flaherty, 2014, April 9). In these cases, deans ought to work with chairs to find flexible teaching solutions or other time management strategies in order to maintain the expected public appearance while allowing for research productivity.

Avoid use of associate professors as chairs. The findings suggest that associate professors serving as department chairs face a daunting task to manage the department while maintaining progress towards full professor status. Deans risk departmental productivity and associate professor careers by selecting them as chairs. Senior faculty continue to present a better option for departments and deans. Evidence suggests that many senior faculty exhibit reduced research productivity or actively seek to step away from their research agenda to explore other career options. Incentivizing senior faculty to serve administrative functions releases productive faculty to focus on research and provides the senior faculty the opportunity to feel productive in other domains. In cases where a viable senior faculty member is unavailable for service, dividing chair responsibilities among a committee of senior faculty or placing chair duties in receivership of an associate dean, may be a more effective solution. As an alternative perspective, deans ought to ensure that associate professors serve only as a temporary bridge between full professor chairs.

Recommendations for Chairs

Help deans to understand the importance of an active research agenda. The lack of direction chairs receive from deans regarding research agenda implies that deans do not perceive the connection between a chair's active research status and the chair's ability to develop the department's research profile and performance. Chairs ought to engage deans to help them understand the importance of active research as a critical aspect of many chairs' professional identities.

Engage stalled associate professors. One of the main challenged chairs articulated was engaging the "stalled associate professor" (Adam) who has failed to make progress towards full professor career status. Finding solutions that encourage discussion, collaboration, and grant-writing advice after tenure would benefit the institution's research productivity. However, according to one participant, associate professors are unlikely to identify themselves as a member of a cohort. Karl offered a potential solution through topic-themed writing groups with required attendance. While the concept of a required activity runs counter to concepts of department collegiality, the effectiveness of a writing peer group offers one potential solution to engage faculty in research activities. Writing groups also serve to foster collaboration and build work ethic. Unlike working groups and writing workshops held at the institutional level, departmental-level workshops might develop accountability to one's faculty through codification of a common scholarship identity. Interdisciplinary workshops could further facilitate collaboration opportunities across discipline boundaries.

Engage senior faculty researchers. According to Bland and Bergquist (1997), many senior faculty members maintain a strong desire to be productive researchers. Senior faculty researchers offer departments well-established professional networks, extensive research experience, and institutional knowledge. However, institutions do not invest in the professional development services necessary to update faculty research skills and create an environment conducive to senior faculty research productivity. The study's findings suggest that chairs' support of institutional research initiatives offers opportunities to influence departmental strategic direction for research. Using academic analytics and their understanding of department culture, chairs might identify weaknesses in senior faculty support structures and remediate those weaknesses to improve research productivity. For example, Academic Analytics® might help chairs to identify productive senior faculty. Chairs might then interview the senior faculty to understand why they continue to be productive researchers. Chairs might then align other senior faculty with those criteria for productivity. Chairs also suggested that senior faculty support junior faculty research endeavors as faculty mentors. Creating these mentorship opportunities might engage senior faculty in department research efforts without requiring they reconstitute active research agendas.

Continue to develop social networks. According to Wheeler, et al., (2008) building social networks helps chairs to take advantage of institutional resources. Participants provided examples of chairs use of social and professional networks to support faculty productivity. As the new research centers at SRU gain momentum, engaging other chairs to facilitate collaborative efforts will become increasingly important. Using formal and informal strategies to develop professional networks, such as engaging other chairs socially and as external speakers, might lead to reciprocal engagements that create new opportunities for faculty research.

Recommendations for Striving Institutions

This study also contributed to the scholarship of striving institutions. While scholars have explored the experiences of faculty as they make sense of striving (O'Meara & Bloomgarden, 2011; O'Meara, 2007), chairs' experiences of striving had remained unexplored. The findings of my study indicated that chairs at one public research university perceived a lack of institutional preparedness for striving. For example, chairs contended that some departments struggled to transition to a research focus because of the effort required to follow administration's previous directive to focus on teaching (Mark; Andrew). Chairs also identified weaknesses in institutional research infrastructure that affect the ability of chairs to align departments to research initiatives. At SRU, chairs identified needs for bridge funding (Margaret), remediation of dangerous laboratory conditions (Edward), and improved startup packages for new faculty hires (Edward) as essential research infrastructure improvements. Chairs' experiences putting into practice administration's research directives provide them unique insights into the requirements for successful support of research productivity. As they prepare for striving, institutions ought to engage chairs to collect requirements for support of research. Identifying institutional weaknesses in research infrastructure and organizational support might improve a striving institution's odds of successfully transforming its research culture and identity.

Implications for Research

This study exposed several avenues for future research. The purpose of this study was to capture a specific moment in a public research university's efforts to improve research prestige. Among the new processes and organizational changes to support improved research productivity, deans tasked department chairs with putting Academic Analytics® reporting service into practice. A longitudinal explanatory case study to examine the effects of that institutional decision over time might identify other processes, organizational challenges, and best practices for application. Future studies might also examine how chairs' research-related roles and responsibilities change as a response to the maturation of the analytics methodology at the institution. Likewise, SRU is one institution among several in a university system. Expanding the scope of the study to explore the lived experiences of chairs at the other campuses in the system might reveal challenges or best practices to share at the systems level.

In order to manage the scope of the study, I excluded some factors that might influence the shape of department chairs' research-related roles and responsibilities. For example. Knight, Folkins, Hakel, and Kennell's (2011) quantitative research study examined the influence of academic discipline and length of service on administrators' resource allocation decisions. Expanding the study based on attributes of the department chairs such as service time, proximity to retirement, or hire type might expose further the experiences, perspectives, and challenges faced by these populations. In particular, associate professors serving as chairs emerged from this study as an institutional area of concern. Further research might identify advantages this population provides in teaching, mentoring junior faculty, or engagements outside the department that justify their service as chairs. This study also did not consider the gender or ethnicity of the chair as within scope. The literature is clear that women serving as chairs experience additional challenges in leadership and work-life balance (Acker, 2014; Perrakis & Martinez, 2012; Wharton & Estevez, 2014). The lived experiences of women serving as department chairs still permeated some women participant's responses as they discussed maintaining work-life balance and supporting faculty. Researchers might consider examining the effect of gender and/or ethnicity on department chairs' research-related roles and responsibilities to capture difference in experiences.

Similarly, this study's findings intimate that the type and size of the academic department or discipline might influence chairs' research-related roles and responsibilities. However, this study did not explore formally how departmental characteristics inform the role of chair. For instance, Karl and Charles' research-related roles and responsibilities as chairs of small interdisciplinary departments seemed different from Adam or Ray's experiences with a large, programmatically diverse department. Karl and Charles tended to engage directly in shaping the boundaries of the department, informing the department research focus, and ensuring a cohesive departmental culture. In contrast, Adam and Ray did not spend time on those types of engagements but instead focused on ensuring that the faculty remained productive by removing administrative overhead. Future researchers may consider these differences when exploring the role of chair in research productivity.

The phenomenon of the "stalled associate professor" also bears further research. Based on the findings of this study, no comprehensive solution to reengage associate professors who have lost research momentum exists. Chairs offered limited strategies, both "carrots" and "sticks" that succeeded in engaging stalled professors. For example, chairs suggested that writing workshops and speakers (Karl), collaborations (Dana), and finding a faculty member's passion (Walt) served as mean by which to engage faculty to contribute to the department's productivity. Opportunities for research studies focused on understanding why and how faculty lose research momentum exist. Future studies might examine how a loss of resources, such as lab space, graduate students, and bridge funding, contributes to a loss of research momentum. New research might lead to comprehensive support structures to help socialize associate professors to their new responsibilities while reinforcing research productivity.

Finally, this study did not examine how the means by which a faculty member comes to the role of chair informs how they enact research-related roles and responsibilities. Gmelch (2016) observed that faculty members serve as chair for extrinsic and intrinsic reasons. A faculty member may also have no choice to serve if the department's faculty elects the chair or the dean appoints the chair. This often occurs when no other viable option exists, such as a willing faculty member or possibility of an external hire. Reluctant or unwilling chairs may choose to remain disengaged or exert minimal effort towards departmental leadership duties. Further research might uncover how becoming a chair influences how the chair negotiates the roles of department leader and career researcher.

Critical Reflections on the Research

As a part of the process of conducting this study, I reflected on the experiences and challenges of performing research. One of the biggest decisions I faced was using the NVivo tool to code the data. As an information technology specialist, I felt compelled to test NVivo for its ability to help me manage the coding and analysis of the data. This decision lead to some challenges and opportunities. For a first-time coder, managing the volume of data from 22 interview of one a half-hour length became easier with the organizational features of NVivio. It felt safer to contain the data in a tool that I could back-up without worrying about overwriting the data with each new analysis. This function allowed me to explore the data and experiment more with coding and analysis. Furthermore, the use of NVivo helped to separate out ideas that chairs tended to conflate from one moment to the next such as Academic Analytics® and research productivity. This function helped me to maintain the integrity of my analysis. At the same time, the volume of data and ability to test different approaches occasionally detracted from simple themes, which required a more organic view to expose. I believe experienced researchers who have the ability to reframe perspectives on their data may benefit from NVivo. In contrast, manual coding might fit the needs of novice researchers prone to becoming overwhelmed or distracted. Nevertheless, as an information technology expert and director for research computing, my experience with NVivo has already paid dividends as I assist faculty to find the right data tools for their research projects.

Another challenge of this project was the number of interviews. Twenty-two interviews of one hour and a half in length provided a plethora of content to contribute to the overall picture of transformative change at SRU. The department chairs I interviewed were generous and talkative. Those near retirement wanted to reminisce about their careers. Other chairs were frustrated with theirs deans, the state of external funding, their lack of research progress, or simply the daily grind. They were unafraid to use colorful language in demonstrations of honesty. I struggled to make those elements represent the individuals I interviewed in this dissertation. To articulate those individual voices required far too many pages of findings. At times, their quotes felt quantitatively bunched under headings that were too discrete. I believe I would have better served my participants, my chair, and my committee, by balancing the number of department chairs with the themes I explored. Narrowing the focus would have allowed me to explore their individual stories in greater depth.

Finally, I have omitted some factors which would contribute to understanding the role chair within a public research institution undergoing research prestige striving. In order to maintain a reasonable research scope, I did not examine teaching and other types of service as factors affecting the chair's research-related roles and responsibilities. While the participants intimated about the implications of their teaching responsibilities, I generally limited those discussions for the sake of time and focus. Future researchers ought to expand the scope of the context of chairs' research-related roles and responsibilities by considering the broader context of the chair's full complement of responsibilities.

Conclusion

The purpose of this study was to understand department chairs research-related roles and responsibilities at one public research institution. Understanding how department chairs enact research-related roles and responsibilities matters to institutional efforts as they strive for research prestige. As SRU and other public research institutions respond to external competitive forces that compel them to engage in the prestige research economy, the role of chair becomes central to institutional efforts to change. Chairs serve as change agents as they help the institution create a culture of research assessment. The findings of this study show that chairs put into practice administration's research initiatives. Chairs engage as boundary spanners within the department and in environments external to the department to align faculty and department processes to new requirements. Putting into practice Academic Analytics® serves as one prominent example of chairs' boundary spanning behavior. Chairs also reframe productivity messages, facilitate faculty research collaborations, change tenure and promotion processes, and promote a department culture focused on research productivity as they prepare departments for changes to institutional research expectations.

The findings of this study also suggest that the dual role as career researcher and departmental leader serves an important purpose as chairs support faculty research productivity within a culture of research assessment. A lack of preparation for the position, aversion to political environments, limitations on power and authority, and role stressors that arise from the dualities inherent in the position challenge the effectiveness of chairs. Addressing these challenges enables chairs to serve as change agents to help institution create a culture of research assessment. Chairs attempt to maintain research productivity and rely on their research reputation and expertise as career researchers to legitimize their efforts and align departments to the institution's new value system. Similarly, chairs experience new skills, perspectives, and social networks as they engage in the political environment of the institution. These combined experiences help chairs overcome the challenges inherent in their dual roles and become more effective change agents.

The lived experiences of department chairs reveal feelings of ambiguity around their role as change agents in the new research culture. Lost in the new research initiatives is the reality that faculty research at SRU is at risk from a fundamental change to how administration perceives research value. According to Matthew, SRU stands at the crossroads of science that "people were passionate about" and funded science. Matthew worried about how this shift in perspective might affect faculty research and result in the department "losing our identity." He also understood the perspective of administration and the need to align the institution to compete in the research prestige economy. Matthew considered the challenges he faced navigating the new research initiatives from his vantage between the perspectives of faculty and administration:

> That's the irony, we talk so much about funding and all this stuff, but the majority I would think, of the science that's out there isn't funded. There is a lot of good science and it must be going on that you don't hear as much about because it didn't bring in a bazillion dollar grant. So, I sit in the chair where it's like, I want to continue to appreciate that and not sort of lose my soul, you know, sell my soul. But also realize, try to be supportive of these administrators and respect a little bit about where they're coming from, the pressures that they're under and try to see if we can find that happy medium, that middle ground.

As SRU moves forward with initiative to transform research productivity, the administration, deans, chairs, and faculty have yet to agree on the shape of this middle ground.

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APPENDIX A: STUDY PROCEDURES

D. Jay Cervino, The University of Alabama
Student, Executive Program in Higher Education Administration
A110 Gordon Palmer Hall, Box 870346
The University of Alabama
Tuscaloosa, Alabama 35487-0346

The P.I. will subject each study participant to the following study procedures:

Semi-structured Interview (90 minutes)

1. Once the participant is recruited, the P.I. will schedule the interview with the participant to take place in a private location and a time convenient to the participant on the [redacted] campus during regular business hours (8AM – 5PM, CENT.). The P.I. has allotted 90 minutes to conduct the interview.
2. At the date and time of the interview, the P.I. will meet the participant in the pre-arranged location and conduct the interview.
3. The P.I. will initiate the interview protocol. The P.I. will first review the Informed Consent form with the subject.
4. Once consent is obtained, the P.I. will set up the digital audio recording device and initiate the interview. If consent is not obtained, the P.I. will terminate the interview.
5. The P.I. will ask the subject questions from the interview protocol and collect data on the subject's answers. A semi-structured interview allows the P.I. to alter the order of questions or omit some questions based on the participant's previous answers or the applicability of the question to the respondent.
6. Once the P.I. has completed the interview, the post-amble will be read to the respondent and the interview concluded by shutting off the digital audio recording device. A copy of the consent form will be provided to the participant at this time.
7. The P.I. will send the respondent a follow-up email thanking the chair for their participation. This email will also

Optional Follow-up Semi-structured Interview (30 minutes)

After initial examination of the interview transcript, the P.I. may have follow-up questions for the study participant. Follow-up questions provide the P.I. an opportunity to improve the clarity of initial answers, fill in missing details, and probe particular themes. Should the P.I. request a follow-up interview with the study participant, the procedure will be as follows:

1. The P.I. will contact the participant by e-mail to schedule a follow-up interview at a time and place convenient to the participant. The interview will occur on the [redacted] campus during regular business hours (8AM – 5PM, CENT.). The P.I. has allotted 30 minutes for the follow-up interview.
2. At the date and time of the follow-up interview, the P.I. will meet the participant.
3. The P.I. will set up the digital audio recording device and initiate the interview.
4. During the follow-up interview, the P.I. will ask the participant for clarification or further elaboration to previous interview questions from the Interview Protocol. The P.I. may also ask questions from the Interview Protocol which may have been omitted during the first interview.
5. Once the P.I. has finished collecting data, the P.I. will end the interview by shutting off the digital audio recording device.

APPENDIX B: INTERVIEW PROTOCOL FORM

Date:

Place:

Name:

Years as Chair:

Research Questions

Q1: What are department chairs' research roles and responsibilities as department leaders?

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

Q2: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders?

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

Interview Questions

1. (Q1, SubQ1)What is your vision for faculty research in your department?
2. (Q1, SubQ1) What strategies do you use to support faculty research productivity in your department?
3. (Q1, SubQ1) How do you assess senior faculty? Junior faculty?
4. (Q1, SubQ1) How do you engage individuals in order to improve their research productivity?
5. (Q1, SubQ1) How do you use information technology to support administrative and research roles and responsibilities?
6. (Q1, SubQ2) How do you interpret and convey information regarding faculty research from administration? From faculty? From other sources?
7. (Q1, SubQ2) How do your professional relationships inside and outside the university help you to facilitate faculty research?
8. (Q1, SubQ2) How do you prioritize research resource requests?
9. (Q1, SubQ2) How do you handle resource conflicts?
10. (Q2, SubQ1) How have your research practices changed since you have become chair?
11. (Q2, SubQ1) What strategies do you use to maintain your research as chair? Or, what strategies do you use to maintain currency in your field?
12. (Q2, SubQ2) How do you think the dean evaluates your research productivity?
13. (Q2, SubQ2) Do you think your past and current research influences your interactions with administration or other chairs on behalf of yourself or your department? Why or why not?

14. (Q2, SubQ3) How have your previously faculty experiences prepared you, or not prepared you, for your research-related roles and responsibilities as chair? Conversely, how has your experience as a chair affected how you approach research?
15. (Q2, SubQ3) How do you approach your career as a researcher now that you have served as a chair?
16. (Q2 SubQ3) Do your career aspirations include continuing with administrative leadership? Why or why not?

Observations

APPENDIX C: DOCUMENT PROTOCOL FORM

Date:

Record:

Original Intention:

<u>Research Questions</u>

Q1: What are department chairs' research roles and responsibilities as department leaders?

Sub-Q1: How do department chairs facilitate research within the department?

Sub-Q2: How do chairs engage in external environments to facilitate faculty research?

Q2: How do department chairs negotiate research-related roles and responsibilities as researchers and as department leaders?

Sub-Q1: How do department chairs maintain support for or transform personal research agendas during their tenure as chair?

Sub-Q2: How do department chairs perceive and experience the administrative value of their research?

Sub-Q3: How do faculty's professional identities and career aspirations as researchers change or develop during their tenure as chair?

Items of Interest

1.

2.

3.

4.

5.

APPENDIX D: INFORMED CONSENT FORM

D. Jay Cervino, The University of Alabama
Student, Executive Program in Higher Education Administration
A110 Gordon Palmer Hall, Box 870346
The University of Alabama
Tuscaloosa, Alabama 35487-0346
512-924-1647
djay.cervino@ua.edu

You are being asked to participate in a research study. This study is called Research-related Roles and Responsibilities of Department Chairs at a Public Research Institution. This study is being conducted by D. Jay Cervino, a student at the University of Alabama in partial fulfillment of the degree of Doctor of Education in Higher Education Administration.

What is this study about?
This study is being conducted to explore department chairs' research-related roles and responsibilities. Approximately 25 individuals who serve as department chairs with responsibility for faculty researchers at [redacted] will participate in this study. You are being asked to participate in this study because of your current role as a department chair with research-related responsibilities. Your experiences are therefore significant to this study.

What will you be asked to do?
If you decide to participate in this study, you will be asked to do the following:

1. Participate in an audio-recorded interview lasting up to 90 minutes in length. During the interview you will be asked questions pertaining to your strategies as chair supporting faculty research productivity, your participation in faculty research processes such as grants acquisition, and your perspectives on how your time as chair has affected your personal research agenda and career aspirations.
2. Possibly participate in a follow up interview. This follow-up interview will last no more than 30 minutes. You may choose to participate in person at a place and time convenient to you.

What are the risks and benefits?
Risks for participating in this study are minimal. As employees of [redacted] department chairs participating in the study may criticize their place of employment or other employees during the study. As such, participants may be subjected to embarrassment or punitive measures from superiors should their confidentiality become compromised and these criticisms revealed. There may be no direct benefits to you as a participant in this study. You will not be paid for the study. The only cost to you in the cost of your time for participating. The

information you provide is beneficial to understanding department chairs' research responsibilities in public research universities. This information will help higher education leaders to develop programs that aid chairs as they support faculty research productivity. Ultimately, public research universities may benefit from this research as they respond to environmental changes that affect faculty productivity.

Your participation is voluntary
Taking part in this study is voluntary. You may choose not to take part at all. You may refuse to answer any of the questions. If you start the study, you can stop at any time. Not participating or choosing to leave the study will not result in any penalty or loss of any benefits you would otherwise receive.

Your answers to questions will be confidential
The researcher will maintain confidentiality of study participants as far as possible. Interviews will be conducted in the private setting of your office or other campus location convenient to you. All interview transcripts will be stored in box.ua.edu, which provides a secure, cloud-based system for file and data storage. Data will be de-identified so that your name will not be associated with your responses. Access to data will be restricted to the principle investigator (P.I.) and the investigator's dissertation chair. Reports of the research will not name or otherwise identify participants.

The University of Alabama Institutional Review Board is the committee that protects the rights of people in research studies. The Institutional Review Board may review study records from time to time to be sure that people in research studies are being treated fairly and that the study is being carried out as planned.

Contact Information
If you have questions about the study right now, please ask them. If you have questions about the study later on, please call the investigator, D. Jay Cervino at 512-924-1647 or Dr. Claire Major at 205-348-1152. If you have questions, concerns, or complaints about your rights as a participant in this research study, you may contact Ms. Tanta Myles, the Research Compliance Officer at UA, at 205-348-8461 or toll-free at 1-877-820-3066. You may also ask questions, make suggestions, or file complaints and concerns through the IRB outreach website at http://osp.ua.edu/site/PRCO_Welcome.html. After you participate, you are encouraged to complete the survey for research participants, which is available online at http://osp.ua.edu/site/PRCO_Survey.html.

I have read this consent form. The study has been explained to me. I understand what I will be asked to do. I freely agree to take part in it. I will receive a copy of this consent form to keep.

____ ____________________
Signature Date

____ ____________________
P.I. Signature Date

APPENDIX E: STUDY RECRUITMENT E-MAIL

D. Jay Cervino, The University of Alabama
Student, Executive Program in Higher Education Administration
A110 Gordon Palmer Hall, Box 870346
The University of Alabama
Tuscaloosa, Alabama 35487-0346

Greetings Dr. <<FACULTY NAME>>,

My name is D. Jay Cervino. I am a doctoral student in the Executive Program in Higher Education Administration at The University of Alabama. As part of the fulfillment of my dissertation requirements, I am conducting a research study regarding the research-related roles and responsibilities of department chairs. I am emailing to ask if I could take an hour and a half of your time to interview you regarding your experiences as a department chair with research responsibilities and as a career faculty researcher. Participation in the study is voluntary. Your interview question responses will remain confidential. If you are interested in participating, or have any questions, please do not hesitate to contact me at dcervino@ua.edu. If you agree to participate, I will follow up with you and your department office to schedule the interview. Thank you kindly for your time.

Best regards,

D. Jay Cervino

APPENDIX F: IRB APPROVAL LETTER

THE UNIVERSITY OF ALABAMA® | *Office of the Vice President for* Research & Economic Development **Office for Research Compliance**

January 18, 2018

Donald Jay Cervino
Executive EdD Program
Department of ELTPS
The University of Alabama
Box 870346

Re: IRB # 18-OR-017: "Research-related Roles and Responsibilities of Department Chairs at a Public Research University: A Qualitative Explanatory Case Study"

Dear Mr. Cervino,

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Your approval will expire on January 17, 2019. If the study will continue beyond that date, you must complete and submit the Renewal Form within e-Protocol. If you need to modify the IRB protocol, please complete and submit the Amendment Form. *Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.* When the study closes, please complete the Final Report Form. Please use the IRB-stamped Consent Form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB approval number. Good luck with your research.

Sincerely,

[redacted]

Carpantato T. Myles, MSM, CIM, CIP
Director & Research Compliance Officer
Office for Research Compliance

cc: Dr. Claire Major

358 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127
205-348-8461 | Fax 205-348-7189 | Toll Free 1-877-820-3066

APPENDIX G: DESCRIPTION OF PARTICIPANTS

Description of Participants

In this section, I provide a brief description of each participant's background as derived from attribute coding and my observations. This section also helps to describe my positionality within the study as the interviewer. Many of the chairs expressed gratitude for the opportunity to talk about their experiences as researchers, and in particular, as chairs. These chairs suggested that no one has previously asked them about their experiences. A few chairs considered the interviews to be "therapy", "a chance to bitch", and a moment to reminisce.

Adam, Participant 1. Adam has been a friend for 8 years. He is halfway through his term (2.5 years). He is a reluctant chair of an Arts and Sciences department. He started our interview with the emphatic declaration, "Nobody wants to be chair!" Adam agreed to the position because he did not want to be responsible for the department falling into receivership. He understood his duty but worried about how he would be able to complete his most recent book. Adam had previous administrative experience as the director of a research center. We conducted the interview over dinner.

Andrew, Participant 19. Andrew is an external hire in Arts and Sciences who was "cherry-picked" by the dean. He suggests he has broad leeway in reshaping a department that had dramatically fallen behind its peer schools in research productivity. We met in his office for the interview. Andrew prefaced his interview with a story about the challenges of administration at his previous institution. Throughout the interview, Andrew was very direct in his assessment of the challenges he faced as a chair at SRU. He declared that, "I don't think I've got 'prick' written across my forehead but what you see is what you get." At the end, he told me he enjoyed the interview and considered it a "chance to bitch."

Bill, Participant 7. Bill is a full professor and department chair in Arts and Sciences who had served for 7 years at SRU. He also served as chair for 12 years between two other institutions. We met in his office in one of the older, labyrinthine buildings on campus. Affable and a good storyteller, Bill recounted how he sought out the chair position at SRU because of the enticing challenge to develop a PhD program. He was near the end of his career but continued to focus on the department's research. He often recounted where the department was succeeding and where it was failing.

Brian, Participant 11. Brian is a new external hire chair in a non-Arts and Sciences department. He had already built a career as a full professor and never intended to be a chair. However, he found the opportunity to stabilize a department, and "build something" with a group of young faculty he already knew professionally, too good to pass up. I conducted his interview in his new, sparsely decorated office. The office reflected a "corporate" style replete with modular furniture, carpeting, white boards, and office doors with inset windows. Brian's perspective on being a chair reflected his newness to the role, like someone rolling up his or her sleeves at the start of a lengthy project.

Charles, Participant 3. Charles is the long-tenured full professor chair of a small Arts and Sciences department. He had served two non-contiguous terms as chair. He originally assumed the role of chair in order to "reinvent" the department before returning to the faculty to continue research. He then started a second term as chair to continue the department's development. Charles took pride in his knowledge of the administrative processes of the institution and where those processes failed. I conducted his interview in his office, which was a museum of books, statuary, old furniture, Persian rugs, prints, and student memorabilia that belied a long career in academia. He contended, "…everything on the walls has a story."

Dana, Participant 12. Dana is a full professor in her first term as chair of an Arts and Sciences department with a heavy interdisciplinary component. As an external hire, she had voiced an interest in leadership at her previous institution. The more she was involved in administration there, the more she "got to see the ugly stuff". She originally applied for the open chair position at SRU as a means of "getting my feet wet". Given family needs to remain in the Southeast, the opportunity turned out to be ideal. I conducted Dana's interview in a glass-walled conference room. She and I shared a circle of acquaintances, which made conversation easier.

Daniel, Participant 2. Daniel is a recent external hire for the chair of a small non-Arts and Sciences department. He is a full professor and considers himself a successful researcher, but always knew that he would eventually move into administration. "I think it's probably just my personality, exposure to life. It was just something I expected would happen one day," he ruminated. I interviewed Daniel in his sparsely decorated new office. Daniel had recently moved his family from a large Southern city to take the job at SRU. We commiserated over the challenges of pulling up roots and adapting to life in a new university town.

Edward, Participant 14. Edward is nearing the end of his term as the chair of a small Arts and Sciences department. Edward is an associate professor and admitted he had no real desire to serve as chair. He suggested that he was the only viable choice amongst a very youthful faculty. Edward recently decided to return to full time faculty responsibilities, citing a need to focus on his research and make the rank of full professor. We met in his office for the interview.

James, Participant 20. James is an associate professor serving as chair of a small Arts and Sciences department. He had only served for a year and a half but was not considering taking on a second term. He desired to return to research and teaching to continue his work towards full professor. James and I knew each other socially. I conducted the interview in his office.

Jennifer, Participant 13. Jennifer serves as chair for a large, non-Arts and Sciences department. She was an external hire who came to SRU after serving as chair at another institution. The intrigue of leading a merger of two programs in the department motivated her to apply for the position. Now into her second year in the position, she felt isolated because she had no peers with which to "vent". I conducted Jennifer's interview in her office. At the end of the interview, she suggested that talking had been "good therapy". She remarked, "To be able to talk through… without thinking… reminds me of some of the good stuff that's going on."

John, Participant 15. John is the chair of a large non-Arts and Sciences department. A full professor, John was entering his second term. Initially reluctant to serve as chair, he admitted that he had grown to love the role. We met in John's office. Baseball memorabilia and Beatles records covered the walls and bookshelves. John's interview occurred over nearly three hours. During that time, John reclined on a couch, putting his feet up over the ends while we talked. John's casualness in dress, body language, and conversation initially disarmed me. However, his affable manner and willingness to discuss the politics of the role made the interview riveting.

Karl, Participant 17. Karl is the chair of a small, Arts and Sciences department with a strong interdisciplinary program focus. A full professor, Karl is an internationally known scholar and a leader in his field. When the dean chose to invest in the program, he asked Karl to lead its growth and connect to the larger national dialog in the discipline. The dean gave Karl responsibility for developing the curriculum, research goals, and faculty of the program. Karl's stature often meant that he and his faculty engaged with administration and students on campus issues. Karl and I conducted his interview on a bench outside his office as he had forgotten his key. We spent some time discussing our common affection for Dungeons & Dragons. Karl considered the interview therapeutic. He knuckle-bumped me as we parted ways.

Margaret, Participant 4. Margaret was a full professor winding down nearly forty years of research and moving towards retirement when she accepted the role of chair at the request of the faculty. She accepted because she felt she could ensure the large Arts and Sciences department was in “in a good place” before she retired. I interviewed Margaret in her office at a table stacked with papers next to a fish tank filled with undulating green plants but no discernable fish. Margaret reflected on how the department and institution had grown and changed during her long career. She was at peace with her decision to retire and happy to use the interview as a "parting shot."

Mark, Participant 5. Mark has been full professor and chair of a non-Arts and Sciences department for over twenty years. He came to the role as an interim chair when the search for a permanent chair failed. Mark suggested that growing up in an academic household with a father who had served as chair was influential to his approach to the position. I interviewed Mark in his temporary office along a busy hallway. The department was waiting for university construction to finish new offices, which would locate all the departments of the school near each other. During the interview, he played music to drown out the noise of the students. Mark had recently decided to return to the faculty although the search for the next chair had yet to start.

Matthew, Participant 18. Matthew is an associate professor who serves as the chair of a large non-Arts and Sciences department. Matthew came to position recently because the dean wanted someone from the largest unit in the department to lead. Matthew also suggested that the dean did not consider the available full professors viable candidates. I interviewed Matthew in his office. I noticed credentialing artefacts, such as framed diplomas, Lucite awards, and ornamental plaques was a primary theme of the office decor. During the interview, Matthew often expressed uncertainty about the effectiveness of his leadership, but considered his faith to be a pillar upon which he could lean while making decisions. “I just think in this job kindness just goes a long ways,” he suggested.

Merle, Participant 8. Merle is the retiring chair of a non-Arts and Sciences department. After a long career as a full professor, the faculty asked Merle step in to the role. Merle agreed in part because he was tired of “busting his butt” doing research and was ready to do something different for the last phase of his career. I interviewed Merle in a colleague’s office because he had given up his office. Before we started his interview, Merle asked me about my work and dissertation. His “interview” of me seemed to give him and me time to collect our thoughts and get comfortable talking. Throughout his interview, Merle demonstrated a substantial depth of institutional knowledge. He spent a portion of our interview time reminiscing about the department and discussing the political and personnel circumstances at the institutional level that led the current emphasis on research. This history lesson was very informative and contextualized many of the comments made by chairs throughout the interviews.

Michelle, Participant 9. Michelle is a full professor who currently serves as chair of a large, non-Arts and Sciences department and as assistant dean of the college. She was just starting her assistant dean duties but had been serving as a department chair for four years. She suggested she was still trying to balance the responsibilities of the two positions. She came to the chair position as a direct appointment of the dean. Michelle credited her time in business prior to going to graduate school with driving her interest in academic leadership. As a result, she considered herself a “non-traditional” academic leader. I interviewed Michelle in her office.

Ray, Participant 16. Ray is a full professor who is in his fourth year as the chair of a large, Arts and Sciences department. The dean selected Ray from at the request of the faculty. Ray felt as though he was at a good point in his career to take a step back from research and teaching to focus on supporting others in his department. I interviewed Ray in his office, which was noteworthy for two impressive walls of floor to ceiling bookshelves. Lining the top of the bookshelves, Ray displayed his published books in cases. Ray was also one of the few chairs I saw who had a mini-fridge and food in his office. He was friendly and discussed the challenges of supporting a faculty producing both academic scholarship and creative activity.

Sam, Participant 10. Sam is a retiring full professor and chair of a small Arts and Sciences department. Sam assumed the role of chair only in the last years of his career. He admitted, "I kind of hoped that I would get to my retirement years without it happening (laughs)." I interviewed Sam in his office, which reflected a lifetime of research and teaching. Bookshelves overstuffed with books, journals, photographs, and specimens from fieldwork dominated the room. A stained-glass window, given to Sam as a gift for leading a community outreach project, cast a peaceful light in his office. I conducted the interview at Sam's old mahogany desk, which spoke to a different era in higher education. Reflecting the office, reminiscences of Sam's career permeated the interview. He had a story to answer every interview question.

Steven, Participant 22. Steven has served as the chair of a large, non-Arts and Sciences department for the last five years. When he started his tenure as chair, he was still an associate professor. As other associate professors selected to be chair, Steven suggested it was a matter of the dean having no better options available. I interviewed Steven in his office. As with a few other chairs, I noticed prominently displayed credentialing, such as diplomas, teaching and research awards, and indicators of professional organization membership. Steven and I knew each other from mutual friends. That level of acquaintance expedited the ease of conversation during the interview.

Thomas, Participant 6. Thomas is the chair of a large, Arts and Sciences department. Initially, Thomas had no interest in becoming a chair. However, the faculty convinced him to become a candidate. He suggested that the dean selected him because he was the most likely to "get along with all factions within the department to try to smooth things over" after a fractious era. Thomas contended that his preparation for the role consisted of "fumbling around." I interviewed him in his office. He was initially business-like in answering the interview questions, but he gradually became more comfortable with our conversation.

Walt, Participant 21. Walt is a full professor who has served as the chair of a large, Arts and Sciences department for the last 14 years. He was close to retirement. Walt contended that he never sought the position, but assumed it at the request of the faculty during a time of administrative upheaval. I interviewed Walt in his office, which was undergoing renovation like many buildings on SRU's campus. Walt's department produced creative activity. As a result, his attitudes and beliefs regarding the role of chair mirrored that priority. Walt reflected on his long career in creative activities during the interview. Extroverted and philosophical, Walt often connected his experiences through stories to bigger issues facing creative activity in higher education.