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WALKING THE TEMPORAL TIGHTROPE: AN EXPLORATION OF THE ACADEMIC
WORKLOAD AND DISCREPANCIES WITHIN FACULTY TIME ALLOCATION

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BY THE COMMITTEE CONSISTING OF

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ACKNOWLEDGEMENTS.....	V
ABSTRACT	VI
INTRODUCTION.....	1
LITERATURE REVIEW.....	2
THE NATURE OF ACADEMIC RESPONSIBILITIES	2
UNIVERSITIES AS GENDERED ORGANIZATIONS.....	4
FACULTY WORKLOAD ALLOCATION.....	6
DISCREPANCIES IN FACULTY WORKLOAD ALLOCATION	11
INDIVIDUAL AND ORGANIZATIONAL OUTCOMES	14
RESEARCH METHODOLOGY	16
SAMPLE	16
PROCEDURE	17
SURVEY MEASURES	18
RESULTS.....	21
DESCRIPTIVE STATISTICS.....	21
PRIMARY ANALYSES.....	23
DISCUSSION	30
THEORETICAL IMPLICATIONS.....	32
PRACTICAL IMPLICATIONS	32
LIMITATIONS.....	33
FUTURE DIRECTIONS.....	35
CONCLUSION.....	37
REFERENCES.....	38
TABLES.....	1

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Abstract

This study investigates faculty workload within a research-intensive (R1) university, with a focus on gender differences and workload discrepancies within teaching, research, and service. Drawing on gendered organizations theory and social role theory, the study explores how faculty members experience workload misalignment and its implications for organizational outcomes. Findings indicate that while both men and women faculty reported spending more time on teaching and service than preferred, and less on research, men spent significantly more time on research while women spent more time on service. Associate professors reported the highest service and lowest research engagement, suggesting workload imbalances that may be related to career stage. However, discrepancies between actual and preferred workload were not significantly different across gender or rank. Importantly, research and service workload discrepancies were meaningfully associated with organizational outcomes. These results highlight the need for institutions to address workload equity, particularly how faculty time within workload is valued and distributed.

Keywords: faculty workload, workload discrepancy, gender disparities, research-intensive university, workload equity

Introduction

As universities continue to transform into complex organizations, faculty of higher education find themselves under more pressure than ever (Brennan, 2007; Kasperkevic, 2014). Increasing pressure means that faculty are faced with the difficult task of meticulously prioritizing their workloads in order to achieve their career goals (O'Meara, Kuvaeva, & Nyunt, 2017; Winslow, 2010). Research indicates that faculty engage in extremely demanding hours, likely in an attempt to meet their goals in terms of the time they allocate to teaching, research, and service, which we will henceforth refer to as T, R, and S (Snyder et al., 2016; Flaherty, 2015; U.S. Bureau of Labor Statistics, 2009; Jacobs & Winslow, 2004). Despite best efforts to distribute their time across T, R, and S, faculty may find themselves with discrepancies in the workload they prefer in order to meet career goals, in comparison to their actual workload (Griffith & Altinay, 2020; Dahm et al., 2015; Winslow, 2010). Previous research demonstrates that the discrepancies experienced in faculty workload may be exacerbated for women faculty (Misra et al., 2021; O'Meara et al., 2017). It's important to consider that disparities in faculty workload could be attributed to gender norms, societal expectations within and outside of universities, and systemic issues within universities (Acker, 2006, 1990; Bird, 2007; Misra et al., 2012).

The primary objective of this research is to gain more insight into the dynamics of faculty workload distribution within the context of a very high research (R1) doctoral university (Carnegie Classifications, 2024). While past research has considered how faculty allocate their time, there is sparse consideration of faculty members' actual time spent compared to preferred time spent and the subsequent outcomes for individual faculty and institutions (Allen et al., 2023; French et al., 2020; Misra et al., 2012). Contributing to existing research, we will examine the

variance between faculty members' preferred workload distributions and the actual time they allocate to teaching, research, and service activities. Additionally, the present study aims to shed light on potential disparities that may exist among faculty in relation to their time allocation in the domains of T, R, and S. We will delve into the gender-specific aspects of these variances, in hope of uncovering any potential differences that may emerge. While some past research (Xaxakos, 2020; French et al., 2020; Dahm, 2015) has examined these issues at teaching intensive universities or on a broader scale, the current study will explore the allocation of workload specifically for faculty within very high research doctoral universities. Consideration of this issue is critical, as recent studies indicate a lower likelihood and slower progression to full professor for women at research intensive universities (National Research Council, 2007; Link, 2008; Misra et al., 2011).

Our purpose is to make a valuable contribution to the existing body of research by not only considering possible gender differences in faculty workload allocation but also the potential implications on both individual and organizational outcomes, including perceived workload equity, perceived value of effort, and turnover intention. Through our examination of faculty workload distribution, we look to provide a foundation for informed decision-making, ultimately enhancing the overall functioning and well-being of both faculty members and the academic institutions they serve.

Literature Review

The Nature of Academic Responsibilities

The typical faculty workload can be conceptually divided into three primary domains of responsibility: teaching, research, and service, which will be referred to as T, R, and S. Faculty success is typically measured by their accomplishments across these domains. Ordinarily,

teaching and research are the main responsibilities of faculty forming the bulk of their workload. While service is still a vital component for the functioning of universities, on average, faculty engage in a smaller service workload compared to teaching and research (Misra, 2012; French, 2020; Allen et al., 2023).

The core elements of research universities, teaching, research, and service are layered, and evaluation and promotion decisions are generally contingent on performance in these domains. *Teaching* encompasses not only the delivery of course content but also curriculum development, mentoring, and advising students. *Research* involves scholarly or creative activities that contribute the advancement of knowledge in one's field such as, securing grants, conducting studies, producing original works of art, directing productions, or developing software (Sullivan & Eberly, 2004; Nelson, 2013). The term "research" will be used to represent this domain for parsimony, while acknowledging that some disciplines focus their work on more creative pursuits. *Service* involves participating in university committees, professional organizations, community outreach, and other activities that support the institution's mission and governance. Service can also involve work that may be more informal or invisible, defined as unrecognized or undervalued work that faculty members perform beyond their formal job descriptions, such as providing emotional support or guidance to students or informally mentoring a colleague (Hochschild, 1983; Griffin & Reddick, 2011).

Understanding the allocation of faculty time and effort in T, R, and S is crucial for several reasons. First, it provides insights into how faculty members balance their responsibilities and manage their workloads. Second, it sheds light on the potential disparities and challenges faced by different groups of faculty, such as women and members of underrepresented or marginalized groups, in achieving success and recognition in academia. Third, it informs

institutional policies and practices that aim to support faculty development and enhance overall productivity and job satisfaction.

Therefore, it is imperative that we understand how and why faculty engage in T, R, and S, and the impact of this engagement on their career progression and institutional contributions. By doing so, we can better address the systemic issues that may hinder faculty success and progress towards creating a more equitable academic environment.

Universities as Gendered Organizations

Looking at faculty workload through the lens of gendered organizations theory is useful in understanding the mechanisms in which gender dynamics and gender norms may affect how faculty allocate their work time. Acker's (1990) theory of gendered organizations posits that gender inequities are produced through policies, communication patterns, social structures, and divisions of labor. It is also likely that the way in which faculty and administration communicate expectations of workload could affect the gendered division of work (O'Meara et al., 2017). Gendered organizations such as universities are often structured in a way that accommodates a traditional mold, favoring faculty with minimal caregiving responsibilities as the "ideal faculty" (Acker, 1990; Winslow, 2010; Hochschild, 1994). In academia, the nature of the organization is described in masculine terms such as efficient, competitive, and goal-oriented (Acker, 1992). It is argued then, that divisions of labor among faculty may be gendered based on the expectations that a successful university is led by masculine norms.

Previous literature on gender stereotypes demonstrates that women are expected to have more communal traits and men are expected to have more agentic traits (Carli et al., 2016). The domain of research work may be more closely linked to agentic traits such as self-assertion and independence, whereas teaching and service work may have stronger associations with

communal traits such as caring for others in interpersonal sensitivity. Social structures can gender university work through the expectation that women faculty mentor students more, shouldering the caregiving burden that most universities fail to support properly. Women faculty may be expected to engage in activities that are more aligned with teaching and service, such as providing guidance inside and outside of the classroom, or proactively pursuing DEI initiatives.

Outside of the university, social structures and subsequent gender role expectations may affect women faculty, as women still carry most of the caregiving burdens (American Time Use Survey, 2023). According to social role theory (Eagly, 1987), women are expected to be more concerned with communal affairs such as taking care of the family. Therefore, women faculty may experience pressures to conform to social roles and choose family over work. While work-family conflict can impact all faculty members, its intensity is affected by the gendered nature of both families and universities. This can often be demonstrated in university policies, as they rarely support the burdens of caregiving faculty. These external factors may further influence women faculty's decisions when allocating time to their workloads, lest there be consequences for caregiving faculty (Fox & Gaughan, 2021). One such consequence has been termed the "maternal wall" (Williams, 2005; Wolfinger et al., 2008), as women faculty find their proficiency may come under scrutiny following pregnancy, requests for maternity leave, or the utilization of flexible schedules. However, these "consequences" could be mitigated if universities could offer more support via policy to create opportunities and flexibility for women faculty in determining their workload distributions (Cardel et al., 2020).

Previous research provides evidence that faculty members' time allocation decisions are influenced by a wide range of factors, including gender socialization, perceived expectations, and even communication within gendered environments (Acker & Dillabough, 2007; Blackburn

& Lawrence, 1995; Winslow, 2010). Gendered organizations foster environments in which women and men act under a set of expected norms that are typically attributed to the respective gender, thus influencing the work faculty engage in and possibly how much value that work holds (Allen, 1998; Azizi et al., 2022; Misra et al., 2012; Winslow, 2010; O'Meara et al., 2017).

Faculty Workload Allocation

Teaching. Teaching is a paramount responsibility of faculty. However, there are differences in teaching workload between men and women faculty (Misra, 2012). There is some evidence that a gendered division of labor still exists within academia (Carrigan et al., 2011; Park & Park-Ozee, 2020), such that societal norms and expectations based on gender may play a role in women faculty engaging in more teaching compared to men (Anderson, 2010). Furthermore, women have greater work-family conflict and greater familial responsibilities which may influence how women and men faculty prioritize their teaching workload (Cardel et al., 2020; American Time Use Survey, 2023; Dahm et al., 2015).

Existing research demonstrates that women and men faculty differ in the amount of time they spend on teaching, research, and service. Past research has indicated that women faculty engage in more teaching than men faculty (Allen, 2022; Guarino and Borden 2017; O'Meara 2016; Winslow 2010). Allen (1997) found that women who identified as African, Hispanic, and White allocated a greater percentage of time to teaching compared to men faculty of the same groups. Women faculty are significantly more likely to work over normal work hours due to teaching workload than men faculty (Todd et al., 2008). Brommesson (2022) supported the notion of a gendered division of labor in academia, demonstrating that women faculty had stronger teaching merits in their academic portfolios compared to men faculty who tended to showcase stronger research merits. When considering the impact on job candidate rankings, Brommesson found that the positive influence of research merits on ranking is stronger than the

positive effect of teaching merits which has obvious implications on hiring. Furthermore, women faculty may also engage in teaching that “counts less” such as undergraduate teaching, compared to men faculty who may engage in more graduate teaching (Carrigan et al. 2011). Contrarily, Misra et al. (2012) found that the teaching workload of men and women faculty did not differ significantly. Given the mixed findings on gender differences in time allocation for teaching and the necessity for deeper understanding of these disparities within R1 universities specifically, the present study proposes:

Hypothesis 1: Women will exhibit higher proportions of worktime spent on teaching in comparison to men.

Research. Research is highly valued by both universities and faculty alike. Research productivity is linked most directly to institutional financial gain which may explain why universities emphasize research over teaching and service (Peters, 2023). Previous research indicates there are no significant gender differences in how important faculty rate research productivity (Seritan et al., 2010). Certainly, faculty learn to value what the university values, meaning men and women faculty likely prefer a higher research workload in comparison to their preferences for teaching and service (Dahm et al., 2015). Yet, when faculty experience excessive workload pressure, research is typically the first of the triad to suffer (Boice, 2000). For women faculty however, it may be more difficult to find time to allocate to research for several reasons.

It is critical to consider that discrepancies in research productivity between men and women faculty may be influenced by external forces and social dynamics. As with teaching, social and gender norms may affect what type of faculty is expected to engage in research (Miller and Chamberlin, 2000; Eagly, 1987). When universities see research as “me time”, women faculty who are caregivers may find it difficult to engage in the amount of workload

required for research when universities often lack the proper support that would allow caregivers to do so (Misra & Lundquist, 2016; Cardel et al., 2020; Winslow, 2010). Indeed, Allen et al., (2022) reported that time spent on childcare had a negative correlation with time spent on research. Sax et al., (2002), found that women with dependent children exhibit lower levels of research productivity and contrarily men faculty with dependents actually exhibit higher levels of research productivity. Reports that suggest women prefer to spend more time on teaching may be explained by the fact that a teaching workload is easier to balance with their other life obligations (Winslow, 2010). Other external factors such as gender bias in funding may also play a role in the amount of time faculty spend on research (Stack, 2004; Lariviere et al., 2011). Lower grant scores have been associated with female applicants, which may portend negative future outcomes, as findings suggest higher grant application scores have been associated with higher h-indices and past funding success (Tamblyn et al., 2018).

It is no surprise then, that existing findings demonstrate gender differences in faculty research productivity and time faculty spend engaging in research (Allen et al., 2022; Bellas & Toutkoushian, 1999; Griffith & Altinay, 2020; Misra et al., 2021; Kaya & Weber, 2003). While h-indices may not be a perfect indicator of how much time faculty spend on research, it does take into account the sheer number of papers published which is often used as an indicator of research productivity. Hopkins et al. (2012) found on average women had lower h-indices than men faculty which we argue could be a result of women engaging in less research whether by preference or not. The implications here are important considering time spent on research has been positively associated with work satisfaction, faculty well-being, tenure, and promotion (Dahm, 2015). Despite no significant gender differences in valuing research productivity, women faculty face external pressures that may hinder their research time, leading to measurable

disparities in publication numbers and grant success compared to men faculty. Therefore, the present study proposes:

Hypothesis 2: Women will exhibit lower proportions of worktime spent on research in comparison to men.

Service. While service is a smaller portion of faculty workload, it's pivotal to university function. Most service work is difficult to measure, and it is important to note that some service work is often unaccounted for or invisible. Given the complex nature of service work, studies have demonstrated conflicting findings in regard to gender differences in the amount of time faculty spend on service (Bellas and Toutkoushian, 1999).

Because we argue that universities are gendered organizations, we also argue that service work may be gender biased. So, while service is vital, the caveat is, that women faculty are asked more often to engage in service and tend to carry the burden of service work (O'Meara, 2016; O'Meara, 2017; Guarino & Borden, 2017). Gender expectations of men and women may lead to more service requests being aimed towards women faculty (Misra, 2021; Winslow, 2010). Furthermore, it is certainly possible that men faculty are more comfortable expressing disinterest in service and generally choosing to opt out of service work.

In instances where the gap between men and women faculty's time spent on service is narrower, a deeper look at exactly what service is being performed is crucial. Even though women faculty generally do not show different preferences than men for service work, several studies find that women faculty carry the majority burden (Misra, 2011; Cardel et al., 2020; Allen, 2023). One study found that even after controlling for critical mass, departmental characteristics, and gender of the department chair, robust significant differences were found in women's and men's reported service load (Guarino & Borden, 2017). Misra et al. (2011) note

that men and women associate professors spent about the same time on service to the profession at 5.4 hours per week on average. However, women spent significantly more time on service to the university as well at 11.6 hours per week, compared to men at 7 hours per week. In other words, men faculty may be engaging in proportionately more professional service, while women faculty may be engaging in more campus service. This poses an issue because involvement in professional societies can enhance prominence and is likely more esteemed within typical university reward frameworks, while participation in intramural service activities seldom achieves the same effect (Cardel et al., 2020). Additionally, a study that found men faculty at the full professor rank spent more time on service, reported that the gap in service work narrowed substantially after service work in an administrative role as dean or department head were excluded from the analysis (Social Sciences Feminist Network Research Interest Group, 2017). O'Meara and others found significant gender differences in the number of reported campus service activities. Specifically, at the full professor level, women were more likely to report service activities at the university level and all levels. Overall, women associate professors spent about 7 percent more of their time on service work than men (O'Meara, 2017). Although men and women faculty may not differ significantly in their preferences for service work, women faculty tend to shoulder a disproportionate share of the service load, particularly within university-specific service activities, which are less rewarded compared to professional service roles that men faculty may prioritize.

Faculty of color, specifically women, may experience a unique problem in service termed “cultural taxation”. In an effort to create and ensure diverse committees and perspectives within organizations, women, particularly those of minoritized groups, may experience greater demands on their service time, being asked to serve on a greater number of committees or initiatives.

Despite good intentions, cultural taxation might amplify the burden of unrecognized service for women and women of color (Dominigo et al., 2022). In addition, faculty of color and women tend to engage in more service work in roles that involve relational-oriented (versus task-oriented) service activities, such as mentoring, maintaining positive climate, and supporting student socio-emotional wellness. While essential to supporting an organization's mission and maintenance, relational service is harder to quantify, resulting in a lower impact on many faculty evaluation and reward systems (Hanasono et al., 2019).

Clearly service work is multifaceted, and the conflicting findings on gender disparities in service work merits further exploration. The aspiration for the current study is to gain an overall clearer understanding of gender differences that exist in faculty service workloads at an R1 university, therefore, the present study proposes:

Hypothesis 3: Women will exhibit higher proportions of worktime spent on service in comparison to men.

Research Question 1: Will differences between men and women faculty in worktime spent on service depend on rank?

Discrepancies in Faculty Workload Allocation

While a substantial amount of previous research has contributed to an understanding of how men and women academics allocate their time within T, R, and S (O'Meara, 2017; O'Meara, 2020; Griffith & Altinay, 2020; Allen, 2023), previous studies examining faculty workload suggest conflicting results regarding gender differences in how faculty spend their time. Even less scrutinized are the gender differences in self-discrepant time allocation. Self-discrepant time allocation is defined as a discrepancy or mismatch between how one would ideally spend their time to achieve career goals versus how one actually spends their time (Dahm

et al., 2015; Higgins et al., 1987). Conclusively, little research has considered the gender discrepancies in the mismatch between faculty's ideal or preferred time allocation and actual time allocation (Xoxakos, 2020). One hope of this study is to further investigate these "self-discrepancies" in how faculty, more specifically, faculty at R1 doctoral universities, allocate their time.

Preferred Workload Allocations. Past research has consistently shown that women faculty often express *preferences* for balancing their work across teaching, research, and service, while men faculty tend to prefer allocating more time to research. These preferences are shaped by institutional norms, rewards systems, and personal values regarding academic work. O'Meara et al. (2017) found that women faculty reported a preference for a more balanced workload, including service and teaching responsibilities, whereas men were more likely to prefer a research-heavy workload. Women tended to value teaching and service more highly, aligning their preferences with these responsibilities, though this may contribute to their underrepresentation in research-heavy activities. In their study of faculty workloads, Misra et al. (2012) similarly observed that women faculty were more likely to express preferences for a balance between teaching, research, and service compared to their male counterparts, who favored research more heavily. Women faculty were also more likely to prefer engaging in service activities because they viewed these as essential to the institution's functioning and student success.

Actual Workload Allocations. Gender discrepancies are also evident in *actual* workload allocation. Women faculty often report spending more time on teaching and service, while men report allocating more time to research, which is typically more rewarded in academia. This discrepancy between the genders can have significant career impacts. Guarino and Borden

(2017) found that women faculty spent more time on service activities than their male counterparts, across all ranks and disciplines. The authors argue that women are often assigned more service roles, either by choice or by institutional pressure, contributing to their lower research output. Link et al. (2008) showed that women spent significantly more time on teaching and service compared to men, with men reporting a greater allocation of time to research. The study concluded that this imbalance could hinder women's research productivity and career advancement, as research tends to be more heavily weighted in tenure and promotion decisions. Other studies observed similar patterns, finding that gender differences in time allocation contributed to gender disparities in research productivity and career outcomes, with men being more likely to attain higher ranks and receive recognition for their research work (Winslow, 2010; Carrigan et al., 2011; O'Meara et al., 2017; Domingo et al., 2022).

Theoretical Perspectives. Acker's (1990) gendered organizations theory and social role theory (Eagly, 1987) provide a framework for understanding these discrepancies. Societal expectations that women are often expected to perform communal roles, such as teaching and service, while men are more often expected to perform agentic roles, like conducting research may limit women's ability to engage in research and contribute to larger discrepancies between their actual and preferred research workloads. Accumulation of disadvantage (Valian, 1999) suggests that small, systemic biases against women accumulate over time, resulting in a cumulative disadvantage. In academia, this often means women are assigned or take on more teaching and service roles, reducing their time for research, further contributing to the gap between women's actual and preferred research workload.

This gap not only affects individual career progression and organizational outcomes but also perpetuates broader gender inequities in academia. Therefore, this study proposes that

preferences in T, R, S will differ only slightly, while greater differences in actual workload will exist, resulting in differing discrepancies:

Hypothesis 4a: The discrepancy between actual and preferred **teaching** workload allocation will be larger for women and positive for both men and women.

Hypothesis 4b: The discrepancy between actual and preferred **research** workload allocation will be larger for women, and negative for both men and women.

Hypothesis 4c: The discrepancy between actual and preferred **service** workload allocation will be larger for women, and positive for both men and women.

Research Question 2: Will differences between men and women faculty in teaching, research, and service discrepancy depend on rank?

Individual and Organizational Outcomes

Although considerable research has looked at how faculty allocate their time and the existing gender differences, less attention has been given to discrepancies in faculty workload and their resulting impacts. We propose that discrepancies in faculty workload and how it is managed may influence various outcomes related to faculty workplace affect and motivation, as well as impact key institutional metrics.

Differences between the preferred and actual time spent on various tasks can affect faculty perceptions of workload equity. A faculty member may perceive a workload as equitable when it is deemed fair in relation to colleagues (Bitzer, 2007). Faculty who prefer to spend more time on research in order to reach career goals, but find that their teaching and/or service loads intrude on their research time may feel a lack of workload equity, particularly if they see other faculty with lower teaching or service workloads spending a greater amount of time on research. Many academic units have lack workload distribution and assignment policies that lack

transparency, clarity, and context (O'Meara, 2021), resulting in workload discrepancies for some faculty, and in turn, to perceptions of low workload equity.

Misalignment between faculty's preferred workload and their actual workload can also lead to feelings of undervaluation. Faculty should feel that their effort is recognized and valued, especially given that much of academic work often lacks immediate tangible outcomes or rewards. When faculty are unable to allocate their time according to their ideal preferences, especially if they are compelled to engage in substantial "invisible" or "less-meaningful" service work, they may feel that their efforts are neither recognized nor rewarded appropriately (Hanasono, 2018). This perceived mismatch can heighten feelings of undervaluation, as faculty may feel they are contributing beyond what they would ideally choose in areas that are less rewarded by their department. From an economic exchange perspective on distributive justice, this discrepancy between preferred and actual workload allocation is critical. When faculty feel their contributions do not align with the recognition they receive—such as a lack of acknowledgment for service work—it can create a sense of inequity and reinforce feelings of undervaluation (Blalock & Wilken, 1979). This suggests that a misalignment in workload preferences not only impacts how faculty experience their roles but also affects their perception of fairness and justice within their department.

If faculty perceive their efforts are undervalued, this may indicate a lack of distributive justice. As a result, they might decide to either maintain or exit their investment, whether that be the amount of time they dedicate to work they feel is undervalued or their position entirely (Thibaut & Kelley, 1959). Voluntary turnover is a decision an individual makes in response to a persistently dissatisfactory work environment (Xu, 2008). Because universities are increasingly competitive, retaining high-quality faculty is highly important to universities (Brennan, 2007;

Kasperkevic, 2014). Yet, if faculty perceive their workload is unfair, and that their work isn't valued, then turnover seems inevitable. Universities should take turnover intentions seriously as they can impact not only organizational citizenship and counterproductive work behaviors but also overall productivity (Xiong & Wen, 2020). At the organizational level, faculty turnover may negatively impact a university's reputation (Price, 1997). Additionally, if faculty are experiencing turnover intentions, this may lead to diminishing productivity in teaching, research, and service, inherently affecting universities (Daly & Dee, 2006). Individual level negative effects may attribute to what scholars are referring to as the "leaky pipeline" (Ysseldyk et al., 2019; Liu et al., 2019), which refers to the progressive loss of women faculty in academia. Therefore, the current study asks:

Research Question 3: How do discrepancies between actual and preferred workload allocation in teaching, research, and service predict faculty's perceived of workload equity, perceived value of effort, and intention to leave the university?

Research Methodology

Sample

Faculty at a south-central R1 university were invited to participate in an online study examining faculty experiences. Demographic information was gathered through self-reported data from a survey administered in the Spring of 2023. A total of 342 responses were received for tenured and tenure-track faculty. following data cleaning procedures, including the exclusion of cases with incomplete responses, the final analytic sample consisted of 247 participants.

In the surveyed group of faculty members who achieved a 100 percent completion rate in our study, half of the respondents (48.6%) identified as male, while approximately 36.8%

identified as female, 2% identified as non-binary, 5.3% indicated prefer not to say, while 7.3% did not indicate any response.

The majority of respondents identified as White, constituting 65.6% of the sample. East Asian faculty made up 7.3%, while American Indians or Alaskan Native faculty represented 3.2%. Hispanic or Latino individuals accounted for 3.6% of the sample. Both African American or Black and South Asian individuals comprised 2%. Middle Eastern individuals each made up 1.6% of the population. Southeast Asian faculty were the least represented at 0.4%. The remaining percentage reflects participants who either selected “prefer not to say” or did not respond to the race/ethnicity question.

A large portion of respondents resided in higher academic ranks, with assistant professors making up 32% and associate professors slightly higher at 35.2%. Professors represented a somewhat smaller portion at 30.8%. 1.2% is represented by Other, for those who did not wish to disclose their rank but were indicated to have tenure or tenure-track status. The remaining .8% reflects participants who either selected “prefer not to say” or did not respond to the question.

In terms of proportions of faculty by discipline, Engineering, Energy, Mathematical, and Physical Sciences dominated the distribution at 33.2%, followed by Social and Behavioral Sciences at 15.8% and Education/Professional/Other at 18.6%. Humanities accounted for 16.6%, while Fine Arts represented a much smaller segment at 7.7%. The remaining 8.1% reflects participants who did not indicate their disciplinary affiliation.

Procedure

Following IRB approval, participants were recruited through a faculty email list provided by the university. The survey was sent to all regular full-time faculty. This sample is a subset for faculty who were current tenure-track or tenured assistant, associate, or full professors at the

university. Participants who affirmed the consent form via Qualtrics were then presented with a survey in Qualtrics that took approximately 10 to 15 minutes to complete. While potentially identifying data was requested in the survey, participants were able to decline to respond to any questions they wished and were assured that their responses would be de-identified and handled by only a select few trained key study personnel.

Survey Measures

Workload Distribution. Faculty workload distribution was measured by asking participants to complete a calculation matrix in which they indicated their assigned, actual, and preferred time allocations within Teaching, Research, Service, and Administrative. Administrative work was included to acknowledge that faculty engage in required tasks outside of the realm of teaching, research, and service, including tasks such as completing mandatory institutional training and travel reimbursement requests. Assigned workload is that which is the official workload assigned by the participant's department. Actual workload is the proportion of time participants practically spend on teaching, research, and service in a typical semester. Preferred workload is how participants ultimately prefer to allocate their time amongst teaching, research, and service. This is the individual's perception of what their ideal distribution of time between teaching, research, and service would be based on their own priorities and goals. The total entered for each type of allocation was presented and participants were instructed to ensure the total equaled 100%.

Workload Discrepancy. Another variable of interest was the discrepancy between actual workload allocation and preferred workload allocation. This discrepancy is calculated by subtracting preferred workload allocation percentage from actual workload allocation percentage

in each domain. A positive value indicates that actual time allocation is more than preferred, while a negative value indicates that actual time allocation is less than preferred.

Perceived Workload Equity. The study measured the extent to which departmental workload is distributed fairly across faculty and the flexibility of making adjustments based on other demands. The measure used in this study was adapted from a measure of workload equity (Misra, 2021). The adapted measure included five items, each rated on a scale from 1 (Not at all) to 4 (To a Great Extent). The following item is an example of the measure: “Please indicate the extent to which your unit/department fairly divides the service workload among faculty”.

Internal consistency for the adapted scale was acceptable, with a Cronbach’s alpha of $\alpha = .82$.

Perceived Value of Effort. The study assessed the extent to which faculty members perceive that their efforts in teaching, research/creative activity, and service are valued by their department. This measure was adapted from the Kansas State Climate report (Rankin, 2014), further inspired by a measure of perceptions of equity in evaluating workload (Misra, 2021). The adapted measure included three items, each rated on a scale from 1 (Not at all) to 4 (To a Great Extent). The following item is an example of the measure: “My teaching is valued by my department”. Internal consistency for the adapted scale was acceptable, with a Cronbach’s alpha of $\alpha = .80$.

Turnover Intention. The study examined the extent to which faculty members are considering leaving their job. An adapted measure of Michaels and Spector’s (1982) intention of quitting measure was used. This measure included three items, each rated on a scale from 1 (Not at all) to 4 (To a Great Extent). The following item is an example of the measure: “I often seriously consider leaving my current job”. Internal consistency for the adapted scale was acceptable, with a Cronbach’s alpha of $\alpha = .86$.

Demographic Variables. Demographic variables were obtained, including self-reported gender, race, discipline, and rank.

Gender. Respondents were asked to specify their gender identity by selecting from the following options: Man, Woman, Non-binary/Third Gender, Prefer Not to Say, or Self-Describe. Gender was recoded into a binary variable to reflect only participants who identified as male or female. Participants whose gender identity fell outside this binary were excluded from gender-based analyses to protect their anonymity and ensure statistical reliability. This decision was made due to the limited number of respondents identifying as non-binary or preferred not to say.

Race. Respondents were asked to identify their racial or ethnic identity, given several check boxes with options that include African American/Black, American Indian or Alaskan Native, East Asian, Hispanic/Latino, Latina, Middle Eastern, Pacific Islander, South Asian, Southeast Asian, White, and Other. Respondents were instructed to select as many options as apply or leave all options unselected if they prefer not to disclose their racial or ethnic identity. Insufficient samples sizes in most racial/ethnic identities were expected; therefore we aggregated these identities into three groups: White, Asian, and Underrepresented. Individuals who selected a group outside of White or Asian (e.g., multiracial or another non-White/Asian identity) were included in the Underrepresented category, while the Asian category consisted of those identifying as solely Asian or as both Asian and White. The White category included individuals who identified exclusively as White.

Discipline. Controlling for disciplinary area at an R1 university is critical due to the varying workload expectations across different fields. For example, the research/creative activity demands in the fine arts differ significantly from those in fields like biomedical engineering. By controlling for disciplinary area, we can account for these variations and ensure that comparisons

between faculty members are not skewed by field-specific expectations. While discipline was originally collected by having participants select from a list of 70 departments, we aggregated these departments into five areas: Engineering, Energy, Mathematical and Physical Sciences; Social and Behavioral Sciences; Humanities; Education/Professional/Other; and Fine Arts.

Rank. Controlling for rank is essential due to the differing workload expectations placed on faculty members at different stages in their careers. Typically, assistant, associate, and full professors are expected to allocate their time differently among teaching, research, and service activities. For instance, assistant professors may focus more on research to secure tenure, while full professors might have greater service responsibilities. Any analysis of faculty workload must account for rank to ensure that comparisons between faculty members are accurate and not confounded by these career stage-specific expectations.

Results

Descriptive Statistics

Table 1 presents descriptive statistics for assigned, actual, and preferred workload across teaching, research, service, and administrative duties. On average, assigned workload percentages were 37.09% ($SD = 10.88$) for teaching, 41.43% ($SD = 11.51$) for research, 18.42% ($SD = 7.88$) for service, and 0.68% ($SD = 3.92$) for administrative duties. Actual time spent was reported as 38.572 ($SD = 14.22$) for teaching, 34.15% ($SD = 15.67$) for research, 22.54% ($SD = 12.39$) for service, and 2.81% ($SD = 7.07$) for administrative duties. Faculty's preferred workload allocations were 32.45% ($SD = 13.98$) for teaching, 43.91% ($SD = 17.81$) for research, 15.76% ($SD = 9.71$) for service, and 1.39% ($SD = 4.34$) for administrative responsibilities.

Also presented in Table 1 are the descriptive statistics for faculty workload discrepancies (subtracting preferred workload allocation percentage from actual workload allocation

percentage) in teaching, research, and service. The teaching discrepancy scores ($M = 6.30$, $SD = 12.66$) indicate that, on average, faculty members report spending more time on teaching than they would prefer. Similarly, the service discrepancy scores ($M = 6.80$, $SD = 11.30$) suggest that faculty, on average, engage in more service work than they ideally desire. In contrast, the research discrepancy scores ($M = -9.78$, $SD = 17.99$) reveal that faculty members generally report spending a lower percentage on research than they would like.

Table 2 includes descriptive statistics for academic rank and gender of faculty who participated in the study. Of these, 32.6% identified as Assistant Professors ($N = 79$), 36.0% as Associate Professors ($N = 87$), and 31.4% as Full Professors ($N = 76$). For gender, responses were limited to participants who identified as either male or female due to small sample sizes for other gender identities. Among the responses, 57.1% identified as male ($N = 120$) and 42.9% as female ($N = 90$).

Table 3 presents descriptive statistics and bivariate correlations for three organizational outcomes, workload equity, perceived value of effort, and turnover intentions. On average, faculty perceived workload equity as moderate ($M = 2.52$, $SD = 0.79$), with slightly lower ratings for perceived value of effort ($M = 1.92$, $SD = 0.45$), and moderately low turnover intentions ($M = 2.19$, $SD = 0.97$). Significant positive correlations were observed between workload equity and perceived value of effort ($r = .610$, $p < .01$). This may suggest that when faculty perceive greater workload equity and value of effort, they are less likely to consider leaving their institution.

Table 4 presents mean scores for organizational outcomes by academic rank and gender. Across all ranks, men generally reported higher perceptions of workload equity and value of effort than women. For example, male assistant professors reported the highest workload equity ($M = 2.81$), while women across all ranks reported lower and relatively consistent perceptions. A

similar trend appeared for departmental value, with men rating their perceived value of effort more favorably than women. Turnover intentions were highest among associate professors, particularly women ($M = 2.51$). Female faculty at all ranks also tended to report slightly higher turnover intentions than their male counterparts.

Primary Analyses

For Hypothesis 1, an independent samples t-test was conducted to examine whether women spend a higher proportion of their actual work time on teaching compared to men. As shown in Table 5, the t-test revealed no statistically significant difference in actual proportion of time spent on teaching between men and women, $t(155) = .091, p = .927$. Women ($M = 38.51, SD = 15.61$) and men ($M = 38.69, SD = 11.33$) reported spending nearly the same percentage of actual time on teaching. Effect size calculations further support this interpretation, $d = .01$, indicating a very small and non-significant effect. Thus, Hypothesis 1 was not supported, suggesting minimal gender differences in actual teaching allocation.

For Hypothesis 2, an independent samples t-test was conducted to assess gender differences in the actual proportion of time spent on research. As shown in Table 5, the t-test revealed a statistically significant difference in research workload between men and women, $t(174) = 2.17, p = .015$. On average, men ($M = 36.60, SD = 14.13$) reported spending a greater proportion of their time on research than women ($M = 31.84, SD = 16.50$). The effect size was small to moderate, $d = .31$, supporting Hypothesis 2. These results suggest a gender disparity in actual research time allocation, with men devoting more of their work hours to research activities than women.

For Hypothesis 3, an independent samples t-test was conducted to examine gender differences in actual time spent on service work. As shown in Table 5, the t-test revealed a statistically significant difference between men and women in actual service workload, $t(146) = -1.96, p = .026$. Women reported spending significantly more time on service ($M = 25.11, SD = 14.65$) than men ($M = 21.61, SD = 9.80$). The effect size was small to moderate, $d = -.29$, providing support for Hypothesis 3. These findings suggest that women faculty are disproportionately burdened with service responsibilities compared to their male counterparts.

For RQ1, a two-way ANOVA was conducted to examine the effects of academic rank and gender on the actual percentage of time faculty reported spending on service activities. The results shown in Table 6 revealed a statistically significant main effect of academic rank, $F(2, 203) = 3.32, p = .007$, partial $\eta^2 = .076$, and a significant main effect of gender, $F(1, 203) = 4.60, p = .033$, partial $\eta^2 = .022$. While the interaction between academic rank and gender was not statistically significant, $F(2, 203) = 2.30, p = .103$, partial $\eta^2 = .022$, see in Table 7 that there is a notable difference between women full professors and male professors in regard to service workload.

Estimated marginal means indicated that associate professors ($M = 26.05, SE = 1.37$) reported spending significantly more time on service than assistant professors ($M = 20.48, SE = 1.47$), $p = .017$. Full professors ($M = 23.97, SE = 1.55$) did not differ significantly from other groups. Female faculty ($M = 25.32, SE = 1.29$) reported spending more time on service than male faculty ($M = 21.69, SE = 1.10$), consistent with a small but significant gender effect.

Tukey's HSD post hoc comparisons showed that the difference between associate professors and assistant professors was statistically significant, $p = .017$, with associate professors reporting an average of 6% more time spent on service. Differences between

professors and other ranks were not statistically significant. These results suggest that both gender and academic rank independently influence the proportion of time spent on service activities, with women and associate professors tending to report higher service workloads.

Although formal hypotheses were only specified for gender differences in actual service workload, parallel two-way ANOVAs were conducted for actual research and teaching to explore whether similar patterns emerged across other workload domains.

For actual research, the results shown in Table 6 revealed a significant main effect of academic rank, $F(2, 203) = 7.43, p = .001$, partial $\eta^2 = .068$, and a significant main effect of gender, $F(1, 203) = 4.25, p = .040$, partial $\eta^2 = .021$. The interaction between academic rank and gender was not significant, $F(2, 203) = 0.05, p = .951$, partial $\eta^2 < .001$. Estimated marginal means showed that assistant professors reported the highest proportion of time spent on research ($M = 38.80, SE = 1.83$), followed by professors ($M = 35.41, SE = 1.93$), and associate professors ($M = 29.34, SE = 1.70$). Post hoc comparisons using Tukey's HSD indicated that assistant professors reported significantly more research time than associate professors ($p = .001$), and professors also reported significantly more research time than associate professors ($p = .023$). Notably, Table 7 highlights that women associate professors spend the lowest amount of time on research ($M = 26.76$). There was no statistically significant difference between professors and assistant professors ($p = .496$). Regarding gender, male faculty ($M = 36.69, SE = 1.37$) reported significantly higher research time than female faculty ($M = 32.35, SE = 1.60$), though the effect size was small. These findings indicate that both academic rank and gender are significantly associated with actual time spent on research, with associate professors and women reporting the lowest research workloads.

For actual teaching, results found in Table 6 indicated that there were no significant main effects or interaction. Specifically, the main effect of academic rank was not statistically significant, $F(2, 203) = 1.55, p = .216$, partial $\eta^2 = .015$. The main effect of gender was also non-significant, $F(1, 203) = 0.07, p = .788$, partial $\eta^2 < .001$, as was the interaction between academic rank and gender, $F(2, 203) = 0.45, p = .638$, partial $\eta^2 = .004$. Estimated marginal means revealed similar teaching loads across academic ranks, with associate professors ($M = 40.56, SE = 1.53$) reporting slightly higher levels of teaching than assistant professors ($M = 38.26, SE = 1.65$) and professors ($M = 36.54, SE = 1.74$), but these differences were not statistically significant. Similarly, male faculty ($M = 38.71, SE = 1.23$) and female faculty ($M = 38.20, SE = 1.44$) reported comparable actual teaching loads, with no significant differences detected. Tukey's HSD post hoc comparisons confirmed that none of the pairwise differences between academic ranks reached significance. These findings suggest that neither academic rank nor gender meaningfully predicted the actual proportion of time faculty spent on teaching duties.

To examine the mismatch between faculty members' actual and preferred time allocations, discrepancy scores were calculated for teaching, research, and service by subtracting the proportion of preferred time from the proportion of actual time spent in each category. A negative discrepancy value indicates that faculty members are spending less time than they would prefer in a given domain, suggesting an unmet desire for greater engagement in that domain. Conversely, a positive discrepancy value indicates that faculty members are spending more time than they would prefer, which may reflect an overcommitment or a workload that is externally imposed. Discrepancy scores are widely used in research to measure gaps, mismatches, or misalignments between expectations and reality. Standard discrepancy scores (*Actual - Preferred*) allows for meaningful interpretation of how faculty time mismatches may

differently impact attitudes and behaviors. This method is comparable to methods used in similar studies (Winslow, 2010; Dahm, 2015).

For Hypothesis 4a, an independent samples t-test was conducted to examine whether teaching workload discrepancy differed by gender. As seen in Table 8, there was no significant difference in teaching discrepancy scores between men ($M = 5.29$, $SD = 11.87$) and women ($M = 6.39$, $SD = 12.12$), $t(208) = -0.66$, $p = .510$. The effect size was small, Cohen's $d = -0.09$, suggesting a negligible difference between groups. These results do not support Hypothesis 4a, which proposed that women would have a larger discrepancy in teaching workload allocation compared to men. Both men and women reported positive discrepancy scores on average, suggesting that faculty members tend to spend a greater proportion of time teaching than they would prefer, regardless of gender.

For Hypothesis 4b, an independent samples t-test was conducted to determine whether the discrepancy between actual and preferred research workload allocation differed between men and women faculty. The results in Table 8 showed that women ($M = -11.87$, $SD = 18.60$) reported slightly larger negative discrepancies in research workload compared to men ($M = -9.11$, $SD = 16.78$); however, this difference was not statistically significant, $t(208) = 1.13$, $p = .261$, $d = 0.16$. Although the direction of the results is consistent with Hypothesis 4b, both men and women reported negative discrepancy scores, and women had slightly larger discrepancies, the difference was not statistically significant. Thus, Hypothesis 4b was not supported.

For Hypothesis 4c, an independent samples t-test was conducted to examine whether the discrepancy between actual and preferred proportion of time spent on service differed between men and women faculty. The results, also observed in Table 8, no significant differences in service workload discrepancy between men ($M = 6.97$, $SD = 10.09$) and women faculty ($M =$

6.94, $SD = 12.90$), $t(208) = -.116$, $p = .908$, $d = -.016$. Although both men and women faculty, on average, reported spending a greater proportion of time on service than they would prefer, the difference in discrepancy scores was not statistically significant. Thus, Hypothesis 4c was not supported.

For RQ2, a multivariate regression was conducted to examine whether gender, academic rank, and their interaction predicted discrepancies in teaching, research, and service hours. The multivariate tests shown in Table 9 revealed no statistically significant main effects of academic rank, Roy's Largest Root = .022, $F(3, 202) = 1.46$, $p = .227$; gender, Roy's Largest Root = 0.007, $F(3, 201) = .441$, $p = .724$; or the interaction between academic rank and gender, Roy's Largest Root = 0.025, $F(3, 202) = 1.68$, $p = .173$.

Follow-up univariate tests for each dependent variable indicated that none of the predictors significantly explained variance in discrepancy scores. As seen in Table 10, there was no significant effect of gender on teaching discrepancy, $F(1, 203) = 0.288$, $p = .592$; research discrepancy, $F(1, 203) = 1.177$, $p = .279$; or service discrepancy, $F(1, 203) = 0.054$, $p = .817$. Similarly, academic rank did not significantly predict teaching discrepancy, $F(2, 203) = .167$, $p = .846$; research discrepancy, $F(2, 203) = .316$, $p = .729$; or service discrepancy, $F(2, 203) = 1.914$, $p = .150$. The interaction between gender and academic rank was also non-significant for teaching discrepancy, $F(2, 203) = 2.416$, $p = .092$; research discrepancy, $F(2, 203) = .265$, $p = .767$; and service discrepancy, $F(2, 203) = .295$, $p = .745$.

Taken together, these results suggest that perceived discrepancies between actual and preferred time allocation for teaching, research, and service do not significantly differ by gender, academic rank, or their interaction.

A multivariate regression was conducted for RQ3, to examine whether discrepancies in time allocation for teaching, research, and service predicted faculty perceptions of workload equity, value of effort, and intention to leave the university, controlling for academic rank. Seen in Table 11, academic rank did not significantly predict the combined outcomes, Roy's Largest Root = 0.021, $F(3, 116) = 0.800$, $p = .497$, partial $\eta^2 = .020$, suggesting that rank alone was not a meaningful factor in explaining variance in workload equity, turnover intentions, or valuing of effort.

Discrepancy in teaching workload approached significance, Roy's Largest Root = 0.197, $F(13, 118) = 1.792$, $p = .052$, with a moderate-to-large effect size (partial $\eta^2 = .165$). This suggests that discrepancies in teaching load may contribute meaningfully to at least one of the outcomes, although the result did not meet conventional thresholds for significance.

Discrepancy in research workload was a significant multivariate predictor, Roy's Largest Root = 0.304, $F(15, 118) = 2.393$, $p = .005$, partial $\eta^2 = .233$, indicating that mismatches between actual and preferred research time were strongly associated with differences in faculty outcomes.

Discrepancy in service workload also reached multivariate significance, Roy's Largest Root = 0.208, $F(13, 118) = 1.886$, $p = .038$, partial $\eta^2 = .172$, showing that larger gaps between preferred and actual time spent on service were linked to differences across at least one outcome variable.

Follow-up univariate tests used to identify which specific outcomes were predicted by each factor. For Perceived Workload Equity, the overall model was marginally significant, $F(49, 118) = 1.393$, $p = .075$, $R^2 = .366$. As shown in Table 12, academic rank did not significantly predict perceptions of workload equity, $F(1, 118) = 0.002$, $p = .967$, partial $\eta^2 < .001$. Although not statistically significant, teaching discrepancy, $F(13, 118) = 1.505$, $p = .125$, partial $\eta^2 = .142$,

and research discrepancy, $F(15, 118) = 1.532, p = .105$, partial $\eta^2 = .163$, explained modest proportions of variance. Service discrepancy did not significantly predict workload equity, $F(13, 118) = 0.874, p = .582$, partial $\eta^2 = .088$.

For Turnover Intention, the overall model was not significant, $F(49, 118) = 1.073, p = .383, R^2 = .307$. No predictors were statistically significant. Academic rank was non-significant, $F(1, 118) = 1.535, p = .218$, partial $\eta^2 = .013$, as were teaching discrepancy, $F(13, 118) = 0.787, p = .673$, partial $\eta^2 = .080$, research discrepancy, $F(15, 118) = 0.897, p = .570$, partial $\eta^2 = .102$, and service discrepancy, $F(13, 118) = 1.397, p = .171$, partial $\eta^2 = .133$.

For Perceived Value of Effort, the overall model did not reach significance, $F(49, 118) = 1.32, p = .114, R^2 = .354$. None of the predictors reached statistical significance, though service discrepancy approached significance, $F(13, 118) = 1.790, p = .052$, partial $\eta^2 = .165$. Effects of academic rank, $F(1, 118) = 0.990, p = .322$, partial $\eta^2 = .008$; teaching discrepancy, $F(13, 118) = 1.168, p = .312$, partial $\eta^2 = .114$; and research discrepancy, $F(15, 118) = 0.611, p = .861$, partial $\eta^2 = .072$, were non-significant.

In summary, the analyses indicated that none of the predictors significantly explained variance in individual outcomes. While teaching and research discrepancies showed modest effects on perceived workload equity, and service discrepancy approached significance for perceived value of effort, no predictors reached conventional significance levels across outcomes.

Discussion

This study explored how discrepancies between actual and preferred faculty workload allocations in teaching, research, and service relate to gender, academic rank, and key organizational outcomes such as perceived workload equity, perceived value of effort, and

turnover intention. Overall, the findings underscore a persistent mismatch between faculty's desired and actual time allocations, particularly in research and service domains. Faculty members, on average, spent more time on teaching and service than they prefer, and less time on research.

While actual time spent on teaching did not significantly differ between men and women, gender differences emerged for research and service workload. Further, both gender and academic rank independently influenced service and research workloads. Associate professors in particular, reported significantly more service duties and the lowest engagement in research activities compared to assistant and full professors. This pattern suggests, associate professors, especially women, may shoulder disproportionate service responsibilities that can hinder research productivity and career advancement.

Discrepancies in teaching, research, and service time did not significantly differ by gender or academic rank. While men and women report spending different amounts of time on certain activities, the degree of mismatch between actual and preferred workload was comparable across groups. These findings complicate assumptions that women experience greater workload misalignment and instead suggest that overcommitment and under allocation are common challenges across the faculty population.

Discrepancies in research and service workload showed associations with organizational outcomes as a whole. However, these relationships did not consistently reach significance when each outcome was considered individually, suggesting that the influence of these discrepancies may be subtle or shared across multiple aspects of faculty experience rather than concentrated in any single domain.

These findings highlight the importance of understanding both actual time use and perceived misalignment in workload distribution. Interventions that promote more equitable workload practices, such as transparent service assignment, flexible teaching loads, and research support, may not only improve individual well-being but also promote greater organizational fairness and retention.

Theoretical Implications

From a theoretical perspective, these results are consistent with Acker's (1990) theory of gendered organizations and Eagly's (1987) social role theory. Although gender differences in workload were not statistically significant for most domains, the observed patterns suggest that structural and organizational culture forces continue to shape faculty experiences in subtle but impactful ways. For example, the persistent gap in the proportion of time spent on research may reflect institutional expectations or social pressures that differentially constrain how men and women engage in research versus service or teaching roles. Knowledge of gender differences in workload allocation supports the establishment of tools and training to help leaders promote and create equitable workload distributions and evaluation processes. These theoretical perspectives also suggest that gendered workload patterns may accumulate over time, potentially contributing to disparities in career outcomes, including delayed time to promotion or hindered achievement of tenure—areas which warrant further research.

Practical Implications

These findings also have practical implications. Institutions must recognize and address the misalignment between assigned duties and faculty preferences. Doing so may involve more transparent and equitable workload policies, mechanisms for adjusting work distribution over time, and improved recognition of invisible service work—particularly the relational and

emotional labor disproportionately carried by women and minoritized faculty. Knowledge of gender disparities can inform the development of training programs for academic leaders aimed at reducing inequities in workload distribution and promoting fair evaluation processes. These efforts may be expected to lead to increased perceptions of workload equity, greater recognition of faculty contributions, and ultimately, stronger intentions to remain in the institution. Without intentional and systematic interventions, misalignments in workload may continue to undermine faculty satisfaction, productivity, and retention.

Limitations

Despite the contributions of this study to the understanding of faculty workload allocation and perceived equity, several limitations should be considered. First, the research was conducted at a single R1 university, which may restrict the generalizability of the findings to other institutional contexts, such as teaching-focused universities, liberal arts colleges, or community colleges. Faculty workload dynamics and expectations may differ substantially across these environments.

Second, the cross-sectional nature of the study limits its ability to capture temporal changes in workload distribution. Faculty responsibilities and perceptions may shift over the course of an academic year or in response to external factors such as administrative changes or personal circumstances, which are not reflected in a one-time data collection.

Third, the study relies on self-reported measures of actual and preferred time allocation, which introduces potential bias. These subjective perceptions, while valuable for understanding faculty experiences, may not align with objective workload records. Faculty may misremember or misestimate the time spent on various activities, which could impact the accuracy of the discrepancy scores. Additionally, although the sample includes a range of disciplines and

academic ranks, some subgroups had very small sample sizes. This limits the ability to conduct meaningful statistical analyses for these populations and may obscure important variability in workload experiences among underrepresented groups.

A significant limitation of this study is the aggregation of disciplines. It is possible that different cultures and norms surrounding workload, the value of different faculty activities, and expectations for promotion and tenure differ based on one's discipline. Particularly there may be differences in STEM and non-STEM disciplines. For instance, disciplines such as engineering or biomedical sciences might value grant acquisition and research output more heavily than humanities or fine arts, which may prioritize teaching excellence and community engagement. Furthermore, the distribution of gender varies across disciplines, with men more heavily represented in STEM fields and women more commonly found in non-STEM disciplines. This imbalance may confound observed gender differences, as disciplinary norms and expectations likely shape workload patterns.

Another limitation is that faculty rank was treated categorically without examining in finer detail the distinctions within, such as years within rank and previous administrative roles. For example, newly promoted associate professors might experience workload demands differently compared to more senior associates. It is not uncommon for new faculty to experience a large amount of support in the early stages of their career at a university, which eventually tapers off. Differences within ranks could affect one's workload distribution and perceptions of workload equity and intention to leave.

Furthermore, the study did not address other potentially important psychological outcomes such as burnout, job engagement, or work-life balance, all of which might directly mediate or moderate the relationship between workload discrepancies and faculty outcomes.

Inclusion of these psychological outcomes might provide deeper insights into the mechanisms driving faculty dissatisfaction and the nuanced impacts of workload discrepancies.

Lastly, due to the non-experimental design, the findings should be interpreted as correlational. Although associations between workload discrepancies and outcomes such as perceptions of equity or turnover intentions are observed, causal inferences cannot be drawn from the data.

Future Directions

Building on the current findings, several avenues for future research could be pursued to deepen our understanding of faculty workload allocation and equity. First, longitudinal studies are needed to capture the dynamic nature of workload over time. Faculty responsibilities and institutional demands often fluctuate across semesters or academic years, and a longitudinal design would provide insight into how discrepancies in workload evolve and potentially affect faculty outcomes. Incorporating time-diary or time-tracking methodologies may enhance accuracy in reporting and allow researchers to better pinpoint subjective perceptions with objective workload data.

Second, expanding this line of inquiry to include a wider range of institutional contexts is critical. Future studies should examine faculty workload discrepancies not only across multiple R1 institutions but also within teaching-focused universities, liberal arts colleges, and community colleges. These comparisons would help determine how institutional mission, resource availability, and teaching load expectations shape workload experiences and perceptions of equity.

Third, future research should consider intersectionality more explicitly. Faculty identities are multifaceted, and the experiences of workload inequity may differ significantly based on

intersecting factors such as race, ethnicity, caregiving responsibilities, and LGBTQ+ status. In particular, caregiving responsibilities may disproportionately affect faculty at lower ranks, who often have less schedule flexibility and different levels of institutional support. An intersectional lens would provide a better understanding of how multiple identities, and their interaction with rank, influence perceptions of workload and access to institutional resources.

Fourth, a mixed-methods approach using qualitative methods may allow further exploration into how gender differences may manifest in workload responsibilities. Quantitative percentage-based measures may not fully capture informal, emotionally intensive, or invisible workload activities disproportionately undertaken by women faculty. Qualitative data, such as interviews or focus groups, could reveal meaningful differences in workload experiences not apparent through quantitative analyses alone.

Additionally, future research should investigate invisible or informal service work, such as mentoring, emotional labor, and DEI initiatives, to better understand how these tasks may contribute to gendered workload disparities. These forms of service often go unrecognized in traditional workload measures, potentially hiding important differences across gender. By explicitly measuring and analyzing these hidden responsibilities, future studies may reveal patterns of inequity that are otherwise overlooked.

Finally, further investigation could delve into the role of departmental and leadership dynamics in shaping workload distribution and equity perceptions. Leadership styles, transparency in decision-making, and formalized workload policies may significantly affect faculty experiences and outcomes such as job satisfaction, burnout, and turnover intentions. Exploring these organizational processes may help identify leverage points for interventions aimed at improving workload equity across academic units.

Conclusion

This study examined faculty workload allocation and discrepancies between actual and preferred time spent on teaching, research, and service at a research-intensive university, with a focus on gender and organizational outcomes. While gender differences in workload discrepancies were largely non-significant, men reported spending more time on research than women, reflecting persistent structural patterns. Across the board, faculty tended to spend more time than preferred on teaching and service and less on research, discrepancies that significantly predicted perceived workload equity, perceived value of effort, and intention to leave. These findings underscore the importance of aligning institutional expectations with faculty preferences to enhance equity, satisfaction, and retention. Institutions that fail to address misalignments may inadvertently contribute to faculty disengagement and turnover, particularly in undervalued domains like service.

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Tables

Table 1

Descriptive Statistics for Percentage of Time Spent in Teaching, Research, and Service Workload

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min.</i>	<i>Max.</i>
Assigned Teaching	244	37.09	10.88	0	70
Assigned Research	244	41.43	11.51	0	80
Assigned Service	244	18.42	7.88	0	40
Assigned Admin	242	0.68	3.92	0	50
Actual Teaching	243	38.72	14.22	0	85
Actual Research	243	34.15	15.67	0	80
Actual Service	243	22.54	12.39	0	80
Actual Admin	242	2.81	7.07	0	60
Preferred Teaching	244	32.45	13.98	0	85
Preferred Research	244	43.91	17.81	0	80
Preferred Service	244	15.76	9.71	0	60
Preferred Admin	244	1.39	4.34	0	40
Teaching Discrepancy	243	6.30	12.66	-40	50
Research Discrepancy	243	-9.78	17.99	-60	80
Service Discrepancy	243	6.80	11.30	-20	60

Table 2*Descriptive Statistics for Academic Rank and Gender*

	Frequency	%
Assistant Professors	79	32.6
Associate Professors	87	36.0
Full Professors	76	31.4
Total	242	100
Male	120	57.1
Female	90	42.9
Total	210	100

Table 3*Descriptive Statistics and Correlations for Workload Equity, Departmental Value, and Turnover Intentions*

Variable	<i>n</i>	<i>M</i>	<i>SD</i>	1	2	3
1. Workload Equity	176	2.52	0.793	1	.610**	-0.335**
2. Departmental Value	228	1.92	0.449	.610**	1	-.436**
3. Turnover intentions	238	2.19	0.974	-0.335**	-.436**	1

Note. * $p < .05$. ** $p < .01$

Table 4*Outcome Variable Means by Rank and Gender*

	Assistant Professor		Associate Professor		Full Professor	
	Men	Women	Men	Women	Men	Women
Workload Equity	2.81	2.42	2.55	2.29	2.73	2.29
Departmental Value	2.02	1.94	1.94	1.79	1.99	1.78
Turnover Intention	1.99	1.92	2.35	2.51	2.02	2.33

Table 5*Independent T-Test Results for Gender Differences in Actual Proportion of Time Spent.*

	Actual Teaching				Actual Research				Actual Service			
	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>
Gender	0.091	0.927	155	0.01	2.17	0.015	174	0.31	1.96	0.026	146	-0.29

Note. N=244. *Indicates $p < .05$. **Indicates $p < .01$. *t* = t-value; *p* = p-value; *df* = degrees of freedom; *d* = Cohen's *d* effect size.

Gender was coded as 0 = Male, 1 = Female. Participants who selected non-binary or "prefer not to say" were excluded from gender-based analyses to protect participant confidentiality due to small subgroup sizes.

Table 6*ANOVA Results for Actual Service by Academic Rank and Gender.*

Actual Service				
Variables	<i>df</i>	<i>F</i>	<i>p</i>	η_p^2
Corrected Model	5, 203	3.32	0.007	0.076
Intercept	1, 203	773.81	<.001	0.792
Academic Rank	2, 203	3.88	0.022	0.037
Gender	1, 203	4.60	0.033	0.022
Academic Rank*Gender	2, 203	2.30	0.103	0.022
Actual Research				
	<i>df</i>	<i>F</i>	<i>p</i>	η_p^2
Corrected Model	5, 203	4.014	0.002	0.090
Intercept	1, 203	1075.37	<.001	0.841
Academic Rank	2, 203	7.430	0.001	0.068
Gender	1, 203	4.252	0.040	0.021
Academic Rank*Gender	2, 203	0.050	0.951	<.001
Actual Teaching				
	<i>df</i>	<i>F</i>	<i>p</i>	η_p^2
Corrected Model	5, 203	0.80	0.548	0.019
Intercept	1, 203	1645.66	<.001	0.890
Academic Rank	2, 203	1.55	0.216	0.015
Gender	1, 203	0.07	0.788	<.001
Academic Rank*Gender	2, 203	0.45	0.638	0.004

Note. N=290. *Indicates $p < .05$. **Indicates $p < .01$. *F* = F-value; *df* = degrees of freedom; *p* = p-value; η_p^2 = partial eta squared effect size.

Table 7

Workload Means by Rank and Gender

	Assistant Professor		Associate Professor		Full Professor	
	Men	Women	Men	Women	Men	Women
Assigned Teaching	37.61	34.21	39.44	38.38	36.30	34.77
Assigned Research	42.92	41.51	41.41	37.97	44.34	42.64
Assigned Service	19.47	17.18	18.38	19.05	17.14	22.14
Assigned Admin	0.00	0.65	1.28	1.94	0.00	0.45
Actual Teaching	37.30	39.23	41.67	39.46	37.16	35.91
Actual Research	40.95	36.65	31.92	26.76	37.18	33.64
Actual Service	20.32	20.65	25.21	26.89	19.54	28.41
Actual Admin	1.43	3.29	4.28	2.57	2.39	2.73
Preferred Teaching	33.94	32.61	37.51	31.35	29.50	32.73
Preferred Research	50.11	46.10	41.28	40.68	45.67	45.45
Preferred Service	15.09	16.61	17.23	18.51	12.83	19.77
Preferred Admin	0.86	1.61	1.92	1.35	0.67	2.05

Table 8

Independent T-Test Results for Gender Differences in Teaching, Research, and Service Discrepancy.

	Teaching Discrepancy				Research Discrepancy				Service Discrepancy			
	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>	<i>t</i>	<i>p</i>	<i>df</i>	<i>d</i>
Gender	-0.66	0.51	208	-0.09	1.13	0.261	208	0.16	-0.116	0.908	208	-0.016

Note. N=244. *Indicates $p < .05$. **Indicates $p < .01$. *t* = t-value; *p* = p-value; *df* = degrees of freedom; *d* = Cohen's *d* effect size.

Gender was coded as 0 = Male, 1 = Female. Participants who selected non-binary or "prefer not to say" were excluded from gender-based analyses to protect participant confidentiality due to small subgroup sizes.

Table 9

Multivariate Tests of the Effects of Gender, Academic Rank, and Their Interaction on Discrepancies in Teaching, Research, and Service Workload

Predictor	Test Statistic	Value	<i>F</i>	df Hypothesis	df Error	<i>p</i>	Partial η^2
Intercept	Roy's Largest Root	0.750	50.27	3	201	<.001	0.429
Academic Rank	Roy's Largest Root	0.022	1.46	3	202	0.227	0.021
Gender	Roy's Largest Root	0.007	0.441	3	201	0.724	0.007
Academic Rank*Gender	Roy's Largest Root	0.025	1.68	3	202	0.173	0.024

Note. Roy's Largest Root chosen based on the strength of each effect. Partial η^2 indicates effect size.

Dependent variables: Workload Equity, Turnover Intentions, and Perceived Value of Effort.

Table 10

Univariate Tests of the Effects of Gender, Academic Rank, and Their Interaction on Discrepancies in Teaching, Research, and Service Workload

Source	Dependent Variable	SS (Type III)	df	MS	<i>F</i>	<i>p</i>	Partial η^2
Corrected Model	Teaching Discrepancy	839.79	5, 203	167.96	1.174	0.323	0.028
	Research Discrepancy	783.69	5, 203	156.74	0.500	0.776	0.012
	Service Discrepancy	543.37	5, 203	108.67	0.838	0.524	0.020
Intercept	Teaching Discrepancy	6038.37	1, 203	6038.37	42.209	<.001	0.172
	Research Discrepancy	21353.07	1, 203	21353.07	68.072	<.001	0.251
	Service Discrepancy	9265.00	1, 203	9265.00	71.469	<.001	0.260
Academic Rank	Teaching Discrepancy	47.74	2, 203	23.87	0.167	0.846	0.002
	Research Discrepancy	198.48	2, 203	99.24	0.316	0.729	0.003

Gender	Service Discrepancy	496.23	2, 203	248.11	1.914	0.150	0.019
	Teaching Discrepancy	41.14	1, 203	41.14	0.288	0.592	0.001
	Research Discrepancy	369.25	1, 203	369.25	1.177	0.279	0.006
Academic Rank*Gender	Service Discrepancy	6.97	1, 203	6.97	0.054	0.817	<.001
	Teaching Discrepancy	691.27	2, 203	345.64	2.416	0.092	0.023
	Research Discrepancy	166.53	2, 203	83.26	0.265	0.767	0.003
	Service Discrepancy	76.48	2, 203	38.24	0.295	0.745	0.003

Note. SS = Sum of Squares; MS = Mean Square. Partial η^2 values reflect the proportion of variance explained by each effect, controlling for other effects in the model.

Table 11

Multivariate General Linear Model Predicting Workload Equity, Turnover Intentions, and Perceived Value of Effort from Workload Discrepancies in Teaching, Research, and Service.

Predictor	Test Statistic	Value	<i>F</i>	df Hypothesis	df Error	<i>p</i>	Partial η^2
Intercept	Roy's Largest Root	1.228	47.466	3	116	<.001	0.551
Academic Rank	Roy's Largest Root	0.021	0.800	3	116	0.497	0.020
Teaching Discrepancy	Roy's Largest Root	0.197	1.792	13	118	0.052	0.165
Research Discrepancy	Roy's Largest Root	0.304	2.393	15	118	0.005	0.233
Service Discrepancy	Roy's Largest Root	0.208	1.886	13	118	0.038	0.172

Note. Roy's Largest Root chosen based on the strength of each effect. Partial η^2 indicates effect size. Dependent variables: Workload Equity, Turnover Intentions, and Perceived Value of Effort.

Table 12*Tests of Between-Subjects Effects Predicting Workload Equity, Turnover Intention, and Perceived Value of Effort*

Source	Dependent Variable	SS (Type III)	df	MS	<i>F</i>	<i>p</i>	Partial η^2
Corrected Model	Workload Equity	39.636	49, 118	0.809	1.393	0.075	0.366
	Turnover Intention	52.561	49, 118	1.073	1.065	0.383	0.307
	<i>Perceived Value of Effort</i>	12.793	49, 118	0.261	1.320	0.114	0.354
Intercept	Workload Equity	23.140	1, 118	23.140	39.842	0.000	0.252
	Turnover Intention	9.663	1, 118	9.663	9.595	0.002	0.075
	<i>Perceived Value of Effort</i>	15.676	1, 118	15.676	79.277	0.000	0.402
Academic Rank	Workload Equity	0.001	1, 118	0.001	0.002	0.967	0.000
	Turnover Intention	1.546	1, 118	1.546	1.535	0.218	0.013
	<i>Perceived Value of Effort</i>	0.196	1, 118	0.196	0.990	0.322	0.008
Teaching Discrepancy	Workload Equity	11.364	13, 118	0.874	1.505	0.125	0.142
	Turnover Intention	10.301	13, 118	0.792	0.787	0.673	0.080
	<i>Perceived Value of Effort</i>	3.001	13, 118	0.231	1.168	0.312	0.114
Research Discrepancy	Workload Equity	13.347	15, 118	0.890	1.532	0.105	0.163
	Turnover Intention	13.543	15, 118	0.903	0.897	0.570	0.102
	<i>Perceived Value of Effort</i>	1.811	15, 118	0.121	0.611	0.861	0.072
Service Discrepancy	Workload Equity	6.596	13, 118	0.507	0.874	0.582	0.088
	Turnover Intention	18.283	13, 118	1.406	1.397	0.171	0.133
	<i>Perceived Value of Effort</i>	4.603	13, 118	0.354	1.790	0.052	0.165

Note. SS = Sum of Squares; MS = Mean Square. Partial η^2 values reflect the proportion of variance explained by each effect, controlling for other effects in the model.