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Chairs and Program Leaders: Voices from a Smaller Institution on the Roles and Responsibilities

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As higher education institutions respond to the disruption caused by the challenging post-pandemic environment, there is a need to cultivate strong leadership (Harvey-Smith, 2022). One such leadership position is the academic department chair or program director. Research indicates that this complex leadership position requires individuals to balance many competing demands, including managing various relationships and multiple operational and strategic projects (Freeman et al., 2020), with potentially limited support and preparation for the role (Armstrong & Woloshyn, 2017; Kruse, 2022). Faced with calls to reinvent higher education (Gigliotti, 2021; Harvey-Smith, 2022), this leadership role in today's small, private institution is particularly of interest given the unique issues facing such institutions, including enrollment challenges fueled by operating costs, tuition pricing, and the perception of value of a college degree (Kelderman & Gardner, 2019). As such, the purpose of this study is to examine the role of academic chairs and program leaders at a small private institution through an anonymous survey designed to assess the various responsibilities of the position along with related benefits, challenges, and opportunities. To aid in this examination, the following literature review addresses the current research on department chair responsibilities, the challenges faced by department chairs, and small, private institutions.

Department Chair Responsibilities

Department chairs are charged with a range of operational and strategic tasks. These include leadership responsibilities related to the department and institution, such as compliance reporting and committee work; instruction, such as course scheduling and assessment; faculty matters, including reviews, mentoring, and conflict management; and student issues, including advising and grievances. In addition, chairs must effectively communicate with stakeholders and prepare and manage the budget (Kruse, 2022). Chairs may also engage in external relationship development while maintaining their own teaching and scholarship (Gmelch, 2004) and may be responsible for new student recruitment (Weaver et al., 2019).

Researchers have attempted to explain this complex role. Berdrow (2010) developed a model of department chair responsibilities that categorized tasks as managerial or relating to transformational leadership. Managerial tasks included communication flow and program representation; faculty development, such as hiring, mentoring, and course assignments; student development, including advising and outreach; and operations and administration, such as budgeting, recruiting, and staff management. Transformational leadership oriented tasks were

related to innovation, such as through new curriculum development, and enhancing the department climate, noting that chairs ineffective at doing this could create an environment of distrust.

Through a grounded-theory study of 81 department chairs across the Big Ten research institutions, Gigliotti (2021) conceptualized chair responsibilities as task-centered, relationship-centered, or leadership-centered. Task-centered responsibilities included such items as course and academic planning; relationship-centered tasks included communication with senior administration, faculty, staff, and students as well as balancing personal and professional obligations; and leadership-centered tasks included managing morale, uncertainty, and budgetary issues, particularly due to the challenges in the post-pandemic environment. Similarly, Freeman et al. (2020) interviewed 15 department chairs from across research-focused institutions and categorized such responsibilities as “people work vs. paperwork” (p. 903). People work responsibilities related to those in support of faculty and students while paperwork referred to the procedural and policy-driven tasks.

Challenges of Department Chairs

Research indicates that department chairs experience a range of challenges, including those related to authority, training, communication, budgetary concerns, and self-care. Department chairs may be hired, elected, or appointed into their role, typically from a faculty position, and the structure of the position within the organization may contribute to a lack of authority despite the outcomes for which they are responsible. Kruse (2022) interviewed 45 department chairs representing various institution types to learn the challenges and tensions that department chairs experience in their role, regardless of context. Indeed, while chairs expressed that they were charged with important work related to functioning of the department, they had limited institutional authority or power to leverage with faculty to encourage performance toward departmental goals (Armstrong & Woloshyn, 2017; Kruse, 2022). This is complicated by the often-temporary role of chair held by a faculty person who must shift into an administrative mindset while maintaining their faculty identity among colleagues (Freeman et al., 2022; Gmelch, 2004; Kruse, 2022; Young, 2020). As such, chairs may find it difficult to assert a level of authority over their peers (Armstrong & Woloshyn, 2017). While Freeman et al. (2020) found that leveraging leadership skills rather than authority may be a more effective strategy to motivate others, not all chairs possessed these skills, and the higher education industry may not support such leadership talent in rising faculty (Gmelch, 2004). In fact, Berdrow (2010) contends that chairs are often selected for the role based on their willingness, rather than anticipated effectiveness.

This presents a need for training for the department chair role. Unfortunately, research indicates a lack of training is evident in the relatively brief role transition period (Berdrow, 2010). “Preparation for academic leadership roles is key, but woefully inadequate” (Gigliotti, 2021, p. 442). Incoming chairs need to have both foundational and leadership skills (Berdrow, 2010). In Weaver et al.’s (2019) study of 34 department chairs at a small, rural institution, 85% of respondents reported they did not receive leadership training prior to assuming the role of chair yet most would have attended one if available. Kruse (2022) found that chairing required the attainment and use of new skills, including conflict resolution among staff and faculty. Indeed, Weaver et al. (2019) found that most department chairs experienced conflict within their department while Young (2020) found that chairs also had to mediate external tensions between department faculty and administration. In

addition to needing such leadership strategy, department chairs may also lack the necessary preparation for the demands of managerial tasks, including budget preparation (Armstrong & Woloshyn, 2017; Freeman et al, 2020). Kruse (2022) called for institutions to establish more support structures, such as orientation and mentorship opportunities, to facilitate the development of these skill sets.

The chair or academic program leader is accountable for communication with multiple stakeholders. These academic leaders must “continually pivot to provide support for and address the needs of senior administrators, faculty and staff colleagues, and for some, graduate and undergraduate students within their departments” (Gigliotti, 2021, p. 437). This requires chairs to frequently modify their communication strategy, including messaging and modality, to meet the individualized needs of the audience (Gigliotti, 2021). Chairs must ensure the communication flow between faculty and administration (Young, 2020). Yet, chairs must adjust to having new access to confidential information that cannot always be shared transparently with all audiences (Armstrong & Woloshyn, 2017). This balance of communication is critical. Czech and Forward (2010) found higher job satisfaction among faculty members who reported supportive communication, defined as collaborative, clear, and inclusive, from their chair, but the researchers recognized this finding may not be representative of all audiences with whom chairs must communicate, which further underscores the need for varied communication strategies. Indeed, Gmelch (2004) described a need for collaborative style with faculty versus an authoritative style with administration.

Concerns regarding the budget range from planning to execution. Such financial stewardship is often a new-found responsibility assumed with the administrative role (Morris & Laipple, 2015). Chairs experienced stress related to the competition to secure resources for their departments and prevent budget cuts (Armstrong & Woloshyn, 2017). Gigliotti (2021) contends that, in the present higher education environment, chairs are asked to do more with less. Kruse (2022) found that chairs were often faced with limited budgets and the resulting challenge of determining where these limited resources should go among many competing priorities.

Given the challenges and stressors associated with this role, self-care has also been a documented challenge. In Kruse’s (2022) study of 45 department chairs from across institution types, a majority of participants reported balancing their needs with those of the position was an ongoing issue. Similarly, in Freeman et al.’s (2020) phenomenological study, a common theme among department chairs was work-life balance and managing personal responsibilities at home. Armstrong and Woloshyn (2017) found that faculty transitioning into the department chair role experienced negative outcomes related to their well-being, including “extended workdays and feelings of fatigue, uncertainty, and pervasive anxiety” (p. 102). In a study of academic administrators, about half of participants reported their administrative work interfered with family commitments, physical fitness, and sleep (Morris & Laipple, 2015). The demands of academic leadership can result in such stress and personal sacrifice (Gmelch, 2004).

Small Private Institutions

While research has been conducted on the role of the department chair at larger institutions as discussed above, few studies have specifically examined such views from those chairs working within the setting of a small, private, non-profit institution. Presently, these types of institutions are

facing unique pressures. In the post-pandemic era, the higher education environment is unstable: institutions across the industry are faced with challenges, including rising costs, technology needs, the enrollment shift, and questions about the value of a college degree (Harvey-Smith, 2022). The resulting financial issues are exacerbated at small, private institutions that are less selective and tuition dependent. The demographic cliff expected to bring a decline in the number of traditional-age college students after 2025 and an increase in the number of non-white high school graduates may hit private, non-profit institutions hard, particularly those in regions that are most likely to see these shifts, such as the Northeast and the Midwest (Kelderman & Gardner, 2019).

As the pool of college-aged students is shrinking, they are increasingly more price-sensitive, which may lead to higher tuition discounts that have been on the rise since 2008 (Kelderman & Gardner, 2019). The National Association of College and University Business Officers reported that tuition discounts were at a record high in the 2022-2023 school year, with an average tuition discount rate for first year students of 56.2 percent across 341 private institutions surveyed. While these tuition discounts are focused on making private institutions more affordable and competitive, they also mean that institutions may collect less tuition revenue (Moody, 2023). Overall, increasing competition, operating costs, and tuition prices have created unstable conditions and institutional closures and mergers among private, non-profit institutions are making headlines (Kelderman & Gardner, 2019).

Higher education leaders are called upon to respond to these challenges to ensure institutional viability (Harvey-Smith, 2022). Colleges and universities are having important conversations, evaluating their markets and program offerings (Kelderman & Gardner, 2019), and as academic leaders, department chairs and program leaders are integral to this work of reinventing higher education, which adds to their already overloaded and complex work environment (Gigliotti, 2021). As such, exploring the role in this context lends to a fuller picture of the dynamics facing academic leaders serving in smaller institutions. The purpose of this study is to examine the role of the academic chair or program leader at a small private institution. Specifically, the proposed survey research intended to answer the following questions: How do academic program leaders balance their responsibilities related to faculty, academics, students, and administration? What are the most rewarding aspects, opportunities, and challenges of this academic leadership role?

Methods

Data were collected in May 2023 through the use of an anonymous electronic survey distributed to the professional email addresses of those identified as having served in a department chair or program director role within the last four years at a small, private, non-profit university in Southeastern Pennsylvania, where small is defined by Carnegie classification. Throughout this study, the terms “department chair” and “program director” and “academic/program/faculty leader” are used interchangeably. A total of 38 leaders were emailed the research study invitation and survey link with one reminder follow up, and 21 consented to participate in the study, resulting in a 55% response rate.

The survey administered to department chairs and program leaders contained questions both of a quantitative and qualitative design. Likert scale survey items were based on the institution’s stated responsibilities of department chairs as listed in the University’s policy manual, including tasks related to the faculty, academics, students, and university administration. Faculty related tasks

included items such as faculty recruitment, orientation, evaluation, and communication as well as staffing of courses and roster management. Responsibilities in service to academics included tasks related to curriculum and program development while responsibilities in service to students included advising, writing letters of recommendations, communication, and grievances. Lastly, university administration responsibilities included tasks related to reporting, planning, committee work, and assessment. Additional open-ended questions asked academic program leaders to reflect on the challenges and rewards of the role.

Quantitative data were analyzed using descriptive statistics to indicate the trends of time distribution related to the academic leader responsibilities. To understand the qualitative data, thematic analysis was employed with a balance of inductive and deductive coding, an approach to support qualitative rigor (Fereday & Muir-Cochrane, 2006). Data were first categorized through inductive coding methods to create emerging themes and then by deductive coding using Gigliotti's (2021) model of task-centered, relationship-centered, or leadership-centered responsibilities. Intercoder agreement ensures that data are coded the same way by two or more coders (Creswell & Creswell, 2018). Such cross-checking was employed by members of the research team to support qualitative reliability.

Results

The present study was designed to answer two research questions:

1. How do academic program leaders balance their responsibilities related to faculty, academics, students, and administration?
2. What are the most rewarding aspects, opportunities, and challenges of this academic leadership role?

The following section responds to the research questions through a presentation of the data organized under the areas of balancing time and rewards and challenges of faculty leadership.

Balancing Time Across Areas of Service

Department chairs and program directors were asked to rank the areas of service (academics, administration, faculty, and students) in which they spent the most amount of time. The first ranking clearly indicated that service to students was where they spent the majority of their time (71.43%), followed by service to administration (19.05%), service for academics (9.52%), and service to faculty (0%). Table 1 demonstrates the full response rankings.

Respondents were also asked to describe the time spent within each category of service using a 4 point scale, 1 (none of my time), 2 (very little of my time), 3 (moderate amount of time), and 4 (most of my time). In regard to service to students, the area in which they reported spending the most time overall, department chairs reported that they spend the most time responding to emails (3.43 out of 4) and advising students for successful completion of curriculum (3.29 out of 4). The least amount of their time was spent making provisions for students in need of special help (2.19 out of 4) and negotiating grade challenges (1.62 out of 4).

Table 1

How would you rank the time you spend in each of the areas listed below.

	1st Ranking	2nd Ranking	3rd Ranking	4th Ranking
Service to academics	9.52%	47.62%	33.33%	9.52%
Service to administration	19.05%	14.29%	14.29%	52.38%
Service to students	71.43%	9.52%	14.29%	4.76%
Service to faculty	0.00%	28.57%	38.10%	33.33%

When asked about their time spent supporting faculty within their department, the chairs/program directors indicated that preparing course offerings (3.10 out of 4) and creating a positive work environment (3.00 out of 4) is where they spent their most time. Encouraging and advising faculty to further their performance/professional growth (2.29 out of 4) and evaluating and documenting faculty performance (2.24 out of 4) is where they spent the least amount of time.

As department chair and program directors reflected on time spent in the realm of support to academics, they indicated that the most time was in the area of charting the future direction of department/division (3.00 out of 4) followed by initiating curriculum change (2.81 out of 4), initiating curriculum innovation (2.76 out of 4), leading new program development (2.76 out of 4), developing online offerings (2.57 out of 4), engaging in cross-disciplinary learning experiences (2.57 out of 4) and designing learning spaces (2.18 out of 4).

When asked to consider how their role supports and provides service to the university administration, completing paperwork (3.00 out of 4), collaborating with department/division members (2.76 out of 4) and contributing to recruitment/enrollment efforts (2.71 out of 4) were identified as the areas in which they spent the most time. The areas in which they spent the least amount of time were working as a consultant for offering and staffing of workshops (1.52 out of 4), working on grant development (1.52 out of 4), and administering the budget (1.57 out of 4).

Lastly, department chairs and program directors were asked about their role as an academic leader on a four-point scale, one being strongly disagree and four being strongly agree. Most agreed that they enjoy their role as an academic leader (3.14 out of 4) and confirmed that they seek out professional development to strengthen their ability to serve in their role (3.05 out of 4). Respondents reported less agreement to being called upon to provide input on institution-wide challenging issues (2.59 out of 4) and being called upon at the institutional level to dialogue about the future of the University (2.36 out of 4).

Rewards and Challenges of Faculty Leadership

In a series of open-ended questions, faculty leaders were asked to identify the most rewarding and challenging aspects of their academic leadership roles as well as share strategies for addressing troublesome tasks and providing examples of strategies used to effectively balance responsibilities for the role. The final question asked them to offer suggestions on how to support the faculty leader position. Across the responses, researchers identified several key themes running across issues of the relationship-, task-, and leadership-centered components of the department chair/program director roles.

Gigliotti (2021) conceptualized chair responsibilities as relationship-centered, task-centered, or leadership-centered. Using this conceptual framework as an organizing principle, the researchers viewed the qualitative responses to the survey administered to chairs and program leaders. The following themes emerged.

Relationship-Centered

Gigliotti (2021) categorizes those tasks and responsibilities which involve communication and the examination of life balance as being relationship-centered. The chairs and program leaders saw their efforts associated with relationships within three subcategories: those dealing with students, colleagues, and administration.

Communication

Students. The academic leaders mentioned supporting students as being the most rewarding part of their academic leadership role. Tasks were varied ranging from advising to supporting goal achievement. Comments in the area of advising or mentoring included working with students, collaborating, helping individuals achieve their goals, seeing students mature over time, and helping students succeed. One faculty member commented: "I like being able to dialogue with faculty and tweak the program to be most effective for students." Another commented about "seeing students succeed and grow over their four years." By contrast, one of the most difficult aspects of the role involves having conversations with students "when they cannot academically handle the work."

Commenting on their use of time, academic leaders noted repeatedly that students and their needs are the priority. One respondent stated: "I start with the tasks where the students are a priority, and then I look into other matters."

Colleagues. In the area of collaborating with colleagues, academic leaders mentioned their deep desire for communicating and collaborating interdepartmentally, engaging in collegial dialogue, and working productively with colleagues within the academic unit. One survey respondent stated that one of the most rewarding parts of the role was the opportunity for "interaction with members of other departments" and another gave the suggestion that more encouragement could be given for interdisciplinary work. While opportunities for collegial visioning represents one aspect of communication, the lack of communication between departments was noted as a challenge to academic leadership. Noting the smallness of the size of an academic unit, one leader indicated: "we are smaller, however, our daily dialogue with each other helps a lot; I feel supported."

Table 2*Gigliotti's Framework/Categories Aligned with Survey Themes*

Gigliotti's Framework	Gigliotti's Categories	Themes in the Survey Data
Relationship-Centered	Communication	<p>Students</p> <ul style="list-style-type: none"> • Supporting students • Having difficult conversations with students <p>Colleagues</p> <ul style="list-style-type: none"> • Communicating and collaborating interdepartmentally • Engaging in collegial dialogue • Working with colleagues within the academic unit <p>Administration</p> <ul style="list-style-type: none"> • Gaining professional development, training, and support • Allowing for greater freedom • Ensuring Deans support • Negotiating
	Balancing both the personal and professional	<ul style="list-style-type: none"> • Engaging in collegial relationships • Planning, prioritizing, and remaining on task • Seeking more time to do the work
Task-Centered	Resource management	<ul style="list-style-type: none"> • Balancing time, resources, responsibilities • Providing qualified faculty staffing • Participating in tasks such as recruitment • Finding resources and using these creatively • Completing administrative tasks
	Course/academic Planning	<ul style="list-style-type: none"> • Designing programs and courses • Scheduling
Leadership-Centered	Managing morale	<ul style="list-style-type: none"> • Getting faculty support within the academic unit • Providing support
	Uncertainty	<ul style="list-style-type: none"> • Creating a vision for the academic unit • Deciphering the vision at the institutional level • Dealing with identity issues
	Budgetary Issues	<ul style="list-style-type: none"> • Participating in enrollment processes and internalizing their budgetary impact

Cooperation and mutual dialogue were mentioned repeatedly; however, respondents also mentioned the troublesome task of getting some of one's own colleagues to "understand and support" the programs within a department. In order to accomplish all the tasks associated with a chair/program leader's role, a respondent stressed accomplishing this by "prioritizing and delegating tasks to individuals in the department ... capable of producing quality work and [who] have the knowledge to assist with the task."

Administration. Working with the administration fell into categories relating to professional development, mutual support, freedom to act, the significance of the Dean's support, and negotiating skills. While academic leaders stressed their limited time mentioning "work day and night," they still indicated that professional development, opportunities for exchange of ideas, and mutual support were areas of benefit. One leader suggested a department chair support group indicating that "having opportunity to talk about what is going on in each department and how we could support each other with initiatives or discuss ways to collaborate" would contribute to the functioning of chairs or program leaders. Training before the role begins and not feeling forced to serve in the capacity were proposed by some respondents. The chairs suggested that feeling greater freedom, avoidance of micromanagement, better communication, understanding decisions made by the administration, and having additional support personnel to perform some administrative tasks would all be beneficial.

Balancing Both Personal and Professional Life

One chair commented that there is no way to achieve balance with the role given there are responsibilities that are academic (for many as a faculty member) and administrative (for many with a long list of tasks, deadlines, and projects). Individuals commented on ways they sought to achieve some measure of control sharing items such as the carefully planned agenda with hours for teaching, advising, developing classes, working with students and faculty; establishing certain times for certain tasks; striving to find and use support personnel resources when possible and available; being flexible; establishing a department culture of teamwork among the faculty; and keeping lists. They again mention the value of collegial relationships and mutual support. But the academic leaders share the reality of the limitations of time to manage competing priorities.

Task-Centered

Course/Academic Planning

Programmatic development and design was identified as a reward by approximately a quarter of the chair/program directors' responses. Comments such as "helping to define a program," "the capacity to foster evolution of academic programming," and being able to work collaboratively with faculty to "tweak" a program to ensure it was "most effective for students" highlight the components of this area that chairs/program directors saw as a positive component of their roles.

Resource Management

Most tasks, however, arose as challenges in the survey results, with the most common themes falling into two, related areas: balancing time, resources, and responsibilities and finding resources.

Respondents cited challenges such as “Finding time to do everything,” “not having adequate resources or time,” and “inadequate resources” to support what they need to accomplish. Related tasks included seeking instructors (adjunct) to fill rosters while maintaining program quality as well as scheduling courses and adjusting schedules when courses are under enrolled. Tasks related to student recruitment were also indicated, with respondents sharing concerns about “having to work on recruitment and help with marketing ideas” and doing so without an “adequate strategy or support from Admissions.”

Taken together, the tasks associated with the chair/program director roles - while allowing for opportunity to direct program development - involve several difficult components. Aside from the time limitations clearly stated across many responses, the other elements identified suggest a level of frustration with the limitation of the role, particularly when it comes to resources (fiscal and human) and the added pressure of enrollment/recruitment challenges.

While the challenges remain, respondents did offer strategies and suggestions for managing such tasks, such as “use of support personnel” and other time-management strategies such as keeping a current calendar and differentiating types of tasks. Respondents also suggest the need for greater support for chairs/program directors’ administrative tasks and responsibilities, such as by “providing more time to accomplish administrative tasks...by providing more advanced notice of due dates.”

Leadership-Centered

While involving some themes that closely align with the relationship-centered responses, the Leadership area yielded the fewest thematic categories in coding. Unsurprisingly, in light of the task-related concerns, chairs/program directors identified limited resources/supports, citing fiscal concerns with one responding they “used personal funds;” concerns surrounding enrollment, such as “improving enrollment and retention - collaborate with Admissions;” and limitations to institutional support, as in, “lack of backup support for my program.”

Balancing leadership within the middle-management sector of faculty leadership yields both benefits and challenges. Respondents found the visionary element of the faculty leadership role rewarding as it provides opportunity for “creating a practical plan for growth of the department” and engaging in “change and innovation.” Yet there was a persistent tone of uncertainty across the leadership elements of the role, countering the vision of the department with the “limitations of [the] role” and the need for a better “...shared understanding of institutional identity and a clearly articulated institutional vision for the future.”

Discussion

The present study affirms prior research indicating that the department chair role is complex with competing demands and responsibilities. Academic leaders reported service in the areas of students, faculty, academics, and administration that was both operational and strategic. At this small, private institution, academic program leaders are spending most of their time in service to students, an area that they also find most rewarding. This may be reflective of the small college environment itself, where faculty meet with incoming and prospective students, teach many of the

same students in multiple classes, and thus know and build relationships with their students (Buzza, 1985).

While the sample in this study reported enjoying their role as an academic leader, the role is not void of challenges. Given their emphasis on students, it is not surprising that a challenge of the role is to have difficult conversations with students, such as when they cannot succeed academically. While the prior research certainly supports communication as a challenge, this emphasis on communication with students may again be unique to the small college environment. Other challenges included limited resources as well as limited time to get tasks done. This sense of frustration may reflect past studies that found self-care and stress related to the role were challenges (Armstrong & Woloshy, 2017; Freeman et al., 2020; Gmelch, 2004; Kruse, 2022; Morris & Laipple, 2015), but that was not as prevalent in this sample. Surprisingly, authority and budgetary issues were not found to be explicit issues in the present study.

Aligned with today's small, private, non-profit environment, another challenge that emerged was the responsibility for enrollment, which also indicates a concern for enrollment. Indeed, Weaver et al. (2019) found such an association: the more concerned chairs were about enrollment, the more responsible they felt for it.

These findings also align with prior research that training is a challenge (Berdrow, 2010; Gigliotti, 2021). While preparation for the role is lacking, department chairs appear to seek out opportunities on their own to develop professionally for the position. However, more training prior to taking on the role was suggested. Similarly, Berdrow (2010) recommended a one-year transition period during which incoming chairs shadow the incumbent to allow necessary learning and socialization into the role. Also consistent with Berdrow (2010) and Gigliotti (2021), academic leaders at this small, private institution are concerned with creating a positive work environment in the department.

Given the state of higher education and the calls for reinvention, it is encouraging that this sample of department chairs reported spending most of their time in service to academics by charting the future direction of the department or division followed by initiating curriculum change and curriculum innovation. These findings reflect Gigliotti's (2021) study in which department chairs described "opportunities for innovation, creativity, and growth" in response to the challenges facing higher education (Gigliotti, 2021, p. 439), including ideas for interdisciplinary work and sharing of ideas. Serving in the role of chair provides opportunity to create new meaningful and fulfilling relationships (Armstrong & Woloshyn, 2017). Indeed, these findings indicate chairs find it rewarding to interact with their colleagues in this way. Further encouragement by administration may facilitate such positive collaboration.

However, while these academic leaders were engaged in the future of their department, there may be additional opportunity at smaller institutions to engage these individuals in discussions regarding the future direction of the university itself. As also recommended by Armstrong and Woloshyn (2017), institutions should examine and cultivate the leadership potential of the department chair in contributing to the viability of the institution.

Conclusions

Academic leaders at this smaller institution suggest that they participate in an expansive array of responsibilities. Aligning research literature with the data collected in this study suggests that tasks associated with the role remain fairly consistent across institutional size. However, the academic leaders see their role in service to the students as a primary responsibility and a priority. They clearly articulate the large amount of time they dedicate, seeming to depend upon support from their Deans and colleagues as a significant factor in the accomplishment of their responsibilities. Since this study was limited to the results from one small institutions, future research might examine the structure of positions and how the responsibilities for teaching and administration of the academic unit impact these results. More research into the unique circumstances and pressures of academic leaders at smaller institutions would seem warranted to delve more deeply into the demands and priorities emanating from the current study and to what degree institutional size contributes to the benefits and pressures of serving in this role.

References

- Armstrong, D.E., & Woloshyn, V.E. (2017). Exploring tensions and ambiguities of university department chairs. *Canadian Journal of Higher Education, 47*(1), 97-113.
- Berdrow, I. (2010). King among kings: Understanding the role and responsibilities of the department chair in higher education. *Educational Management Administration & Leadership, 38*(4), 499-514. DOI: 10.1177/1741143210368146.
- Buzza, B.W. (1985). The small college environment. *Association for Communication Administration Bulletin, 54* (October), 8-10.
- Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). Sage Publications, Inc.
- Czech, K., & Forward, G.L. (2010). Leader communication: Faculty perceptions of the department chair. *Communication Quarterly, 58*(4), 431-457.
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods, 5*(1), 80–92. <https://doi.org/10.1177/160940690600500107>
- Freeman Jr., S., Karkouti, I.M., & Ward, K. (2020). Thriving in the midst of liminality: perspectives from department chairs in the USA. *Higher Education, 80*, 895-911. <https://doi.org/10.1007/s10734-020-00521-6>
- Gmelch, W.H. (2004). The department chair's balancing acts. *New Directions for Higher Education, 126*, 69-84.
- Gigliotti, R.A. (2021). The impact of COVID-19 on academic department chairs: Heightened complexity, accentuated liminality, and competing perceptions of reinvention. *Innovative Higher Education, 46*, 429-444.
- Harvey-Smith, A.B. (2022). *Higher education on the brink. Reimagining strategic enrollment management in colleges and universities*. Rowman and Littlefield.
- Kelderman, E., & Gardner, L. (2019). The looming enrollment crisis. How colleges are responding to shifting demographics and new student needs. *The Chronicle of Higher Education*.
- Kruse, S.D. (2022). Department chair leadership: Exploring the role's demands and tensions. *Educational Management Administration and Leadership, 50*(5), 739-757. <https://doi.org/10.1177/1741143220953601>

- Moody, J. (2023 April 25). Tuition discount rates hit new high. *Inside Higher Ed*. Retrieved from insidehighered.com/news.
- Morris, T.L., & Laipple, J.S. (2015). How prepared are academic administrators? Leadership and job satisfaction within the US research universities. *Journal of Higher Education Policy and Management, 37*(2). <https://doi.org/10.1080/1360080X.2015.1019125>.
- Weaver, L.D., Ely, K., Dickson, L., & DellAntonio, J. (2019). The changing role of the department chair in the shifting landscape of higher education. *International Journal of Higher Education, 8*(4), 175-188.
- Young, M. (2020). Speaker of the house: The intersection of faculty and administrator roles among community college faculty department chairs. *Educational Administration: Theses, Dissertations, and Student Research, 312*. Retrieved from <https://digitalcommons.unl.edu/cehsedaddiss/312>.

The Department Chair: A Hybrid Model of an Essential and Fulfilling Role

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It was a highly anticipated first day. The new department chair arrived, dutifully arranged the desk, and unpacked some of the boxes stacked against the wall. Visions of crucial strategic academic decisions affecting numerous faculty and hundreds of students danced in their mind. Soon, the highly anticipated knock came. It was the director of the preschool that was part of the department's academic program as well as a service to the university and community. The new chair wondered excitedly what executive decision would become the first. A transformative tweak to the curriculum? A major research endeavor? The reality—a request to approve the resurfacing of the tricycle path.

This true and personal story of a first day, first decision as a department chair highlights the broad range of decisions chairs face. While not a typical request in itself, it represents the challenges chairs deal with ranging from the strategic to the mundane. However, if you look beyond the obvious, these decisions can offer opportunities to learn more about the community needs, to build connections with faculty and staff, to listen to students, and to be immersed in the myriad of factors that create the challenges and joys of being a department chair.

Our paper explores the role of department chair from several perspectives, but ones that might differ from typical examinations of the position. In doing so, we hope to provide a unique insight through various lenses of the chair's role and what new possibilities might be available both functionally and attitudinally. We highlight the unique overlap of faculty and administrative aspects of the position, an overlap that does not occur as clearly in any other academic position. We consider the various kinds of knowledge chairs gain about both faculty and administration, and how such knowledge can be effectively utilized to improve the educational enterprise. We also consider how and why chairs should be central partners for senior and executive leaders in the institution across all divisions, not simply in academic affairs.

Like many commentators, we agree that department chair is “probably the most important, least appreciated, and toughest administrative position in higher education” (Buller, 2012, p. 3). The COVID-19 pandemic intensified the complexity of challenges, need for flexibility, and increased decision-making speed (Chu, 2020; Gigliotti, 2021). Although there is little doubt that the pandemic experiences made the job tougher in general, we will argue that these experiences should serve as windows on improvements and sources of information regarding innovations that work.

First, though, we need to clarify some points. Historically, individuals who lead academic departments or areas have been given two primary labels: chairs and heads. The differences are

largely in the type of appointment, not in terms of duties. For example, at CalPoly (2020), chairs are appointed for renewable three-year terms whereas heads are appointed indefinitely. However, the actual duties and responsibilities are the same. Consequently, we will use *chair* to label the individual who leads an academic department as the focus is on what those individuals do.

Second, despite their centrality to much of the operation of a college or university, department chairs are rarely named specifically in accreditation or regulatory documents. Rather, any references to institutional academic governance and leadership only explicitly mentions the chief executive officer and the administration in general. Thus, external forces essentially do not require institutions to have department chairs. That decision is based solely on internal institutional structural and departmental cultural needs.

Third, much has been written regarding the specific job responsibilities and duties of department chairs (e.g., Buller, 2012; Gmelch & Miskin, 2004; Hecht et al., 1999; Kruse, 2022; Lees, 2006; Schmidt & Tucker, 1983). Even though the complexity of the role has increased over time, the general list and substance of the duties and responsibilities has not fundamentally changed in decades, so we will not consider them in detail. Rather, we will view the role as one that presents a set of unmatched opportunities to participate and lead within most of the major contexts comprising colleges and universities.

The remainder of our paper begins with a description of the two general skill sets department chairs must blend into a hybrid, one with which they are usually well acquainted and the other likely to be new and unfamiliar. From there we consider how the hybrid model provides benefits to the department and institution, and to the individual. Next, we consider how the COVID-19 pandemic did and did not affect the core aspects of the department chair position. Finally, we offer suggestions on how the hybrid model could inform onboarding and professional development programs for department chairs.

It's Actually Both-And: The Hybrid Model of the Department Chair

In order to understand better how the position of department chair is structured, we need initially to step back and adopt a wide-angle perspective of the way colleges and universities organize their core mission-driven educational operations. Taking this macro view, the academic division within colleges and universities is populated mainly by faculty and administrative staff (including deans, provosts, and presidents). How any individual's work effort is defined differs depending upon which of these macro groups one is in.

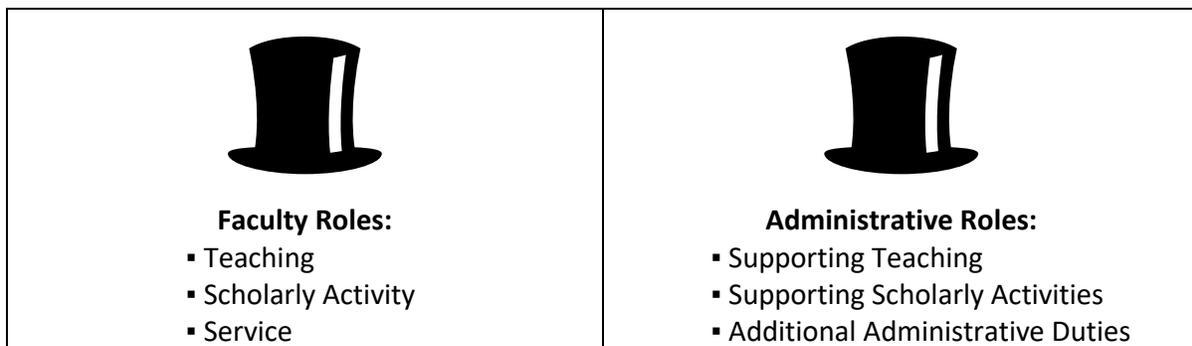
The faculty workload traditionally consists of teaching, scholarly activity, and service. Deviations from whatever the standard distribution of effort across these three arenas is occur only when one is given release time, usually from teaching, in order to fulfill obligations for an externally funded grant or for a special project in the institution (e.g., leading an accreditation self-study, special purpose assignment, certain shared governance activities). At most institutions, faculty are under contract or appointment for the academic year and not the full calendar year.

In contrast, administrative staff are essentially devoted to work other than actual teaching, and their contracts or appointments are typically for the entire year. In most cases, this work directly

supports the teaching and scholarly activity missions (e.g., academic tutoring and advising, IT support, enrollment and registrar operations, academic budgeting and finance, scholarly activity support). Although some senior academic administrators (deans, provosts, presidents) may teach occasionally, and even more rarely engage in significant scholarly activity, their contract usually does not require them to do so, and they are rarely evaluated on the basis of those endeavors.

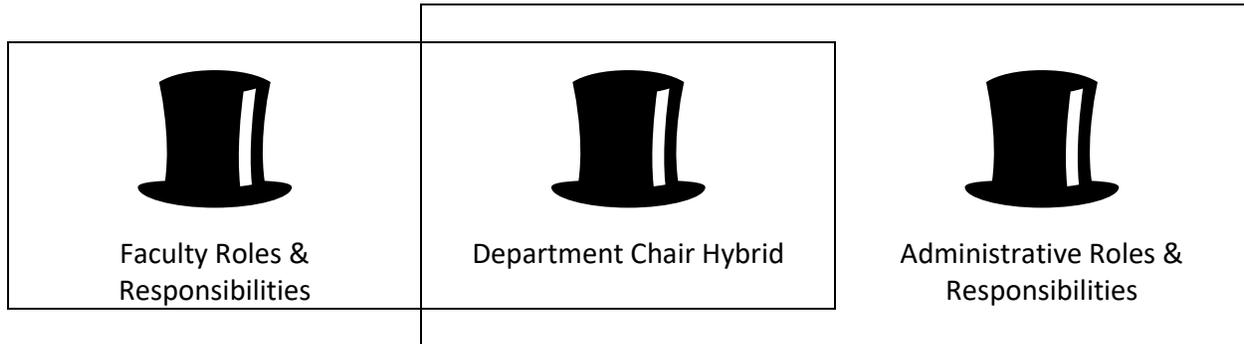
Graphically, these two clusters of work can be depicted as nonoverlapping sets in a Venn diagram (Figure 1). For the most part, individuals working within these two sets lead parallel lives, and smooth operations within the academic affairs division depends crucially on their ability both to collaborate but also to respect each other’s domains.

Figure 1. Separate Domains of Faculty and Administrative Roles



Now consider the department chair. Academic department chairs, because they nearly always step into the role from the faculty, are coming with years of experiencing a typical faculty workload. Although they may have collaborated closely with some academic administrative staff (e.g., in a center or institute, the library, the sponsored programs office), their background has emphasized collaboration and not a need to learn the ins and outs of administrative tasks. Now, though, they are presented with a different kind of workload agreement. Most commonly, part of the workload agreement is quite familiar—a reduced version of the faculty workload; for instance, a department chair may teach half as many courses as a regular faculty member, as well as have reduced expectations for scholarly productivity. The other part of the agreement, however, is radically different. For the first time, the workload includes significant (say, 50%) effort devoted to administrative work *for which they will be held accountable*. Essentially, the most common department chair’s workload agreement is a hybrid, or blend, of the traditional faculty workload and the typical administrative staff workload. This is represented graphically in Figure 2.

Figure 2. Hybrid Model of Department Chairs



Consider what Figure 2 means. As the graphic depicts, essentially the department chair is a hybrid position combining aspects of both faculty and (institutional) administrative roles and responsibilities. Arguably, this makes it unique among academic positions. It also makes it one of, if not *the*, most challenging positions in the institution. The reasons are directly related to the hybrid nature of the job.

Let's break it down. Although there are two major components to the position (faculty work and administrative work), the learning curve is driven by the administrative side. More specifically, although faculty with large research operations may have administrative responsibilities for budgets, personnel, and so forth, those responsibilities usually do not map directly onto administrative responsibilities for the institution itself (e.g., direct instructional budgets, department-related capital functions (e.g., base office allocation), faculty performance reviews that accrue toward tenure and promotion, implementation of institutional/college/division strategic plans). In contrast, the faculty work is familiar; the learning is mainly getting used to doing *less* of it.

What implications does this hybrid have in practice? Essentially, the department chair is a gateway between faculty and administration, a point made by many commentators (e.g., Buller, 2012; Hecht et al., 1999; Kruse, 2022). The gateway concept reminds us of the similar functions played by the Roman god Janus (Depicted in Figure 3), whom Cicero, in 45 BCE in his *De natura deorum* (trans. Rackham, 1933), described as the god who oversaw transitions, beginnings, and movement, and was often depicted on gates.

The Janus analogy provides a stark reminder that being a department chair demands behaving in two very different, often incompatible ways. The hybrid model doesn't guarantee that all things are positive; there are aspects that feel very personal. One moment, the chair is behaving like a typical faculty member; the next, they are behaving like an administrator. Faculty sometimes need to confront administrators in ways that are uncomfortable, such as directly questioning the motivation for certain decisions. Administrators sometime need to confront faculty in ways that are

Figure 3. Janus



uncomfortable, such as when the integrity or the good of the institution requires a different action than the one(s) being advocated by faculty. The result for department chairs can be role confusion—the heart tugs for an action consonant with the faculty perspective, while the head tugs for an action consonant with the administrative perspective. The proof of the difficulty in this hybrid is the first (of many) times a faculty member looks at their chair and says, “I thought you were my friend.” Worse are those comments by faculty about the chair having “gone over to the dark side.” We will return to this reality later when we discuss the personal discernment aspects of the department chair role.

There are other facets to chairing the department, though. This hybrid set of skills provides department chairs with a perspective on the institution unlike that in any other role. In this way, the department chair position offers a unique set of opportunities for both the incumbent, as well as those at other levels in the institution’s organizational structure. Let’s consider how each respective collection of roles and responsibilities is potentially shaped and influenced by the other, which can create a most effective hybrid blending of skills.

In general, most faculty are the product of advanced disciplinary-focused education, most frequently at the terminal degree level. That education generally does not include a deep background on the structural workings of a college or university. Rather, emphasis is rightly focused on inculcating the skills needed to provide the best educational experiences possible for students. When one wears that hat reflecting their faculty upbringing, the skills most valued include systematic inquiry, curiosity, learning, healthy skepticism, and deeper understanding. When applied to decision making and related processes, the emphasis is on deliberation, reflection, analysis, participation, and consensus. These emotional-motivational-cognitive processes and skills, and their translation into process, continue to be honed as faculty mature in their roles, and lie at the heart of the perspectives they bring to other situations.

On the administrative side, especially for senior leaders, among the most valued skills represented by this hat are quick information uptake and analysis, team collaboration, support for subordinates, fairness, transparency, ability to shift topics quickly, and effective advocacy. Played out in

processes, these are reflected in rapid (and accurate) decision making, problem solutions, efficiency, and defining and focusing on the goal. Administrators also continue to hone these skills and processes as they mature in their roles.

When a newly appointed department chair steps into that position on the first day, their comfort zone is more likely to be in the faculty realm. This matters. Even when the new department chair has received some level of onboarding preparation in institutional budgeting, finance, operations, and the like, the faculty hat tends to override, at least initially. The reality shock that often occurs is most often the result of the new experience of the never-ending to-do list of administrative matters, and the pressures to engage those related skills and processes that, at this point, are much less familiar and developed.

Ideally, first-time department chairs quickly realize that the time-independent deliberative approach valued in the faculty role is often ill-suited to the kinds of issues and timelines that present themselves for action. Ideally, that realization results in steps to become more knowledgeable, skilled, and comfortable wearing the administrative hat. The hoped-for outcome—the hybridization of faculty and administrative skills—can then proceed.

Acting Within a Hybrid Approach

The department chair has been referred to derogatorily as a position that is “neither fish nor fowl” (Smith, 1972). We disagree. Our dynamic hybrid model would claim that the position is *both* fish *and* fowl, inextricably intertwined, and that it is essential to understand the department chair is, truly, a hybrid. As we will develop in this section, it is precisely the creation of a hybrid of the faculty and the administrative hats that results in the most successful model of department chairs. It is also what makes the department chair role unique, and also results in the unpleasant aspects we raised earlier.

What does success within this hybrid model look like? Consider these examples:

- A chair who learns new issues underlying challenges and problems quickly, yet still screens them through critical analytic filters and identifies those solutions that are maximally creative and likely to be successful.
- A chair who brings healthy skepticism to new proposals and applies it as a way to identify pathways to implementation (not reasons for rejection).
- A chair who takes a macro view of issues, including financial ones, thereby maximizing the ability to identify ways to ensure fairness and collaboration.
- A chair who adopts a participative consensus group process to ensure transparency while setting realistic timeframes for decisions.
- A chair who uses data-driven decision making as their default approach and considers opportunities for advocating for departmental resources and initiatives as teachable moments.

- A chair who comes to understand that the “I thought you were my friend” and related comments that felt deeply personal at one point are not actually aimed at the person (usually), but rather at the title (“chair”). Another way to look at this is “It’s professional, not personal.”

In our view, the hybrid approach points out how the more familiar and likely better honed skills represented by the faculty hat are neither lost nor compromised. Rather, they are used to bring a different tenor to the traditional administrative (managerial) skills and processes. In turn, the administrative skills and processes bring a modified sense of urgency and need for closure that the faculty skills and processes raise to a more effective level, as well as new sources of data and “students.” The combination, or hybridization, jointly creates a hoped-for result of qualitatively better, more thoughtful, more efficient, and more effective decisions.

More specifically, we are arguing that a better conceptualization of the department chair position is one in which a faculty member brings a set of well-honed skills to a situation in which those skills are applied in familiar ways to new content and in a new context. In practice, what does this mean?

Consider a faculty member who has been an active researcher. The same skills they used to design a research study (i.e., creating good research questions/hypotheses, systematically analyzing data, seeking patterns in the results) are directly applicable across a wide variety of administrative issues that land on the chair’s desk (i.e., staffing needs, enrollment projections, curricular proposals). It’s not that an entirely new set of skills needs to be learned; rather, well-developed skills are applied to a new type of situation and data/evidence.

Likewise, skills that have been developed and are successful in the instructional setting with students in courses can be applied to any administrative situation that involves the transmission of information. Instead of “students” being individuals in a course, “students” are the people one is advocating to on behalf of the department. Again, skills developed as part of becoming expert within the role of faculty can be adapted to be used with new audiences.

The implication is clear—as the hybrid model emphasizes, none of the faculty skills are set aside to be replaced by administrative skills. Rather, it is a both-and situation, one in which skills from both roles are adapted and applied to new situations. The successful department chair, then, is one who is simultaneously working within both the faculty and the administrative domains. We also note that the mindset is reinforced tangibly within the workload agreement providing that the chair has assignments in both the faculty role (teaching and scholarly activity) and administrative roles for which they are held accountable.

Additionally, being able to detach from seemingly personal criticism and commentary to understand that those remarks would be said about *whoever occupied the position of chair* and not just at you is essential. Making difficult decisions is not for the faint of heart. No one relishes providing negative feedback to people on performance reviews or denying requests for initiatives. The hybrid model reminds us that the chair can place themselves in the position of the faculty member receiving the feedback or the denial, and understand how that individual may feel, perhaps because they received similar decisions at some point in their own career. The hybrid model actually provides a base for compassion and empathy if the chair realizes and takes advantage of it.

Applying the Hybrid Model: Benefits for the Department and the Institution

One additional important implication of our dynamic hybrid approach is that it promotes a reanalysis of ways in which department chairs should be viewed by senior and executive leaders in the institution. Flowing from our model is a view that chairs are much more than the academic analog of first level supervisors—they are the most crucially important interface between faculty and administration. Because only the department chair at most institutions is required to be and is evaluated as *both* faculty and administrator, they alone can provide real-time evidence regarding how best to achieve synchrony between the two groups. They are in the best position to play both roles, especially in discussions with senior and executive leaders when insightful initial feedback for proposals is most needed before those proposals are proffered for wider commentary within each respective, separate group.

Two other facts are key. First, chairs are in more regular contact with faculty than are most other senior and executive leaders. Second, chairs are in more regular contact with senior and executive leaders than are most faculty. Consequently, chairs' bidirectional, Janus-like vision gives them a unique perspective on matters within the institution. Numerous opportunities emerge as a result emerging from the point that chairs are the primary communication links and translators between faculty and administration. For instance, they are best situated to provide first level review of department faculty led proposals aimed at higher levels in the institution. Senior and executive leaders can learn from chairs what is actually occurring at the faculty level and provide firsthand commentary to these leaders on formal or informal proposals. Chairs can serve as early warning systems regarding emerging or potential challenges. We believe being a two-way information conduit is one of the most important advantages for the institution of taking the hybrid perspective regarding department chairs.

Applying the Hybrid Model: Personal Career Benefits

What motivates people to agree to become a department chair? Clearly, reasons vary (Buller, 2012; Gmelch & Miskin, 2004; Hecht et al., 1999; Lees, 2006). For some, it is a sense of obligation (“It’s my turn.”) For others, it is an opportunity to explore a possible career shift into administration. For still others, it may be a sense of service and curiosity about increasing one’s knowledge about how institutions work and doing what one can to improve the learning environment in one’s department. Regardless the specific motivation, assuming the role brings with it increased knowledge about the department and its people, as well as the institution, and experience at making decisions about complex issues that have consequences beyond one’s personal sphere.

The hybrid model is a useful frame for considering how these personal benefits accrue. Presuming that one brings fewer well-honed administrative skills into their first department chair role, much of their learning curve will likely entail topics such as budgeting, finance, institutional processes and procedures, and various aspects of the department about which one is less familiar (which is more likely the case in larger departments). Depending on the type of institution (e.g., public, private independent), the budgeting and finance aspects could be more or less complicated. For instance, public institutions are more likely to require separation of funds based on their source when tracked in a budget spreadsheet. Most commonly, department budgets adopt a format that is

generally similar to the way the institutional budget is organized in terms of revenue and expenditure categories. As a result, learning the ins and outs of budgeting and finance at the department level will provide a window into understanding the wider budget and finance aspects of the institution as a whole. At some institutions, even department chairs have access to the entire institutional budget at a reasonable, if not complete, detailed level. Such knowledge and understanding are invaluable for discussions with department faculty and staff about institutional initiatives and in forming the supporting arguments and data for a department level proposal. Whether the individual in the chair role serves one or more terms and returns to the faculty, or heads into a career in administration, increased knowledge about how the institution functions will be a distinct advantage.

At the local level, a new chair always learns more about the operations, areas of expertise, and details about the academic courses and programs in one's own department. Being in a position that requires a different, broader, and deeper set of conversations about the work that each faculty and staff member does will inevitably provide richer knowledge and understanding. Of course, part of this knowledge involves learning the various idiosyncrasies of the people involved, but we also view that as an opportunity to acquire and practice human relations, negotiation techniques, and diplomatic skills. Some might even say developing "shuttle diplomacy" skills. Again, regardless of what the chair chooses to do at the end of their time in the role, gains in these domains tend to improve one's tolerance.

Similarly, deeper understanding of curricular matters (e.g., revision, adding new options, identifying opportunities for collaboration within and across units) positions a chair well to delve more deeply into continuous quality improvement of the academic learning environment. Such expertise is crucial for the institution as well, as important considerations such as accreditation benefit directly from having those with experience in scheduling and altering curricula involved in those processes. Moreover, this expertise opens additional opportunities for career options in the institution (e.g., positions directly related to coordination of accreditation) and in external organizations (e.g., accreditation organizations, state, and federal regulatory agencies, third party content providers).

This should be a major step in discerning whether to make a personal decision to move forward into university leadership. Having a taste of the kinds of decision-making requirements and obligations that come with institutional management and leadership may spark ambition towards moving into a different career path direction.

Additionally, there is a certain satisfaction that comes from serving others and doing the best one can to leave a department better than it was when one became the chair. Such satisfaction is different than that experienced for having done a great job at teaching or having one's scholarly work published in a top journal or exhibited in a top venue. The satisfaction that accrues from serving as chair reflects having done good for a larger group—the students who take the courses, the faculty who discover new knowledge and teach the whole body of it, the staff who provide the support to ensure the department operates well—and for the institution at large. Much of this satisfaction derives from internal or informal external sources, as tangible, formal external recognition is too often lacking. Still, having a sense that one has done good for others usually does result in good feelings about oneself.

The Pandemic Affected Interfaces, Not the Fundamentals

The overwhelming conclusion from research is that the COVID-19 pandemic had significant effects on most aspects of the college or university experience. This has been true for the role of department chair (Chu, 2020; Gigliotti, 2021). However, a careful consideration of these effects (e.g., stress and mental health, course delivery, enrollment patterns) indicates that the effects continued or increased trends already apparent pre-pandemic (e.g., increased use of online delivery, increased need for mental health services) more than they introduced brand new challenges. Even remote working challenges were not new; for example, faculty have been working remotely (e.g., scholarly and other writing, grading student work) for generations; what changed was the degree to which this occurred and the pressures on department chairs to respond quickly and effectively with more detailed human resource and academic policies (e.g., allowing permanent remote working for teaching).

We argue that perhaps the most important effects of the pandemic were the need for decision making speed across a wide range of personnel and student issues and concerns (e.g., the speed of switching to digital delivery), an increased ability to pivot rapidly from one issue to another, increased demands from both students and faculty (e.g., free speech and personal trauma in the classroom), and increased feelings of personal stress.

Earlier, we noted that one of the administrative skills that department chairs must acquire is the adjustment to the speed at which administration happens and how rapidly these decisions jump from one domain to another, often disconnected domain. More often than not, administrative decision making is done based on the best information available at the time, and then the decision maker moves on, sometimes only to revisit the issue and the decision. Challenges relating to free speech appear at least weekly in both higher education and mainstream media outlets. These issues are not clear-cut matters within the First Amendment or within common understandings of academic freedom, but often involve more complex, nuanced, and competing views of what is (or is not) appropriate content for discussion in a course. Nearly all sectors of the U.S. population reported increased mental health concerns that derived in some way from the pandemic and the ways in which life had been disrupted.

Certainly, the pandemic resulted in many aspects of college and university life and institutional operations becoming more complicated and stressful. It did not truly invent new problems that had no roots in the pre-pandemic world. What did result, though, to borrow a term from the financial industry, was a stress-test for the hybrid model. Although more time is needed to obtain empirically validated support for this view, it is our sense that the pandemic may prove to be a filter for understanding how chairs who can both handle the effects of crisis situations *and* do what is necessary to provide personal recovery time and space to avoid burnout will provide a revised view of the department chair position. As we discuss in the next section, they also provide important insights into how best to onboard and continually develop department chairs.

Onboarding and Professional Development for Chairs

Traditionally, intentionally preparing someone to assume the position of department chair was rare. Since the 1990s, this view has changed. Many institutions, and some professional organizations,

now provide at least some degree of onboarding for new chairs and ongoing professional development opportunities afterward. The shift seems to have been the realization that becoming adept at blending the faculty and administrative skill sets is neither innate nor inevitable. It is learned, and the learning occurs best when it is accompanied by mentoring and coaching (Cavanaugh & Cavanaugh, 2018; Maxson & Cavanaugh, 2021; Ross et al., 2014; SAIL Institute, 2023; The Chair Academy, 2023).

Onboarding is the process by which someone who is new to a position is assimilated into the culture (of the new role and the larger structural units such as the college or division), introduced to key relationships (e.g., with the dean and other key leaders), provided clear descriptions of expectations, and given opportunities to acquire knowledge and initial skills in core processes and procedures (e.g., budget, finance, institutional policies and processes). For maximum benefit, onboarding programs should also connect new chairs with a mentor and a coach, whose functions are different (Cavanaugh & Cavanaugh, 2018).

Many onboarding programs fall into a couple of types: those that emphasize one set of skills, usually the administrative set, while largely ignoring the other, usually the faculty set; and those that focus on personal leadership skills while largely ignoring the other skills. Interestingly, few formal onboarding programs in higher education are grounded in an individualized approach that assesses the new chair's breadth of existing skills across both the faculty and administrative sets, then explicitly bases training on identified gaps (e.g., basic training on how to create and manage budgets, how to perform personnel evaluations correctly). This type of individualized onboarding, coupled with mentoring and coaching, would be supplemented with regular ongoing professional development opportunities that would strive not only to teach advanced skills directly relevant to the department chair's duties and responsibilities, but also to know how utilize them in a dynamic, hybrid manner that would create collateral benefits (e.g., improved departmental functioning, growth in personal leadership skills). We believe that adopting the hybrid model as the overall frame regarding department chairs would make such individualized assessments and focused onboarding training the standard, and result in much better prepared new chairs.

Similarly, ongoing professional development of the type offered by SAIL (2023) and The Chair Academy (2023) would be even more effective when the hybrid model is explicitly embedded. Although we advocate the type of self-development options that focus on strengths, areas for development, and the like, we strongly encourage program developers to explicitly increase the focus on how chairs can more effectively apply the inquiry and teaching skills they bring with them to help them address the administrative challenges they encounter. We envision this as emphasizing how one brings a teacher-scholar's mind to the administrative aspects of being a department chair. An example of a resource that could be useful in this regard is the newsletter *The Department Chair* which emphasizes practical advice on focused topics (e.g., data-informed decision making, how to conduct market analyses for new programs, leading curriculum change).

Adopting a longer-term view, personal and professional development for department chairs may also provide pathways for discerning whether one has potential interest in pursuing other administrative positions (e.g., dean). For example, the Council of Independent Colleges and Universities (CIC) *Workshop for Department and Division Chairs* provides both training for the specific duties and responsibilities of chairs, and insights into more advanced positions. Programs

that specifically provide opportunities for further exploration into senior administrative roles are also offered by professional associations, such as the American Association of University Administrators (AAUA), American Association of State Colleges and Universities (AASCU) *Millennium Leadership Initiative*, and *Emerging Leaders Program*, the HERS Leadership Institute, and the American Council on Education (ACE) *Fellows Program*. Together, these and other similar programs offer structured, progressive opportunities to increase one's expertise and performance as a chair as well as learn more about what more senior administrative positions entail.

Final Thoughts

Colleges and universities would do well to invest significant resources into the careful preparation and continued development of department chairs. The hybrid model described here captures the unique dual-facing roles chairs undertake, and the model also provides a useful perspective from which more effective onboarding and ongoing professional programs can be developed. We firmly believe that intentionality in the selection process, rather than a "whose turn is it" approach, and in the onboarding and ongoing professional development programs better reflect the reality that department chairs are the arbiters of many complex issues that are best resolved at that level. Investment in department chairs also has the collateral benefit of creating a more deliberate process of creating the talent source for future senior administrative leaders. If these steps are taken, candidates will be ready to answer the door confidently when the Opportunity to Serve as Chair comes knocking.

References

- Buller, J. L. (2012). *The essential department chair*. Jossey-Bass.
- CalPoly. (2020). *Department head/chair responsibilities* (rev. 2/2020). <https://content-calpoly-edu.s3.amazonaws.com/academic-personnel/1/PDF/Dept%20Head-Chair%20Responsibilities.pdf>
- Cavanaugh, C. K., & Cavanaugh, J.C. (2018). The importance of executive coaching for academic administrators. *Journal of Higher Education Management*, 33, 22-31. https://aaua.org/wp-content/uploads/2019/03/JHEM_2018_33-1.pdf#page=28
- Chu, D. (2020). The post-COVID-19 environment: What chairs need to know and do. *The Department Chair*, 31, 19-21. <https://doi.org/10.1002/dch.30333>
- Cicero, M. T. (45 BCE/1933). *De natura deorum*. W. Heinemann. <https://archive.org/details/denaturadeorumac00ciceuoft>
- Gigliotti, R. A. (2021). The impact of COVID-19 on academic department chairs: Heightened complexity, accentuated liminality, and competing perceptions of reinvention. *Innovative Higher Education*, 46, 429-444. <https://doi.org/10.1007/s10755-021-09545-x>
- Gmelch, W. H., & Misikin, V. D. (2004). *Chairing an academic department* (2nd ed.). Atwood Publishing.
- Hecht, I. W. D., Higgerson, M. L., Gmelch, W. H., & Tucker, A. (1999). *The department chair as academic leader*. Oryx Press.
- Kruse, S. D. (2022). Department chair leadership: Exploring the role's demands and tensions. *Educational Management Administration & Leadership*, 50, 739-757. <https://doi.org/10.1177/1741143220953601>

- Lees, N. D. (2006). *Chairing academic departments: Traditional and emerging expectations*. Anchor Publishing.
- Maxson, P. & Cavanaugh, C. K. (2021). Administrator, faculty, and staff coaching. *How the role of coaching is impacting higher education*, 7-8.
[https://icfraleigh.org/resources/Documents/Coaching%20In%20Higher%20%20Education%20\(2\).pdf](https://icfraleigh.org/resources/Documents/Coaching%20In%20Higher%20%20Education%20(2).pdf)
- Ross, W. E., Huang, K. H. C., & Jones, G. H. (2014). Executive onboarding: Ensuring the success of the newly hired department chair. *Academic Medicine*, 89, 728-733.
<https://doi.org/10.1097/ACM.0000000000000214>
- SAIL Institute. (2023). *Department chair resource center*. <https://sunysail.org/department-chair-training/>
- Schmidt, R. A., & Tucker, A. (1983). Chairing the academic department: Leadership among peers. *Journal of Higher Education*, 54, 212-214. <https://doi.org/10.2307/1981578>
- Smith, A. B. (1972). Department chairmen: Neither fish nor fowl. *Junior College Journal*, 42(6), 40-43.
- The Chair Academy. (2023). *Academy programs*. https://www.chairacademy.com/index_acad.html

Impact of Financial and Admission Variables on Graduation Rates of Four-Year College Students Within Different Timeframes

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The issue of lower graduation rates of four-year college students in the United States has been a significant concern for colleges and universities. To understand these lower rates, several studies investigated factors influencing graduation rates (Al-Haddad et al., 2017; Cheng et al., 2016; Smith et al., 2001). Financial, academic, social, and personal challenges have been identified as the major reasons for lower graduation rates (Moodley et al., 2015; Smith et al., 2001).

Financial barriers, such as the high cost of tuition fees, textbooks, and living expenses, negatively impact students' ability to graduate within the defined timeframe. For example, low-income students, in particular, face challenges in completing their studies, and many rely on financial assistance loans and scholarships to pay for their education (Ragland, 2016). Research findings on the impact of financial aid on graduation rates have been mixed. Some studies have found a positive impact on graduation rates (Zhang, 2009; Jaschik, 2014; Smith et al., 2001), while other research has shown different impacts of tuition and level of aid on graduation. Receiving financial aid, specifically state grants, has different but significant effects on the likelihood of a student completing a degree (Zhang, 2009). On the other hand, student loans and Pell grants have a negative impact the potential of completing a degree (Youmans, 2017, Smith, et al., 2001).

Colleges and universities with open admission policies, those that accept all applicants, tend to have lower graduation rates (At the Core, 2020). On the other hand, the importance of mentoring, advising, new student orientation, tutoring, and other actively intensive programs for student success positively impact graduation rate. Improved academic advising for students leads to higher levels of graduation (White, 2015; Anstine, 2017). Furthermore, students' backgrounds can significantly impact graduation rate and can influence an institution's overall graduation rate (Astin, 1991, 1993, 1997; Goenner et al., 2004).

Paying high tuition impacts a student's likelihood of graduating. Studies have shown a positive relationship between the amount of tuition charged and the graduation rate (Youmans, 2017). This is because higher tuition rates provide greater motivation for students to meet all graduation requirements and avoid penalties (Goenner et al., 2004). Another study by Wolf (2017) found similar findings, showing that students enrolled in institutions that charge higher tuition fees, academic fees, instructional expenses, and student-related expenses are more likely to graduate than those in other institutions.

Numerous studies have examined the relationship between high school GPA, standardized test scores, and college graduation. While high school grades are often seen as important measures of academic achievement, standardized test scores are generally considered to be more valid and objective indicator of academic readiness as they are evaluated under standardized conditions. However, the most consistent finding across several large-scale studies is that while both standardized test scores and high school GPA can predict college success, the latter is a much stronger predictor (Hutt et al., 2018). Geiser et al. (2007) also confirm that high school GPA is consistently the most robust predictor for all academic disciplines, campuses, and freshman cohorts in their sample. Moreover, research suggests that the predictive value of high school GPA increases over time, particularly after freshman year. As an admissions criterion, high school GPA has less adverse impact than standardized tests on disadvantaged and underrepresented minority students. However, no studies have examined the impact of high school GPA and standardized test scores on four, six, and eight-year graduation rates.

Completion of college preparatory programs is another important success factor for college graduation. Although it is commonly believed that college preparatory programs have some impact on college awareness and academic achievement, there is limited research on their effect on persistence in higher education. However, as more and more states are beginning to define college readiness, there are similarities in states' requirements for knowledge and skills in English and mathematics that high school graduates need for college (Watt et al., 2011). These college preparatory programs are impactful in ensuring college success for first-generation and minority students who lack the proper background. According to Watt et al. (2011), certain college-preparation activities such as acquiring college credits before graduating from high school and meeting the Higher Education Readiness Component (HERC) are predictors of college success.

Most previous studies have investigated the relationship between graduation rates and various factors, such as financial assistance, socio-demographic variables of students, better services like advising, standardized test scores, and high school GPA at the individual level. To understand the complex relationship between graduation rates and their influencing factors, it is important to examine the data collected as cohorts across colleges and universities.

The objective of this study was to evaluate the impact of financial aid and admission policies on graduation rates at four-year colleges and universities. Using a comprehensive, national sample of institutions participating in Title IV funding, we conducted a cohort analysis examining how key admission criteria and financial factors influence degree completion over time. Specifically, we assessed the impact of common admission metrics including high school GPA, standardized test scores, and completion of college preparatory coursework, as well as financial factors such as in-state and out-of-state tuition rates, and percent of students receiving Pell grants, Federal, State, and Institutional grants, and loans on graduation rates over 4, 6, and 8 years.

Materials and Methods

Data Source and Description

For this study, we obtained graduation rates for three cohorts of first-time, full-time undergraduate students who had entered universities in 2013, 2015, and 2017 and graduated in Fall 2021 from the Integrated Postsecondary Education Data System (IPEDS). IPEDS collects data from the universities that participate in Title IV federal student financial aid programs. The data collected by IPEDS from the postsecondary educational institutions in the United States includes the numbers of students enrolled, institutional characteristics, admission and test scores, retention, graduation rate, financial aid used, staff employed, dollars expended, and degrees and certificates earned.

These cohorts represent the percentage of students who graduated within 8 years (200% of the normal time to degree), 6 years (150% of the normal time to degree), and 4 years (100% of the normal time to degree). The response variable is the percentage of students who graduated in Fall 2021 within four, six, and eight years of admission, respectively. In addition to graduation rates, we also gathered financial assistance, standardized test scores, admission, and tuition of attendance-related variables associated with three cohorts from 2256 Title IV-participating four-year colleges and universities across the United States.

The financial assistance variables are the percentage of full-time, first-time undergraduate students who received Pell Grants, the percentage of students who received Federal Grant Aid, the percent of students who received State/Local Grant Aid, the percent of students who received Institutional Grant Aid, the percent of students who received student loans as well as the cost of in-state and out-of-state tuition for 2020.

As for admission variables, we collected data on the 25th and 75th percentile scores for the SAT and ACT in verbal, math, and composite for the admission years of 2013, 2015, and 2017. In addition, we also collected other admission-related variables such as open admission policy, whether secondary school GPA was required, whether completion of the college-preparatory programs was required, and whether standardized test scores were required for the admission years of 2013, 2015, and 2017.

Since some colleges and universities failed to provide comprehensive data for all variables considered, we removed those universities from the dataset. As a result, the final sample size was reduced to 944, 932, and 1,037 institutions for cohorts 2013, 2015, and 2017, respectively.

According to the statistical summary presented in Tables 1 and 2, the average graduation rates of cohorts 2013, 2015, and 2017 were 60%, 58%, and 44%, respectively, in the Fall of 2021. There has been a decline in the percentage of students graduating within the eight-, six-, and four-year timeframes.

The proportion of students receiving financial grants and scholarships remains relatively constant across all three cohorts. Moreover, students who graduate within four years tend to

have higher SAT and ACT scores compared to those who take eight or six years to complete their degrees.

Table 1. Descriptive Statistics for variables included in Cohort 2013 and 2015

Variable	Cohort 2013			Cohort 2015		
	n (%)	Mean	SD	n (%)	Mean	SD
Graduate rate (in %)		0.60	0.17		0.58	0.17
PELL Award (in %)		0.37	0.16		0.37	0.16
Fed Grant (in %)		0.36	0.26		0.36	0.26
Local grant (in %)		0.36	0.22		0.36	0.22
Local Institutional Aid (%)		0.82	0.22		0.81	0.23
Student Loans (%)		0.55	0.21		0.55	0.21
Total in-state Tuition (\$)		42085	16580		41018	16499
Total out-state Tuition (\$)		46586	13885		45724	13902
SAT Verbal (25 th %)		470	66		468	70
SAT Verbal (75 th %)		581	69		579	72
SAT Math (25 th %)		480	72		476	74
SAT Math (75 th %)		589	71		585	75
ACT Composite (25 th)		21	3.43		21	3.64
ACT Composite (75 th)		26	3.37		26	3.48
ACT Verbal (25 th)		20	3.87		20	4.23
ACT Verbal (75 th)		26	3.87		26	4.02
ACT Math (25 th)		20	3.53		20	3.68
ACT Math (75 th)		26	3.36		26	3.52
Open Admission Policy:						
Yes				3(0.32)		
No	944(100)			929(99.68)		
School GPA required:						
yes	827(87.61)			824(88.41)		
No	117(12.39)			108(11.59)		
Completion of the college-preparatory program:						
yes	376(39.83)			363(38.95)		
No	568(60.02)			569(61.05)		
Admission Test Score required:						
Yes	877(92.90)					
No	67(7.10)					

Institutions that require admission test scores and school GPA tend to exhibit higher graduation rates across all three time periods as compared to those that do not. On the other hand, universities with an open admission policy generally have lower graduation rates than those that do not follow an open admission model.

Table 2. Descriptive Statistics for variables included in Cohort 2017

Variable	Cohort 2017		
	n (%)	Mean	SD
Graduate rate (in %)		0.44	0.20
PELL Award (in %)		0.37	0.16
Fed Grant (in %)		0.36	0.26
Local grant (in %)		0.35	0.22
Local Institutional Aid (%)		0.81	0.22
Student Loans (%)		0.55	0.20
Total in-state Tuition (\$)		41973	16833
Total out-state Tuition (\$)		46651	14114
SAT Verbal (25 th %)		513	71
SAT Verbal (75 th %)		612	65
SAT Math (25 th %)		507	71
SAT Math (75 th %)		608	71
ACT Composite (25 th)		21	3.81
ACT Composite (75 th)		26	3.57
ACT Verbal (25 th)		20	4.34
ACT Verbal (75 th)		26	4.19
ACT Math (25 th)		20	3.78
ACT Math (75 th)		26	3.60
Open Admission Policy:			
Yes			
No	1037(100)		
School GPA required:			
yes	920(88.72)		
No	117(11.28)		
Completion of the college-preparatory program:			
yes	401(38.67)		
No	636(61.33)		
Admission Test Score required:			
Yes	950(91.61)		
No	87(8.39)		

Construction of Indices for Financial and Admission Variables

As the goal of this study was to measure the effect of admission and financial variables, we attempted to use a multiple regression model. However, the use of a multiple regression model depends on some important model assumptions. One crucial assumption of the regression model is the absence of multicollinearity. Multicollinearity occurs when there is a high degree of interdependency among the explanatory variables, leading to inefficient and less reliable regression results. To detect multicollinearity among the explanatory variables, we used various

diagnostic measures, including the variance inflation factor (VIF), condition number, and condition index based on the eigenvalues of the correlation matrix of the explanatory variables.

After conducting preliminary exploratory data analysis, which included correlation analysis, variance inflation factor, and eigensystem as presented in Tables 3, 4, and 5, it was determined that the dataset contains three highly correlated variable groups. The first group pertains to funding and includes variables such as the percentage of students who received Pell Grants, Federal Grant Aid, State/Local grant aid, Institutional Grant Aid, and Student Loans. The second group relates to tuition costs and comprises in-state and out-of-state tuition. Finally, the third group of variables is associated with admission requirements and consists of the 25th and 75th percentiles of aggregated SAT and ACT scores in verbal and math.

Table 3. Multicollinearity Diagnostic Scores for Cohort 2013

Group 1	VIF	Eigenvalues	Condition Index
Percent of PELL award	1.56	1.78	1.00
Percent of federal grant aid	1.05	1.39	1.13
Percent of local government aid	1.33	0.91	1.40
Percent of local institutional aid	1.44	0.57	1.78
Percent of standard loans	1.61	0.35	2.25
Group 2			
Total in-state Tuition	5.13	1.90	1.00
Total out-state Tuition	5.13	0.10	4.30
Group 3			
SAT Verbal 25 th percentile	14.89	9.13	1.00
SAT Verbal 75 th percentile	11.92	0.24	6.16
SAT Math 25 th percentile	18.44	0.21	6.65
SAT Math 75 th percentile	13.38	0.16	7.57
ACT Composite 25 th percentile	32.72	0.07	11.69
ACT Composite 75 th percentile	22.24	0.07	11.84
ACT Verbal 25 th percentile	25.21	0.04	14.69
ACT Verbal 75 th percentile	16.59	0.04	14.99
ACT Math 25 th percentile	14.60	0.03	17.48
ACT Math 75 th percentile	13.34	0.02	22.59

Variance Inflation analysis indicates a high degree of correlation among the standardized test scores, with six of them scoring more than 10 in the Condition Index. The tuition variables, in contrast, exhibit only moderate multicollinearity. The financial assistance variables, however, demonstrate no significant association with one another.

Table 4. Multicollinearity Diagnostic Scores for Cohort 2015

Group 1	VIF	Eigenvalues	Condition Index
Percent of PELL award	1.56	1.78	1.00
Percent of federal grant aid	1.05	1.39	1.13
Percent of local government aid	1.33	0.91	1.40
Percent of local institutional aid	1.44	0.57	1.78
Percent of standard loans	1.61	0.35	2.25
Group 2			
Total in-state Tuition	5.13	1.90	1.00
Total out-state Tuition	5.13	0.10	4.30
Group 3			
SAT Verbal 25 th percentile	14.89	9.13	1.00
SAT Verbal 75 th percentile	11.92	0.24	6.16
SAT Math 25 th percentile	18.44	0.21	6.65
SAT Math 75 th percentile	13.38	0.16	7.57
ACT Composite 25 th percentile	32.72	0.07	11.69
ACT Composite 75 th percentile	22.24	0.07	11.84
ACT Verbal 25 th percentile	25.21	0.04	14.69
ACT Verbal 75 th percentile	16.59	0.04	14.99
ACT Math 25 th percentile	14.60	0.03	17.48
ACT Math 75 th percentile	13.34	0.02	22.59

Although the financial assistance variables are not highly correlated, we have considered constructing an index variable that represents all financial assistance variables. Therefore, we constructed three indices based on the variables grouped into three similar categories to simplify analysis and to decrease multicollinearity. Principal component analysis (Johnson, 2007) is used to combine the collinear variables into a single index variable. The standardized test score index captures approximately 91% of the variance contained in the ten standardized test score variables. The financial assistance index accounts for 36% of the variability of the five financial assistance variables. Furthermore, the tuition index explains 95% of the total variance of the two tuition variables.

Statistical Methods

A multiple regression model was used to determine the potential impacts of admission, financial assistance, and tuition fee variables on graduation rates, while controlling for three categorical variables: high school GPA requirement, college preparation requirement, and admission test score requirement. To address multicollinearity among the explanatory variables related to standardized test scores, financial assistance, and tuition fees, three indices were constructed using principal component analysis and included in the model.

Table 5. Multicollinearity Diagnostic Scores for Cohort 2017

Group 1	VIF	Eigenvalues	Condition Index
Percent of PELL award	1.56	1.78	1.00
Percent of federal grant aid	1.05	1.39	1.13
Percent of local government aid	1.33	0.91	1.40
Percent of local institutional aid	1.44	0.57	1.78
Percent of standard loans	1.61	0.35	2.25
Group 2			
Total in-state Tuition	5.13	1.90	1.00
Total out-state Tuition	5.13	0.10	4.30
Group 3			
SAT Verbal 25 th percentile	14.89	9.13	1.00
SAT Verbal 75 th percentile	11.92	0.24	6.16
SAT Math 25 th percentile	18.44	0.21	6.65
SAT Math 75 th percentile	13.38	0.16	7.57
ACT Composite 25 th percentile	32.72	0.07	11.69
ACT Composite 75 th percentile	22.24	0.07	11.84
ACT Verbal 25 th percentile	25.21	0.04	14.69
ACT Verbal 75 th percentile	16.59	0.04	14.99
ACT Math 25 th percentile	14.60	0.03	17.48
ACT Math 75 th percentile	13.34	0.02	22.59

Upon examining the residual vs fitted plot, we detected the presence of outliers, which could potentially undermine the reliability and efficiency of our inferences. To address this issue, we removed some observations with highly influential outliers, detected by Cook's distance greater than $\frac{n}{4}$ from the dataset, and refitted the model. As a result, removing the outliers improved the coefficient of the determinant R^2 from 76% to 79%.

In addition, we observed heteroscedasticity in the residuals. To handle the unequal variances in the residuals, we fitted the data using a weighted least square model. With the weighted least square model, R^2 increased to 83%.

Although we addressed the problems of heteroscedasticity and the presence of outliers with weighted least square regression, and deleting outliers, there are still some minor issues with the model assumptions, such as non-normality, heteroscedasticity, large residuals, leverage, and influential points. To effectively deal with these problems, we used Huber -White Sandwich estimators (White, 1980) to estimate the standard errors of the regression coefficients, which improved the overall quality and coherence of our model.

For data analysis and model fitting, we used the R statistical computing software.

Results

Tables 6 and 7 display the effects of the explanatory variables included in the multiple regression model on graduate rates, along with the 95% confidence intervals for those effects for cohorts 2013, 2015, and 2017.

Table 6. Regression Coefficients with a 95% Confidence interval for Cohort 2013 and 2015

Factors	Categories	Cohort 2013		Cohort 2015	
		Estimate	95% C.I.	Estimate	95% C.I.
School GPA Required	Yes	0.020*	(0.008, 0.032)	0.019*	(0.006, 0.031)
	No ^(r)				
College Preparation Required	Yes	0.034*	(0.026, 0.044)	0.029*	(0.019, 0.039)
	No ^(r)				
Admission Test Score Required	Yes	-0.005	(-0.020,0.010)		
	No ^(r)				
Test Score Index		0.032*	(0.029, 0.034)	0.034*	(0.031,0.037)
Financial Assistance Index		-0.020*	(-0.025, -0.015)	-0.014*	(-0.019, -0.009)
Tuition Index		0.022*	(0.017,0.026)	0.027*	(0.022, 0.031)
R^2			0.84		0.82

Notes: ^(r) indicates the reference group and * means p-value<0.05

Regarding the impact of school GPA requirements, the analysis demonstrates their significant influence on the graduation rate for students completing their degrees within 4, 6, and 8 years of admission. Specifically, for cohort 2017, the estimated effect is 0.02 (95% C.I.: 0.003 to 0.036). Similar significant effects are observed for cohort 2015 (0.02, 95% C.I.: 0.006 to 0.031) and cohort 2013 (0.02, 95% C.I.: 0.008 to 0.032). These findings indicate that institutions with a high GPA requirement for admission tend to have higher graduation rates for all three cohorts, assuming all other factors in the model remain constant. In particular, universities with this policy could have graduation rates about 2% higher than institutions without required school GPAs.

The inclusion of college preparation programs has been found to have a positive impact on the graduation rate. For cohorts 2017, 2015, and 2013, the estimated effects of requiring college preparation programs are 0.012 (95% C.I.: -0.001 to 0.024), 0.029 (95% C.I.: 0.019 to 0.039), and 0.034 (95% C.I.: 0.026 to 0.044), respectively. The college preparatory requirement is statistically significant for cohort 2013, and 2015, but not significant for cohort 2017. On average, universities requiring completion of college preparatory programs before admission tend to have graduation rates about 2.5 % higher than those not requiring such courses.

Table 7. Regression Coefficients with a 95% Confidence Interval for Cohort 2017

Factors	Categories	Cohort 2017	
		Estimate	95% C.I
School GPA Required	Yes	0.020*	(0.003, 0.036)
	No ^(r)		
College Preparation Required	Yes	0.012	(-0.001,0.024)
	No ^(r)		
Admission Test Score Required	Yes	-0.010	(-0.029, 0.008)
	No ^(r)		
Test Score Index		0.040*	(0.036, 0.043)
Financial Assistance Index		0.012*	(0.006, 0.018)
Tuition Index		0.061*	(0.055, 0.067)
<i>R</i> ²			0.78

Notes: ^(r) indicates the reference group and * means p-value<0.05

On the other hand, the analysis does not indicate a significant impact of admission test score requirements on graduation rates at a 5% level of significance. The estimated effects of admission test score requirements for cohorts 2013, and 2015 are -0.005 (95% C.I: -0.020 to 0.010), and -0.010 (95% C.I: -0.029 to 0.008), respectively.

According to the results of multiple regression, the test score index, which includes factors such as SAT or ACT scores, has a statistically significant positive impact on graduation rates at a 5% level of significance. The estimated effects of the test score index on graduation rates are 0.04 (95% C.I: 0.036 to 0.043), 0.034 (95% C.I: 0.031 to 0.037), and 0.032 (95% C.I: 0.029 to 0.034) for cohort 2017, 2015, and 2013, respectively. Universities that require high SAT or ACT scores for admission tend to have higher graduation rates. The impact of test scores is higher for students graduating within four years compared to those completing their degrees within six and eight years. With every unit increase in the test score index, the graduation rate for students completing their degrees within four years increases by approximately 4%, while for the students taking longer to graduate, the rates increase by approximately 3% with a one-unit increase in the test score index.

Regarding the financial assistance index, the analysis shows that the effect of financial assistance on graduation rates is statistically significant at a 5% level of significance. The estimated effects of the financial assistance index are 0.012 (95% C.I: 0.006 to 0.018), -0.014 (95% C.I: -0.019 to -0.009), and -0.020 (95% C.I: -0.025 to -0.015) for cohort 2017, 2015 and 2013, respectively. The effect is mixed-graduation rates decline by approximately 2% for students receiving financial assistance (i.e., PELL, Federal and State grants, Institutional grants, Student loans, etc.) who graduate within 150%, and 200% of the standard time. However, for students completing within four years or 100% of the standard time, financial assistance has a positive impact on graduation rates, leading to approximately a 1% increase.

Finally, the analysis shows that the effect of tuition on graduation rates is statistically significant at a 5% level. Universities with higher tuition typically have higher graduation rates for both in-state and out-of-state students. The estimated effects are 0.061 (95% C.I: 0.055 to 0.067), 0.027 (0.022 to 0.031), and 0.022 (95% C.I: 0.017 to 0.026) for cohort 2017, 2015 and 2013, respectively. As time to complete a degree increases, graduation rates tend to decrease. Specifically, students who graduate within four years have an average graduation rate over 4% higher than those who take six or eight years to finish their studies.

Discussion

This study investigates the impact of cohort-level characteristics of four-year colleges and universities on graduation rates. Due to large numbers of similar variables, the study encountered statistical estimation issues such as multicollinearity and heteroscedasticity in developing an optimal regression model. To address these issues, principal component analysis was used to create three comprehensive indices for financial assistance, admission-related, and cost of attendance variables. These indices were found to efficiently represent the variables within each group.

The results of the multiple regression model, presented in Tables 6 and 7, showed several factors significantly associated with graduation rates across different cohorts. The findings of the study are consistent with previous research. These findings have implications for universities aiming to increase graduation rates and reduce drop-out rates.

The effect of high school GPA on individual student graduation rates has been widely studied (Hutt et al, 2018; Geiser et al., 2007), with a positive relationship with a higher graduation rate found. Warren (2019) examined high school and first-year college GPA, finding a significant positive link to higher college GPAs. Our finding reveals that the universities requiring high school GPA for admission tend to have higher graduation rates than those without this requirement. This finding highlights the importance of high school GPA for increasing graduation rates, consistent with research showing a positive relationship between high school GPA and college success (Kuncel, 2005). Therefore, by requiring a high school GPA for admission, universities can increase their graduation rates.

Similarly, the analysis finds that requiring college preparatory program completion before admission is linked to higher graduation rates. This supports previous research that has shown that college preparatory courses can improve college readiness and academic performance (Balfanz et al., 2004; Watt et al., 2011). By requiring college preparatory courses, universities can provide the skills and knowledge for academic success. Universities can increase graduation rates if universities consider providing such programs to ensure that students are adequately prepared for college-level work.

Our analysis shows standardized test scores, such as SAT or ACT scores, significantly impact graduation rates, with higher scores associated with higher graduation rate. This supports previous studies suggesting a positive association between standardized test scores and college graduation (Hutt et al., 2018; Geiser et al., 2007). However, our analysis finds that admission test score requirement is not significantly related to graduation rates.

Our findings regarding the impact of financial assistance and cost of attendance indices on graduation rates demonstrate a mixed effect on graduation rates, depending on the time students take to graduate. Specifically, financial assistance variables had a negative impact on the graduation rate for students who graduated within six and eight years. This finding contradicts previous studies that have reported a positive impact of state funding on graduation rates (Zhang, 2009; Jaschik, 2014; Smith et al., 2001). This inconsistency may be because our composite index differed from analyzing individual variables. Specifically, some variables like PELL grants can negatively impact graduation rate (Youmans, 2017; Smith et al., 2001), potentially outweighing other positive effects in the index. However, for students who graduated within 4 years, the effect of financial assistance is positive. Students who take longer than expected to graduate might be academically disadvantaged compared to those who graduate within a shorter time. This observation aligns with realities of higher education.

Finally, this study finds tuition fees to be a significant factor positively affecting graduation rates. This is consistent with research showing a positive impact on graduation rates (Youmans, 2017; Goenner et al., 2004; Wolf, 2017). Universities charging higher tuition fees tend to have higher graduation rates, which may reflect the fact that higher fees provide universities with more resources to support student success. However, it is important to note that high tuition fees can also create financial barriers to college access for low-income students.

This study has several strengths, including the use of a large, comprehensive, and representative sample of four-year colleges and universities in the United States, which provides reliable and consistent results. In addition, the inclusion of a large set of potential explanatory variables in the model, analyzed with appropriate statistical tools, strengthens the strength of the study.

However, there are some limitations in this study. First, the lack of information on whether students continued receiving financial assistance throughout their time in college limits the study's scope. Discontinued support before graduation could negatively impact graduation rates, yet the model does not account for this. Second, relying solely on aggregate cohort data from the entry year provides an incomplete picture of the graduation process. Moreover, the model only includes tuition fees from the graduation year, lacking admission year and subsequent tuition data. This hampers findings on the impact of tuition fees on graduation rates.

Despite these limitations, this study identifies several significant factors associated with graduation rates across cohorts. This understanding can help universities develop effective strategies to improve graduation rates and reduce dropout rates.

References

Al-Haddad, S., Boone, R., & Campbell, E. (2018). Understanding graduation rates at higher education institutions: A forecasting model. *International Journal for Business Education*, 158, 10-23.

- Anstine, J. (2017). Graduation rates at colleges and universities in the Midwest. *Business Education & Accreditation*, 9(1), 43-54.
- Astin, A. W. (1991). *Assessment for excellence*. New York: Macmillan.
- Astin, A. W. (1993). *What matters in college?* San Francisco: Jossey-Bass.
- Astin, A. W. (1997). How “good” is your institution’s retention Rate? *Research in Higher Education*, 38(6), 647-658.
- Balfanz, R., & Legters, N. (2004). *Locating the Dropout Crisis. Which High Schools Produce the Nation's Dropouts? Where Are They Located? Who Attends Them? Report 70. Center for Research on the Education of Students Placed at Risk CRESPAR.*
- Cheng, X., Suwanakul, S., & Wu, R. (2015). Determinants of graduation rates of historically black colleges and universities. *Journal of Economics and Economic Education Research*, 16(2), 51-60.
- At The Core. (2020, December). *Graduation Rate: The 8-Year College Plan?!* At The Core. Retrieved February 5, 2022, from <https://www.gettingatthecore.com/2020/12/graduation-rate-the-8-year-college-plan/>
- Goenner, C. F., & Snaith, S. M. (2004). Predicting graduation rates: An analysis of student and institutional factors at doctoral universities. *Journal of College Student Retention: Research, Theory & Practice*, 5(4), 409-420.
- Geiser, S., & Santelices, M. V. (2007). *Validity of high-school grades in predicting student success beyond the freshman year: High-school record vs. standardized tests as indicators of four-year college outcomes.* research & occasional paper series: CSHE. 6.07. Center for Studies in Higher Education
- Hutt, S., Gardener, M., Kamentz, D., Duckworth, A. L., & D'Mello, S. K. (2018). *Prospectively predicting 4-year college graduation from student applications.* Paper presented at the Proceedings of the 8th International Conference on Learning Analytics and Knowledge, 280-289.
- Jaschik, S. (2014, April 4). *Grants vs. Loans.* Inside Higher Ed. <https://www.insidehighered.com>. Accessed February 14, 2023.
- Johnson, R. A., & Wichern, D. W. (2002). *Applied multivariate statistical analysis.*, 6th edition, Pearson.
- Kuncel, N. R., Credé, M., & Thomas, L. L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of educational research*, 75(1), 63-82.
- Moodley, P., & Singh, R. J. (2015). *Addressing student dropout rates at South African universities.* *Alternation (Durban)*.
- Ragland, S. E. (2016). *The effect of state financial aid policies on college completion.*
- Smith, W. R., Edmister, J., & Sullivan, K. (2001). *Factors influencing graduation rates at Mississippi’s public universities.* *College and University*, 76(3), 11.
- Watt, K. M., Huerta, J. J., & Alkan, E. (2011). *Identifying predictors of college success through an examination of AVID graduates’ college preparatory achievements.* *Journal of Hispanic Higher Education*, 10(2), 120-133.
- Warren, J. M., & Goins, C. L. (2019). *Exploring the relationships between high school course enrollment, achievement, and first-semester college GPA.* *Journal of Educational Research and Practice*, 9(1), 386-399.
- White, H. (1980). *A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity.* *Econometrica: journal of the Econometric Society*, 817-838.
- White, E. R. (2015). *Academic advising in higher education: A place at the core.* *The Journal of General Education*, 64(4), 263-277.

Wolf, J. B. (2017, July 12). Money Matters. Inside Higher Ed. Retrieved February 14, 2023, from <https://www.insidehighered.com>.

Youmans, C. B. (2017). The effect of tuition on graduation rate at community colleges Old Dominion University.

Zhang, L. (2009). Does state funding affect graduation rates at public four-year colleges and universities? *Educational Policy*, 23(5), 714-731.

Transmitting Anxiety: Students See and Feel the Effects of Teacher Anxiety

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Introduction and Literature Review

As we emerge from the recent global COVID-19 pandemic, educational institutions can look back at the educational results during the crisis to evaluate where we could improve the learning experience of our students in future crises. That there will be future crises is certain. Every year, populations around the world deal with hurricanes, floods, tornadoes, and even wars which impact, interfere, or interrupt education. Research to evaluate what is most effective in such situations could enhance the educational experience of students during such a future crisis.

Even prior to the COVID-19 pandemic, research reflected the incidence of anxiety increasing among college students was contributing to negative academic performance (Cooper, et al., 2018). Research has shown that anxiety negatively affects student cognitive and affective outcomes (Vitasari, et al., 2010), which in turn negatively impacts their academic performance (Beilock, 2008). Student anxiety increased during the COVID-19 pandemic (Wang, et al., 2020) with causes ranging from fear of illness, loss of income, lack of technical skills or access to technology, and inadequate or ineffective instruction being offered.

The literature clearly reflects the influence that anxiety can have on how people will function. For example, studies show that anxiety affects the ability to concentrate (Kecojevic et al. 2020; Marian et al., 2023). In looking at higher education, it is important to examine how anxiety affects the performance of both students and faculty. In addition to impairing overall health and well-being, anxiety can adversely affect academic performance (Pascoe, et al., 2020). Mental health issues, of which anxiety is the most common, are the leading impediment to academic success (Son, et al., 2020).

The effects of anxiety can include mental health issues including depression. Anxiety can cause impairment to the students' ability to concentrate and to their cognitive function. These diminished capabilities could lead to poor academic performance, withdrawal from higher education, and an overall lower quality of life (Peltier, et al., 2021). Anxiety has been shown to tax working memory which is needed in the learning process. This memory distraction can lead to negative learning outcomes (Smith & Capuzzi., 2019). Anxiety can have a negative effect on the information processing system. People with anxiety have difficulty storing and retrieving information (Nelson & Harwood, 2011). The elevated levels of worry associated with anxiety can influence academic performance (Dobson, 2012). According to the Mayo Clinic, anxiety can inhibit thinking about anything other than the present worry (Mayo, n.d.).

In addition to impeding the learning process, anxiety may manifest physical symptoms. The Mayo Clinic includes the following signs and symptoms of anxiety: feeling nervous, increased heart rate, sweating, and hyperventilation. Gastrointestinal problems, trouble sleeping, and fatigue may also be present. These possible physical symptoms may also prevent the student from being able to focus and to learn.

Because of the rapid transition to an online learning platform during the COVID-19 pandemic, faculty had little time to prepare their courses. Approximately 71% of faculty surveyed reflected that they had between 5 days and 2 weeks to prepare to go online (Brewer, et al., 2021). Further, Brewer, et al., (2021), found evidence that faculty had greater anxiety in online settings versus face-to-face courses.

The sudden and unforeseen transition to online crisis teaching caused serious pressures not only on the students, but on the faculty as well (Karakose, 2021). The Educause Center for Analysis and Research found that half of faculty believe that online learning has either no effect or a negative effect on student learning (Pomerantz & Brooks, 2017). Despite this fact, most faculty think they performed well teaching online during the COVID-19 pandemic (Brewer et al., 2021) which is a sentiment not shared by approximately 32% of students (Madrigal & Blevins, 2021). According to a survey of 2,000 students conducted by Student Voice, for the first year of the COVID-19 pandemic, nearly half rated the value of their education as only fair or poor. More than half of the students surveyed reported that they had learned less than compared to pre-COVID years (Ezarik, 2021). During the COVID-19 pandemic, in addition to faculty anxiety related to fear of illness or death was the educational anxiety caused by the rapid transition to remote learning, being unprepared for the transition, and the concern about the quality of education delivered (Wakui, et al., 2021).

Research shows that student anxiety is a contributing factor in the attitudes students formed during the COVID-19 pandemic. A national survey of 33,000 students conducted by A Healthy Minds Network, reflected that 34% of students had anxiety which impacted their memory and concentration (Woods et al., 2021). A new element contributing to the level of student anxiety during the COVID-19 pandemic was the stress of adjusting to a modality of learning that was not originally chosen. This technological anxiety stemmed from lack of prior online learning experience, lack of technical skills, and technology barriers such as access to appropriate equipment and access to the internet (Kim & Parks, 2021).

Even before the COVID-19 pandemic, student anxiety could occur from things like test and STEM anxiety, fear of public speaking, and lack of confidence in their ability to succeed in higher education. The COVID-19 pandemic exacerbated the potential anxiety triggers. One study found that 71% of university students interviewed indicated stress and anxiety due to the COVID-19 pandemic (Son et al., 2020). In addition to the aforementioned triggers, students now face concerns about their health and those of people they care about (Madrigal & Blevins, 2021). The pandemic contributed to more financial insecurity since many people lost employment opportunities. This financial insecurity contributed to an increase in food and housing insecurity. Computer anxiety increased since higher education had to move, very rapidly, to an online platform, which was not a modality chosen by many students. All these COVID-19 pandemic consequences could cause student anxiety to increase, thus negatively affecting learning outcomes. Students with high anxiety and stress are at higher risk of leaving college (Muller et al., 2021).

The goal of this study was to identify areas where we can lessen student anxiety during a crisis. Lowering the anxiety levels of our students, should enhance and improve their educational experience during rapid, remote online learning during such a situation.

Methods

Sample. The final sample size of this study was 102 survey participants with ten interviews. Both faculty and student participants were recruited for the survey. The survey participants were offered the chance to participate in one-on-one interviews. Five faculty and five students elected to be interviewed.

There were fifty-seven faculty participants of which one third had never taught online before the COVID-19 pandemic. 40.4% were between the ages of 41 -50, with 86.1% being over the age of 41. 82.5% self-identified as being female and 17.5% self-identified as being male. Over 90% of the faculty participants are full-time instructors.

Forty-four students completed the survey and one student declined to participate. The student participants ranged in age from 18 – 62. Half of the student participants were 25 years old or younger. Over half of the students who participated were sophomores. Of the students surveyed, 42.2% had not taken an online course prior to the COVID-19 pandemic.

Measures. A mixed methodology employing both quantitative surveys and qualitative interviews was used to collect responses from participants to answer the research questions. Data was collected using two surveys which were adapted from published surveys on learning effectiveness during the COVID-19 pandemic, the student perception (Baczek, et al, 2021) and the top twenty questions to include in distance learning survey for teachers (QuestionPro, n.d.). The result of merging these two instruments was a survey that collected data to draw conclusions for the purpose of this study.

One survey of twenty questions was distributed to faculty participants. A similar survey was distributed to student participants after adjusting the twenty questions to reflect student experience. The questions were chosen for their ability to assess the educational experience faculty and students had during the COVID-19 pandemic, as well as to ascertain their satisfaction with higher education during the crisis.

A phenomenological approach was selected for the qualitative portion of the research. This approach was appropriate as it allowed for data to be collected from the lived experience for individuals who experienced the same phenomenon. In this study, data was collected about the perceptions of the efficacy of online learning during a crisis. Review of the participants' answers to the interview questions revealed themes in how students and faculty perceived their experiences in higher education during the COVID-19 pandemic and was used to reinforce the findings of the quantitative surveys. Using the quantitative survey questions as a guide, a thirteen-question interview protocol was developed to deepen knowledge about participants' experiences. Questions included in the interview process asked student and faculty participants about the quality of teaching during the COVID-19 pandemic.

Results

Faculty Sources of Anxiety. The faculty members interviewed shared similar thoughts and experiences about their level of training and preparedness to transition face-to-face courses to a synchronous modality. One faculty member shared that prior to the Spring 2020 semester, no one had any real formal training on synchronous online teaching. Faculty members had to learn new technologies and were not offered advice on what would work best pedagogically in the new learning environment. One faculty member stated, “there was a big, gaping hole in terms of synchronous teaching resources.” “It was sort of learn as you go.”

Faculty members with prior experience in asynchronous teaching reported having been through a certification process with a focus on use of technology but not on online pedagogy. The faculty members who were interviewed reported that at the start of the COVID-19 pandemic faculty who had never taught online before were permitted to teach online without full e-learning training certification. There was no time to train them in the rapid transition period. It was “slapping a band-aid on the situation” by allowing those with no training to teach online. One faculty member interviewed who had never taught online before the COVID-19 pandemic stated that during the summer of 2020, she participated in an online certification training with hundreds of other faculty members. “All of us were just shoved through.”

The shift to online learning was a dramatic shift for those colleagues who had not taught online previously. The faculty interviewed reflected that in terms of pedagogy, how you teach online is vastly different than how you teach face-to-face. Two weeks was simply not enough time to get faculty prepared. Time was very much a factor. Faculty interviewed do acknowledge that over the COVID-19 pandemic more training was developed and offered. However, the training continues to be predominantly technology focused instead of on pedagogy. One adjunct faculty member who has been teaching online well before the COVID-19 pandemic stated that the adjunct faculty members “were not well trained at all on any features of these systems.” Adjunct faculty members who have full-time jobs did not have the time or opportunity to get adequate training in the two-week transition period. The stress of the rapid transition and the anxiety from feeling unprepared and trained, caused a “kind of distaste for online teaching.”

The survey data supported the difference in feeling properly trained and prepared to teach online between those that faculty who had taught online previously to those who had not (see Table 1). Those that had previously taught online reported feeling better trained and prepared ($M=3.61$ vs. $M=2.32$, $t(55)=3.98$, $p<.001$, $d=1.12$), and enjoying the remote experience compared ($M=3.29$ vs. $M=2.42$, $t(55)=2.59$, $p=.01$, $d=0.73$). Faculty who had previously taught online also felt significantly stronger that online learning during the crisis continued at a higher quality level than those who had not previously taught online ($M=2.53$ vs. $M=1.89$, $t(55)=2.03$, $p=.05$, $d=0.57$).

Regardless of whether faculty had taught online prior to COVID, stress levels were high ($M=3.95$ vs. $M=3.50$, $p=.22$). Faculty also felt only moderate satisfaction in the support and assistance offered by the college or university for the remote crisis situation and this was also regardless of prior teaching experience, ($M=3.61$ vs. $M=3.11$, $p=.15$).

Table 1. Average Scores for Faculty Survey Questions Between Faculty with and Without Prior Online Teaching

	Prior Online Teaching	N	Mean	SD
I felt properly trained and prepared to teach online during the COVID-19 pandemic? ***	No	19	2.32	1.11
	Yes	38	3.61	1.17
I was satisfied with the technology and software I was using for online teaching.	No	19	3.32	0.95
	Yes	38	3.82	1.11
My college or university has been helpful in offering the resources needed to teach from home.	No	19	3.11	1.1
	Yes	38	3.61	1.28
I found teaching remotely during the COVID-19 pandemic stressful.	No	19	3.95	1.18
	Yes	38	3.5	1.33
Learning remotely during the COVID-19 pandemic was stressful for students.	No	19	4.16	0.9
	Yes	38	4.13	0.99
Students were satisfied with my teaching during the COVID-19 pandemic.	No	19	3.74	0.81
	Yes	38	3.79	0.81
I enjoyed teaching students remotely. **	No	19	2.42	1.17
	Yes	38	3.29	1.21
Students learned as much online during the COVID-19 pandemic as they did before the switch to remote learning. *	No	19	1.89	1.15
	Yes	38	2.53	1.08
Face-to-face communication is important while teaching remotely. *	No	19	4.21	1.03
	Yes	38	3.55	0.89
Students were satisfied with their learning experience during the COVID-19 pandemic.	No	19	2.47	0.84
	Yes	38	2.87	0.99
I became a better teacher from my teaching experience during the COVID-19 pandemic. ***	No	19	3.00	1.29
	Yes	38	3.82	0.87

* $p < .05$; $p < .01$; $p < .001$

Student Sources of Anxiety. In general, students felt that they were well supported by the college or university. This was supported by the survey findings. Students reported high levels of satisfaction with the support they received from the college or university with average scores of $M=4.40$ for students with prior online learning experience and $M=4.16$ for students with no prior online learning experience. This was also higher than faculty’s reported satisfaction with support which was more moderate ranging from $M=3.11$ to $M=3.61$ (see Table 2).

Students survey responses demonstrated moderate levels of satisfaction and enjoyment with learning online. In general, students with prior online learning experience felt more satisfaction with online learning during COVID ($M=4.20$ vs. $M=3.32$, $t(42)=2.34$, $p=.02$, $d=0.74$). Similarly, there was a trend where students with prior online learning experience enjoyed online learning during COVID more so than their counterparts, but this was not significant ($M=3.91$ vs. $M=3.21$, $t(42)=1.79$, $p=.08$, $d=0.55$).

While there was satisfaction with the support received by the college and university, and moderate satisfaction and enjoyment in learning online, students reported clearly that they felt frustration with their faculty while learning online. One of the sources that emerged from several students was the anxiety they detected in their faculty. For example, while discussing their dissatisfaction with their online learning experience, one student summarized that they felt “It’s not the college, it’s the professors.” Students reported a poor response time by faculty and felt that this was discouraging,

Table 2. Average Scores for Student Survey Questions Between Students with and Without Prior Online Learning Experience

	Prior Online Learning Experience	N	Mean	SD
Rate the effectiveness of e-learning in terms of increasing knowledge.	No	19	3.53	1.07
	Yes	25	4.04	0.84
In general, rate the effectiveness of your instructors' ability to teach online.	No	19	3.79	0.98
	Yes	25	4.04	0.68
Rate the effectiveness of your college or university in offering resources to help you learn online.	No	19	4.16	0.76
	Yes	25	4.4	0.82
Rate the effectiveness of traditional face-to-face learning in terms of increasing knowledge.	No	19	4.32	0.82
	Yes	25	4.44	0.77

Rate the quality of your experience in learning during the COVID-19 pandemic. ***	No	19	3.05	1.18
	Yes	25	3.96	0.84
Rate your access to technical tools and the Internet during the COVID-19 pandemic.	No	19	4.37	0.68
	Yes	25	4.6	0.65
In general, rate your instructors' communications during e-learning during the COVID-19 pandemic.	No	19	3.79	1.03
	Yes	25	3.96	1.02
In general, rate your instructors' communication during traditional face-to-face learning.	No	19	4.42	0.61
	Yes	25	4.08	1
Rate how much you enjoyed e-learning classes during the COVID-19 pandemic.	No	19	3.21	1.4
	Yes	25	3.92	1.22
Rate your overall satisfaction with online learning during the COVID-19 pandemic. *	No	19	3.32	1.38
	Yes	25	4.2	1.04
Rate your satisfaction with synchronous online learning during the COVID-19 pandemic.	No	19	4.11	1.73
	Yes	25	4.8	1.04
Rate your satisfaction with asynchronous online learning during the COVID-19 pandemic. *	No	19	3.74	1.28
	Yes	25	4.64	1.25
Based on your experience in learning during the COVID-19 pandemic, which now is your preferred modality for taking college courses?	No	19	3.05	1.51
	Yes	25	3.72	1.1

* $p < .05$; *** $p < .001$

especially by the newly online students. Students reflected a feeling of faculty becoming disengaged where it appears to students that “the interest to teach was almost lost.” Little interaction with

instructors and slow communication response rates were observed. One student said he quit school and moved home because he stated, "I can't sit in a dorm room for twenty-four hours with no interaction with my professor or classmates". Overall, the students found that the communication from the college was clear.

Discussion

We sought to explore the anxieties experienced by both students and faculty during the COVID-19 pandemic and the reported impact on the effectiveness of teaching and learning. The literature reflects clearly that anxiety can inhibit learning (Cooper, et al., 2018; Vitasari, et al., 2010). Understanding the sources of anxiety during a crisis like COVID, could help universities better prepare in the future.

In this study, faculty reported that their lack of preparation for teaching online was a significant source of anxiety. This was less so for those with past online teaching experience. In addition, faculty did not feel strongly supported by the college or university. Students identified a sense of disengagement from their faculty that seemed to have stemmed from the faculties distaste for teaching online. This led to lower enjoyment and satisfaction for students. These findings suggest that colleges and universities should continue to support students as they did during COVID. Students were satisfied with the institution's level of support. However, helping faculty be better prepared for teaching online and helping them find ways to enjoy teaching online could be improved. This may not only have benefit for the faculty experience but also for the student experience as students seem to identify and react to faculty's negative experiences while teaching online.

Limitations and Future Research. A small sample of students and faculty participated in the interviews. If the sample was limited to a specific type of course and/or a specific type of educational institution, the results may not generalize to disciplines or to universities. Also, participants who had a desire to express their negative experiences may have been more likely to volunteer for the interviews.

Future research could address this limitation with a larger sample. In addition, an important next step in the research would be to inquire about how students and faculty feel the challenges to online teaching during COVID could be best addressed. This would help to strengthen the recommendations to universities.

Future research could be done to evaluate the impact of increased college support for adjunct faculty. The increased use of adjunct faculty by higher education lowers the amount of the institute's budget for faculty hired. If adjunct faculty feel unappreciated and unsupported, it makes sense that lack of support would negatively impact the quality of their teaching which impairs student learning.

Conclusion

This study was conducted on a small population of faculty and students. While the results are in alignment with literature around the impacts of stress and anxiety on learning, the study could be

enlarged in the future to capture a wider perspective of faculty and students. The study could be expanded to observe how offering more resources and support to faculty impacts the effectiveness of education during a crisis.

This study revealed that during the COVID-19 pandemic, the impact of anxiety and stress on faculty diminished the students' experience. Even before the pandemic, studies have shown teachers to report higher stress than those in other professions (Will, 2022). Students of highly anxious teachers can perform worse academically, particularly in subjects like math, and have more negative feelings and behavior. (Will, 2022). Future studies can collect data to identify where areas of faculty anxiety can be lowered which should increase teaching effectiveness.

References

- Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., & Woźakowska-Kapłon, B. (2021). Students' perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students. *Medicine, 100*(7).
- Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education, 32*(3), 421-439.
- Beilock, S. L. (2008). Math performance in stressful situations. *Current Directions in Psychological Science, 17*(5), 339-343.
- Brewe, E., Traxler, A., & Scanlin, S. (2021). Transitioning to online instruction: Strong ties and anxiety. *Physical Review Physics Education Research, 17*(2), 023103.
- Cooper, K.M., Downing, V.R., & Brownell, S.E. (2018). The influence of active learning practices on student anxiety in large-enrollment college science classrooms. *International Journal of STEM Education, 5*(1), 1-18.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson Education, Inc.
- Dobson, C. (2012). Effects of academic anxiety on the performance of students with and without learning disabilities and how students can cope with anxiety at school (Unpublished master's thesis, Northern Michigan University).
- Ezarik, M. (June 21, 2021). What worked and what didn't for college students learning through Covid-19. *Inside Higher Ed*. <https://www.insidehighered.com/news/2021/06/21/what-worked-and-what-didn%E2%80%99t-college-students-learning-through-covid-19>
- Ezarik, M. (June 23, 2021). What supports college students need in the fall and beyond. *Inside Higher Ed*. <https://www.insidehighered.com/news/2021/06/23/what-supports-college-students-need-succeed-fall-and-beyond>
- Karakose, T. (2021). Emergency remote teaching due to COVID-19 pandemic and potential risks for socioeconomically disadvantaged students in higher education. *Educational Process: International Journal, 10*(3), 53-61. doi: <https://doi.org/10.22521/edupij.2021.103.4>
- Keckojevic, A., Basch, C. H., Sullivan, M., & Davi, N. K. (2020). The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, cross-sectional study. *PLoS one, 15*(9), e0239696.
- Kim, S. H., & Park, S. (2021). Influence of learning flow and distance e-learning satisfaction on learning outcomes and the moderated mediation effect of social-evaluative anxiety in nursing

- college students during the COVID-19 pandemic: A cross-sectional study. *Nurse Education in Practice*, 56, 103197.
- Lackey, K. (2011). Faculty development: An analysis of current and effective training strategies for preparing faculty to teach online. *Online Journal of Distance Learning Administration*, 14(4), 8.
- Levine, D. (June 8, 2018). The many ways anxiety affects those who suffer from it. *U.S. News and World Report*. <https://health.usnews.com/wellness/mind/articles/2018-06-08/the-many-ways-anxiety-affects-those-who-suffer-from-it>
- Madrigal, L., & Blevins, A. (2021). "I hate it, it's ruining my life": College students' early academic year experiences during the COVID-19 pandemic. *Traumatology*.
- Marian, S., Costantini, G., Macinga, I., & Sava, F. A. (2023). The dynamic interplay of anxious and depressive symptoms in a sample of undergraduate students. *Journal of Psychopathology and Behavioral Assessment*, 45(1), 150-159.
- Mayo Clinic. (n.d.). *Understanding mental health: Anxiety*. https://careinfo.mayoclinic.org/mh-anxiety?mc_id=google&campaign=18451827493&geo=9012138&kw=anxiety&ad=626043092858&network=g&sitetarget=&adgroup=142809945340&extension=&target=kwd-10456081&matchtype=b&device=c&account=7470347919&placementsite=enterprise&gclid=EA1aIQobChMIqb-Il6jc_wIVQ6qGCh0k2A6aEAAAYASAAEgKmmfD_BwE
- Müller, E., Hillemacher, T., & Müller, C. P. (2021). Kratom use for depression/anxiety self-management: Challenges during the COVID-19 pandemic—A case report. *Heliyon*, 7(5), e07039
- National Institute of Mental Health (2021). Anxiety disorders. https://www.nimh.nih.gov/health/topics/anxiety-disorders#part_2220
- National Institute of Mental Health (2021). Generalized anxiety disorder: when worry gets out of control. <https://www.nimh.nih.gov/health/publications/generalized-anxiety-disorder-gad>
- Nelson, J. M., & Harwood, H. (2011). Learning disabilities and anxiety: A meta-analysis. *Journal of Learning Disabilities*, 44(1), 3-17.
- Pascoe, M., Bailey, A. P., Craike, M., Carter, T., Patten, R., Stepto, N., & Parker, A. (2020). Physical activity and exercise in youth mental health promotion: A scoping review. *British Medical Journal- Open Sport & Exercise Medicine*, 6(1), e000677.
- Peltier, J. W., Chennamaneni, P. R., & Barber, K. N. (2022). Student anxiety, preparation, and learning framework for responding to external crises: The moderating role of self-efficacy as a coping mechanism. *Journal of Marketing Education*, 44(2), 149-165.
- Pomerantz, J., & Brooks, D. C. (2017). ECAR Study of Faculty and Information Technology, 2017. *EDUCAUSE*.
- QuestionPro (n.d.). Top 20 questions to include in distance learning survey for teachers. <https://www.questionpro.com/blog/distance-learning-survey-for-teachers/>
- Smith, T. F. & Capuzzi, G. (2019). Using a mindset intervention to reduce anxiety in the statistics classroom. *Psychology Learning & Teaching*, 18(3), 326-336.
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, 22(9), e21279.
- Vitasari, P., Wahab, M.N.A., Othman, A., Herawan, T., & Sinnadurai, S.K. (2010). The relationship between study anxiety and academic performance among engineering students. *Procedia-Social and Behavioral Sciences*, 8, 490-497.
- Wakui, N., Abe, S., Shirozu, S., Yamamoto, Y., Yamamura, M., Abe, Y., ... & Kikuchi, M. (2021). Causes of anxiety among teachers giving face-to-face lessons after the reopening of schools during the COVID-19 pandemic: a cross-sectional study. *BMC Public Health*, 21(1), 1-10.

- Wang, X., Hegde, S., Son, C., Keller, B., Smith, A., & Sasangohar, F. (2020). Investigating mental health of US college students during the COVID-19 pandemic: Cross-sectional survey study. *Journal of medical Internet research*, 22(9), e22817.
- Will, M. (2022). Stress, burnout, and depression: Teachers and principals are not doing well, new data confirm. *Education Week*.
- Woods, S. J., Michaelides, G., Inceoglu, I., Hurren, E. T., Daniels, K., & Niven, K. (2021). Homeworking, well-being and the Covid-19 pandemic: A diary study. *International Journal of Environmental Research and Public Health*, 18(14), 7575.

The Influence of Accessing Disability Services on the Academic Outcomes of Students with Disabilities in Higher Education

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Students with disabilities have been a growing population on college and university campuses for the past three decades (Abes & Wallace, 2018; Belch, 2004; Burchell, 2021; Keim, et al., 1996; Peña, 2014; Saia, 2022; Vaccaro et al., 2015). The number of undergraduate students identified as being disabled in 1986 was 10.5% (Department of Education, 1991) and that number increased in 2015 to 19.0% (Department of Education, 2019). Although students with disabilities are enrolling in colleges and universities, issues with retention and graduation persist. Only 2.5% of 25-34-year-olds with a disability having earned a bachelor's degree (Department of Commerce, 2015). Disability accommodations are intended to remove barriers and increase access, but there is little research examining the relationship between student accommodations and academic performance (Parsons et al., 2021).

The challenges to retention and graduation that disabled students encounter are not well understood (Belch, 2004; Herbert, et al., 2014; Wessel et al., 2009), however, research indicates that these challenges are rooted in institutional issues (Evans et al., 2017). For example, a campus climate can intentionally or unintentionally perpetuate biased policies, procedures, and practices that disadvantage disabled students (Chiang, 2020; Saia, 2022; Zehner, 2018). Further research is needed to learn more about transitional elements that impact a student's academic success (Hong, 2015; Troiano, 2003). While the influence of specific accommodations has been examined (Lindstrom et al., 2021; Slaughter et al., 2020), the topic of disabled students and formal connections with disability services on a higher education campus has not been extensively researched.

Many challenges to disabled students in higher education stem from the institutional systems that directly impact requesting and receiving disability services. Although public institutions of higher education are required by the Americans with Disabilities Act and Amendments Act and Section 504 of the Rehabilitation Act to provide access to students with disabilities (DOJ, 2009), there is no rollover of accommodations from the secondary to post-secondary setting (Griffen & Tevis, 2017). This lack of information sharing means that a new process must be undertaken at the higher education-level for institutions to identify students needing accommodations and determine the appropriate support services (Evans et al., 2017; Zehner, 2018). However, many students are unaware there is a new need for the college or university to make an accommodation determination for services to be provided. Students that have relied upon the parents, guardians, and teachers in their life to support the obtaining accommodations are at a particular disadvantage, as they are now being expected to take on this process themselves. The level of personal responsibility taken on by disabled students increases drastically as they transition from high school

to college and the requirement to obtain services for themselves is a key component of these new responsibilities (Adams & Proctor, 2010; Belch, 2004; Hong, 2015).

In addition to accessing services, the institutions provide a new challenge to students with disabilities as disability services in the post-secondary setting are focused on access, not success (Belch, 2004; Herbert, et al., 2014; Wessel et al., 2009). Disability offices and departments seek to proactively create an accessible institution, and when that has not occurred or is not possible, use accommodations to remove barriers. Disabled students seeking to address academic concerns, must largely rely upon services outside of disability services to address their academic issues, a process different than what they would have experienced in high school.

Nearly 20.0% of college students are disabled and despite having access to institutions of higher education, issues with academic success, retention, and graduation persist (Belch, 2004; Hong, 2015). The purpose of the study is to examine disabled students' engagement with university disability services and its influence on student achievement outcomes. The research questions guiding this study are:

- When are disabled students having their initial connection with disability services?
- How does disabled students' academic achievement change over the academic year?
- What influence does connection with disability services have on a disabled students' grade point average over the academic year?

By addressing these research questions, this study aims to support the work of higher education administrators as they work to support disabled students on their campuses.

Literature Review

It is important to note, the language selected and used throughout this paper is intentional and meaningful. As it relates to social identities, the American Psychological Association (APA) advocates for the use of person-first language with the aim of considering the whole, intersectional person and not reducing someone to one aspect of identity (Dunn & Andrews, 2015). Conversely, disability scholars and advocates promote identity-first language that acknowledges and embraces the salience of disability identity (Dunn & Andrews, 2015). Identity-first and person-first language are used interchangeably to acknowledge the value of both types of language.

Secondary and Postsecondary Education

Public institutions of higher education are required by federal law to provide access to students with disabilities (DOJ, 2009). Disabled students must avail themselves of the disability services department on their campus and participate in an interactive process to access accommodations that remove barriers at their institution of higher education. Colleges and universities cannot gather disability identity information in the admissions process, per federal guidelines (Herbert et al., 2014). The reliance on self-disclosure to disability services can limit both student access and

research access to collect and analyze information about disabled students in the postsecondary setting (Kroeger & Kraus, 2017; Wilczenski & Gillespie-Silver, 1992).

Guidelines for K-12 schools are different than those for higher education. The (Individuals with Disabilities Education Act) IDEA requires K-12 schools to ensure access and success for all children, including students with disabilities (DOJ, 2009). The primary difference between the implementation of the IDEA in a K-12 setting and the ADA in a postsecondary setting is the focus on success as compared to access. Students with disabilities in the postsecondary setting are ensured access and have responsibility for their own academic success. College students with disabilities may have used accommodations during their K-12 experience under the direction of the IDEA but may not be requesting these accommodations in their higher education setting.

The Department of Education in 2015 estimated that the proportion of disabled college students reached nearly 20 percent (DOE, 2015). The needs of these historically marginalized students have not been extensively examined, nor has the influence of disability services on student higher education outcomes, such as retention, achievement, and graduation (Fleming et al., 2018; Hong, 2015; Keim et al., 1996; Troiano, 2003).

Research has indicated that disabled students experience more complicated transitions to college than their non-disabled peers (Adams & Proctor, 2010). Disabled students are navigating an added dimension of transition related to access. Traditional age college students with disabilities report a desire to start fresh and have an experience different than high school special education or disability services (Hong, 2015). At the same time, disabled students may not realize the coexistence of both increased autonomy and responsibility in the postsecondary setting (Belch, 2004). These added challenges provide for a more complex transition, which may be impacting student outcomes in currently unknown ways.

Disability Services in Higher Education

There is little known about the influence that the initial connection to disability services has on higher education student outcomes. While it is not inconsequential, solely relying on registration or connection information fails to examine the deeper, institutional factors that impact a student's connection with campus resources (Fleming et al., 2018). The experiences of disabled students will not always be captured by disability services, especially if the campus culture deters a disabled student from entering into a relationship with on-campus resources. Factors and variables that contribute to a student's interest and ability to connect with disability services are influenced by stigma and ableist perspectives (Belch, 2014; Herbert, et al., 2014). Additional information about the influence a connection with disability services has on students; experience may help higher education institutions better support these students' outcomes.

When disabled students connect with disability services an accommodation determination is made and students can begin using accommodations to remove barriers. Until colleges and universities are universally accessible, accommodations must be used to retroactively create access (Kroeger & Kraus, 2017). Even though accommodation determination and implementation are the primary role of disability services there are factors beyond accommodations which impact retention and graduation rates of students with disabilities (Adams & Proctor, 2010; Belch, 2004; Wessel, et al.,

2014). More specifically, the transition from high school to college, self-determination, and faculty attitudes concerning ableism are continually referenced in the research regarding disabled students (Hong, 2015; Troiano, 2003). Finally, factors that influence the general population of college students, such as social integration, institutional affinity, and involvement, are similarly impactful for disabled students (Belch, 2004; Hong, 2015).

Call for Examination of Higher Education Systems

Faculty attitudes, advisor understanding of academic plans and intersecting disability experiences, and the philosophy and framework of disability service professionals are systemic issues that require examination (Belch, 2004; Herbert et al., 2014; Hong, 2015; Troiano, 2003). Disabled students report being deterred or intimidated by faculty, which negates the accommodation identification and implementation process (Hong, 2015; Peña, 2014). Furthermore, students with disabilities have to negotiate the campus climate and individual faculty attitudes anew each semester (Hong, 2015). Connection to disability services and accommodation implementation is not a stagnant process or experience for disabled students. Within the same semester a disabled student could have positive and negative faculty experience because each instructor has unique classroom management styles and personal biases. Accommodation determination serves to remove existing barriers, but accommodations alone will not address all aspects of college and university systems, structures, and faculty that may be problematic.

There are many gaps in research regarding students with disabilities (Belch, 2004; Herbert et al., 2014; Hong, 2015; Peña, 2014; Troiano, 2003). Other historically marginalized populations have been the focus of research specifically concerning access, retention, and graduation (Fleming et al., 2018). Scholarly research consistently cites the need for further examination of the disabled college student experience. Two decades of articles in top tier higher education journals included only one percent of articles regarding disabled students (Peña, 2014). There is a marginalization of disabled students in higher education both on-campus and in the research. More specifically, there are gaps in the examination of institutional change, organizational climate, policy, and theory development concerning disabled students (Troiano, 2003). Before these gaps can be filled, it is necessary to examine the connection between registering with disability services and academic success.

Method

The data for this study was provided by the institutional research office of a regional comprehensive four-year university in the Southeastern United States. A portion of the data requested had initially been collected by the university's office of disability services as part of typical interactions with students requesting services. The remainder of the data was routinely collected by the university's office of institutional research. The specific data requested for this study included students' names, date of initial connection meeting with disability services (if the meeting was held in all 2019), grade point average for Fall 2019 and Spring 2020, gender, race, class level, and in and out of state residency. Included in the sample were undergraduates ranging from first-year through senior year students, along with transfer students. Graduate students were not included in the sample due to the low number of registered graduate students. This data was selected for the study to provide the researchers with a cohort of students that could be tracked over the course of the same year, a particularly important factor given that Spring 2020 included

the beginning of the pandemic and a subsequent campus shutdown. Focusing on a single year allows for the potential influence of the pandemic to be held constant across the entirety of the sample. In total, the sample included 163 students with disabilities.

Data Analysis

The data was analyzed in IBM SPSS Statistics 28.0.1.1. and focused on the analysis of three groups: all students, first-year students, and upper-class students (sophomore-senior). First, the means of student GPA outcomes for Fall 2019 and Spring 2020 semesters for all three respective groups was examined. This data was separated by date of students' initial connection meeting which was dichotomized into summer and fall groupings. The summer group had a connection meeting ranging from June 2019 to August 2019, and the fall group had a connection meeting ranging from September 2019 to December 2019. Following the examination of descriptive statistics, correlations were conducted to examine potential relationships between students Fall 2019 and Spring 2020 grade point averages, separated by respective student grouping.

After running the correlations, a series of multiple regressions was conducted. The multiple regressions were separated by student group, and was first run with Fall 2019 grade point average as the dependent variable and then run with Spring 2020 grade point average as the dependent variable. This resulted in a total of six multiple regressions. The independent variables included in each study included the demographic variables, as well as the time of initial connection meeting with disability services. For the analyses where Spring 2020 grade point average was the dependent variable, the Fall 2019 grade point average was also included as an independent variable. For the analyses where all students were included, the level of student was also included as an independent variable.

Results

Descriptive Statistics

The sample included a total of 163 students with disabilities. The sample was predominantly White ($n = 132$, 81.0%) and female ($n = 102$, 62.6%). Most of the sample participants were upper-class students ($n = 125$, 76.7%) and out of state students ($n = 109$, 66.9%). Finally, most students in the sample completed their connection meetings in the summer ($n = 103$, 63.2%).

The descriptive statistics indicated that for the entire sample, students had a higher Spring 2020 grade point average ($M = 3.05$, $SD = .777$) than Fall 2019 grade point average ($M = 2.85$, $SD = .918$). Students who completed summer connection meetings ($n = 103$) also had a higher Spring 2020 grade point average ($M = 3.13$, $SD = .782$) than Fall 2019 grade point average ($M = 3.01$, $SD = .897$). The students with fall connection meetings ($n = 60$) also had a higher Spring 2020 grade point average ($M = 2.92$, $SD = .756$) than fall grade point average ($M = 2.56$, $SD = .891$).

Similar outcomes were found regarding student having higher Spring 2020 grade point averages, when student level was examined. For first-year students ($n = 38$), the Spring 2020 grade point average ($M = 2.44$, $SD = .871$) was above that of the Fall 2019 grade point average ($M = 2.16$, $SD = .937$). For the upper-class student ($n = 125$) the Spring 2020 grade point average ($M = 3.24$, $SD =$

.641) was higher than the Fall 2019 grade point average ($M = 3.05$, $SD = .807$). This pattern consistently showed that students had higher grade point averages in their subsequent semester.

Correlation Outcomes

The results of the correlation analysis revealed that there was a positive relationship between Fall 2019 and Spring 2020 grade point averages for all students, $r = .631$, $p < .001$. Additionally, the first-year student Fall 2019 and Spring 2020 grade point averages were positively correlated, $r = .430$, $p = .007$. Finally, the upper-class student Fall 2019 and Spring 2020 grade point averages were also positively correlated, $r = .609$, $p < .001$. These findings indicate that while there is a relationship between the scores of students' groups between the two semesters, they are not perfect predictors of one another.

Multiple Regression Outcomes

All Students Sample Results. The first analyses results examined the outcomes for all students in the sample. The results of the multiple regression of all students with a dependent variable of Fall 2019 grade point average indicated that the model was statistically significant, $F(7,155) = 8.518$, $p < .001$, with an adjusted R^2 of .245. Within the model, first-year class level was a statistically significant predictor, $t(155) = -5.798$, $p < .001$, and the summer connection meeting was also a statistically significant predictor, $t(155) = 2.608$, $p = .010$. The results of the multiple regression of all students with a dependent variable of Spring 2020 grade point average indicated that the model was statistically significant, $F(8,154) = 15.763$, $p < .001$, with an adjusted R^2 of .422. Within the model, fall grade point average was a statistically significant predictor $t(154) = 7.781$, $p < .001$, and first-year class level was also a statistically significant predictor $t(154) = -2.730$, $p = .007$.

First-Year Students Sample Results. The next analysis examined first-year students. The results of the multiple regression of first-year students with a dependent variable of Fall 2019 grade point average indicated that the model was statistically significant, $F(4,33) = 3.456$, $p = .018$, with an adjusted R^2 of .210. Within the model, race was a statistically significant predictor, $t(33) = 2.059$, $p = .047$. The results of the multiple regression of first-year students with a dependent variable of spring grade point average indicate that the model was statistically significant, $F(5,32) = 2.693$, $p = .039$, with an adjusted R^2 of .186. Within the model, fall grade point average was a statistically significant predictor, $t(32) = 3.055$, $p = .005$.

Upper-Class Students Sample Results. The final analysis focused on upper-class students. The results of the multiple regression of upper-class students with a dependent variable of Fall 2019 grade point average indicated that the model was statistically significant, $F(4,120) = 2.995$, $p = .021$, with an adjusted R^2 of .060. Within the model, summer connection meeting was a statistically significant predictor, $t(120) = 2.793$, $p = .006$. The results of the multiple regression of upper-class students with a dependent variable of Spring 2020 grade point average indicated that the model was statistically significant, $F(5,119) = 15.150$, $p < .001$, with an adjusted R^2 of .363. Within the model, Fall 2019 grade point average was a statistically significant predictor, $t(119) = 7.856$, $p < .001$.

Discussion

The purpose of the study was to examine engagement with university disability services and disabled student retention outcomes. Approximately 20.0% of college students are disabled (Department of Education, 2019), and accessing higher education lacks value if academic success, retention, and ultimately graduation is not achieved (Wessel et al., 2009; Wilczenski & Gillespie-Silver, 1992). One of the key outcomes of this study was the positive influence that a student having a summer connection meeting with disability services had on their fall grade point average. The fall grade point average also was then shown to positively influence a student's spring grade point average. Notable differences between the experiences of first-year and upper-class students were identified and should be further examined. The average student who connected with disability services was a White, female, upper-class student from out of state who completed their connection meeting in the summer.

Additional data from future academic years may confirm the positive influence summer connection meetings with disability services had on fall grade point average. This knowledge could be used to promote and encourage students to connect with disability services prior to the start of the academic year. Similarly, this information is likely to appeal to family members, high school guidance counselors, and high school special education instructors who can reference these data points to motivate students to connect with disability services before the start of the academic year (Adams & Proctor, 2010; Belch, 2004; Hebert et al., 2014).

The improvement of the fall to spring grade point average was true for all three groups (all students, first-year students, upper-class students) examined in this study. Future research should examine what are the specific reasons for these increases on average from the fall to spring grade point averages, specifically as it relates to the behaviors of students and their experiences with campus services. This insight could be amplified for overall greater academic improvements for all students, not only those requiring support from disability services (Fleming et al., 2018). Similarly, research regarding fall to spring academic gains may help to address any potential drops that result in learning loss over the summer. While retention was not the focus of this study, there is a natural link to retention outcomes as a result of GPA and better understanding of this relationship to disability services could result in the providing of more robust services and research in the future (Herbert et al., 2014; Wessel et al., 2009).

First-Year Students

The outcomes for first-year students in this study were unique compared to the overall participants. First-year students made up 23.3% of the sample and the connection meeting date did not influence fall or spring grade point averages for this smaller group. Future years of data could help confirm if this was a 2019 anomaly or a potential theme in disability services. If a trend is identified, it would be important to learn what causes this perceived gap year in disability services for first-year students. The gap year being the first year enrolled in a college or university, yet not connected with disability services.

Higher education disability services practitioners may need to place a greater emphasis on the high school to college transition for students with disabilities (Adams & Proctor, 2010). This could be

addressed with systemic adjustments such as intentional partnerships between local K-12 school districts and the university. A path could be created for students using accommodations in the secondary setting to learn about the nuances and differences in the postsecondary experience with the aim of reducing or eliminating the disability services gap year.

Demographics

The results indicated that race influenced first-year student fall grade point average. This finding is worth further examination, as it helps to support the development of a more equitable campus environment. Additional studies expanding the research setting to multiple higher education settings may further illuminate these findings by demonstrating if the result holds across multiple campus types. Similarly, it is beneficial to examine the experiences of other historically marginalized student groups (e.g., LGBTQIA+) and determining if similar outcomes are true. This information could inform the efforts of university staff and faculty striving to positively influence the overall retention rate with a specific appreciation for the experiences of students of color, additional marginalized groups, and overall student intersecting identities.

Implications for University Administrators

University administrators can use this information to support transition and outreach efforts. The results of this study highlight the importance of connecting with disability services early on in a student's college career. The registration and connection process are not simply tasks to check off the long to-do list when transitioning to college. Disability services professionals can leverage these findings to promote early connection and accommodation determination. These findings may also encourage disability services staff to partner with institutional research and explore this correlation at their institution. These findings also support and encourage university administrators to prioritize the work of disability services offices, as these offices are shown in this study to positively influence the academic outcomes of students with disabilities.

Conclusion

The disabled student population continues to grow at colleges and universities, however, little is known about the persistence and retention of disabled students in higher education. Disabled students comprise a sizable amount of the student population in higher education and continue to navigate physical and institutional barriers throughout their higher education experiences. Increasing research regarding disabled students and learning more about institutional readiness is critical to student success, and the accommodation determination process is one of the first steps in a disabled student's college or university experience. This study demonstrates that the work of disability services on higher education campuses does benefit the academic outcomes of students with disabilities, however, this is a preliminary study in an area that requires a great deal more work to be done.

Next Steps

The findings in this study lead to a research question likely best examined with a qualitative approach. As previously discussed, the first-year student sample is small compared to the upper-

class students. It would be informative to speak with both the first-year students who chose to connect with disability services, along with the disabled students who decided not to connect with disability services. Understanding when and why a disabled student decides to connect with disability services, or not, may help to explain the deeper stories connected to these quantitative findings.

Limitations

Further data collection and analysis will provide longitudinal information and account for situational variables present in fall 2019 and spring 2020. It is necessary to note the university selected for the study was closed several days during the Fall 2019 semester and the global pandemic caused by the 2019 novel coronavirus resulted in a transition to online learning for all students in March 2020. It is also important to note that the participants were homogenous; most students who connected with disability services identify as White, female, upper-class students from out of state, completed their connection meeting in the summer.

References

- Abes, E.S. & Wallace, M.M. (2018). "People see me, but they don't see me": An intersectional study of college students with physical disabilities. *Journal of College Student Development*, 59(5), 545-562.
- Adams, K. & Proctor, B. (2010). Adaptation to college for students with and without disabilities: Group differences and predictors. *Journal of Postsecondary Education and Disability*, 22(3), 140-166.
- Belch, H. (2004). Retention and students with disabilities. *Journal of College Student Retention*, 6(1), 3-22.
- Burchell, J. (2021). *Understanding disability-related professional development in student affairs*. (28866079) [Doctoral dissertation, University of Arizona]. ProQuest.
- Dunn, D. & Andrews, E. (2015). Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *American Psychologist*, 70(3), 255-264.
- Fleming, A.R., Edwin, M., Hayes, J.A., Locke, B.D., & Lockard, A.J. (2018). Treatment-seeking college students with disabilities: Presenting concerns, protective factors, and academic distress. *Rehabilitation Psychology*, 63(1), 55-67.
- Griffin, J. & Tevis, T. (2017). Tools for moving the institutional iceberg: Policies and practices for students with disabilities. In E. Kim & K.C. Aquino (Eds.), *Disability as diversity in higher education: Policies and practices to enhance student success* (pp. 153-167). Routledge.
- Herbert, J.T., Hong, B.S.S., Byun, S., Welch, W., Kurz, C.A., & Atkinson, H.A. (2014). Persistence and graduation of college students seeking disability support services. *Journal of Rehabilitation*, 80(1), 22-32.
- Hong, B.S.S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, 56(3), 209-226.
- Keim J., McWhirter J., & Bernstein B. (1996). Academic success and university accommodation for learning disabilities: Is there a relationship? *Journal of College Student Development*, 37(5), 502-509.

- Kroeger, S. & Kraus, A. (2017). Thinking and practicing differently: Changing the narrative around disability on college campuses. In E. Kim & K.C. Aquino (Eds.), *Disability as diversity in higher education: Policies and practices to enhance student success* (pp. 216-229). Routledge.
- Lindstrom, W., Lindstrom, J., Barefield, T.T., Slaughter, M.H. & Benson, E.W. (2021). Examination of extended time use among postsecondary students with non-apparent disabilities. *Journal of Postsecondary Education & Disability*, 34(4), 297-309.
- Parsons, J., McColl, M.A., Martin, A. & Rynard, D. (2021). Accommodations and academic performance: First-year university students with disabilities. *Canadian Journal of Higher Education*, 51(1), 42-56.
- Peña, E. (2014). Marginalization of published scholarship on students with disabilities in higher education journals. *Journal of College Student Development*, 55(1), 30-40.
- Saia, T. (2022). Disability cultural centers in higher education: A shift beyond compliance to disability culture and disability identity. *Journal of Postsecondary Education and Disability*, 35(1), 17-30.
- Slaughter, M.H., Lindstrom, J.H. & Anderson, R. (2021). Perceptions of extended time accommodations among postsecondary students with disabilities. *Exceptionality A Special Education Journal*, 29(5), 1-15.
- Troiano, P. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development*, 44(3), 404-419.
- U.S. Department of Commerce, Census Bureau. (2015). Current Population Survey (CPS), Annual Social and Economic Supplement.
- U.S. Department of Education, National Center for Education Statistics. (2019). *Digest of Education Statistics, 2018* (2020-009), Chapter 3.
- U.S. Department of Education, National Center for Education Statistics. (1991). Digest of Education Statistics Retrieved from <https://nces.ed.gov/pubs91/91697.pdf>
- U.S. Department of Justice [Guide]. (2009, July). A Guide to Disability Rights Laws Retrieved from <https://www.ada.gov/cguide.htm>
- Vaccaro, A., Daly-Cano, M. & Newman, B.M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development*, 56(7), 670-686.
- Wessel, R.D., Jones, J.A., Markle, L., & Westfall, C. (2009). Retention and graduation of students with disabilities: Facilitating student success. *Journal of Postsecondary Education and Disability*, 21(3), 116-125.
- Wilczenski, F. L. & Gillespie-Silver, P. (1992). Challenging the norm: Academic performance of university students with learning disabilities. *Journal of College Student Development*, 33, 197-203.
- Zehner, A.L. (2018). Campus climate for students with disabilities. In *Evaluating campus climate at U.S. research universities: Opportunities for diversity and inclusion* (pp. 125-149). Palgrave Macmillan.

Identities, Perceptions, and Experiences of College Student Government Presidents

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More than fifty years ago, Alexander (1969) posited that students have a significant voice in U.S. higher education, with rapidly increasing influence. In 2018, Templeton et al. examined institutional decision-making, and the in/formal influence of students in the “Student Voice Index.” The authors found that student government presidents were largely white- and men-identified, and that over half reported feeling very or extremely influential to effect change on campus (Templeton et al., 2018). The authors posited that engagement and relationships between student government presidents and institutional governing boards, as well as with senior student affairs officers, were of importance in higher education (Templeton et al., 2018).

Previous studies on student government presidents reveal mixed demographic results, including Templeton et al. (2018) and Lozano (2020), both surveying student government presidents in the past five years (see Table 1, Table 2). Specifically, data from Templeton et al. (2018) was generated

Table 1. Previous studies’ student racial demographics

Race/Ethnicity	Lozano (2020) <i>n</i> = 218	Templeton et al. (2018) <i>n</i> = 203
Asian or Pacific Islander	4.1 %	8.8 %
Black or African American	7.8 %	21.1 %
Hispanic or Latino(a)*	5.5 %	8.7 %
Multiracial	5.5 %	
Native American or Alaskan Native	0.5 %	2.9 %
White or Caucasian	54.1 %	63.2 %
Other	1.8 %	8.2 %**
Prefer Not To or Did Not Disclose	20.7 %	4.1 %

Naming of “Hispanic or Latino(a)” pulled from Lozano’s (2020) study.

In Templeton et al. (2018), “Other” included Asian American, Bi-Racial, Malaysian, Mexican, Middle Eastern, Palestinian, Persian, South East Asian, and West Indian.

Table 2. Previous studies capture student government presidents' gender and sex identities

Gender or Sex Identity	Lozano (2020) <i>n</i> = 218	Templeton et al. (2018) <i>n</i> = 203
Female, Woman	31.2 % (female)	42.8 % (women)
Male, Man	46.8 % (male)	55.5 % (men)
Non-Binary		1.2 %
Other	0.9 %	
Prefer Not To or Did Not Disclose	21.1 %	

from 203 student government presidents; Lozano (2020) surveyed 218 student government presidents from 45 states and Washington, D.C., and in particular looked at institutions with and without student trustees. To expand on these studies, and to further understand who college student government presidents are today, a survey was deployed that asked the identities, perceptions, and experiences of those who were serving as president of their student government, student body, or student association during the 2021-2022 academic year. Data from 218 student government presidents are explored for the purposes of this study, and this article responds to the following research question: *What are the experiences, perceptions, and identities of college student government presidents who served during the 2021-2022 academic year?*

Literature Review

Student government and student body presidents in particular have been researched in different ways over time, and the presidency warrants investigation for several reasons. Student government presidents maintain significant influence and power in higher education (Goodman, 2021a; May, 2010; Miles, 2010, 2011; Miles et al., 2008). Student government presidents are often afforded heightened access to administrators, campus committee work, and decision-making processes in campus and university governance (Goodman, 2021a; Goodman et al., 2021; Kuh & Lund, 1994; Laosebikan-Buggs, 2006; Miller & Nadler, 2006; Smith et al., 2016; Templeton et al., 2018), as well as leadership and skill development (Goodman, 2021a; Smith, 2018). This literature review illuminates student government and representation, as well as notable mentions of identity and demographic identifiers of those serving.

Student Government and Student Body Representation. In its current form, student governments became more established in the United States in the early 1900s to provide order in college life (Laosebikan-Buggs, 2006; Miller & Nadler, 2006), and student body presidents gained a greater voice in campus governance in the 1960s (Broadhurst, 2019). Student government is a way for students to participate in institutional governance, and also operate as an active citizen of the campus community (Murdock, 2006). Further, student government as an elected, representative body advocates for students and student groups on campus (Laosebikan-Buggs, 2006). For example, Broadhurst (2019) presented a historical case study about the experiences of two former student

body presidents who served their campuses by protesting the Kent State University shootings in 1970: Tommy Bellow from the University of North Carolina-Chapel Hill and Cathy Sterling from North Carolina State University. As a result of their formal, positional leadership roles, both students maintained visibility on campus that enabled them to reach a greater number of students (Broadhurst, 2019).

Next, Miles (2010) studied the experiences of five community college student government presidents, and found that these students demonstrated pride in their institutions. Presidents worked closely with campus administrators and members of the community, including the college president, senior student affairs officers, and the director of housing (Miles, 2010). Student government leaders are involved on campus in multiple ways, including as student trustees of university boards, for example (Lozano, 2016). In states like Florida, the role of student government president allots a student trusteeship to the university board (Lozano & Hughes, 2017). However, students on university boards who are not there through student government channels have reported a high sense of pressure from their student leader peers (Lozano & Hughes, 2017). Involvement in activities such as student government, among others, positively predicted whether students envisioned themselves as a leader; yet, previous student government experience was not a significant predictor of “the perceived importance of leadership during or after college” (Shertzer et al., 2005, p. 101). The authors posit this may be the case due to student government leaders already possessing knowledge and leadership abilities (Shertzer et al., 2005).

Student Government and Student Identity/ies. In U.S. contexts, it is understood that one election does not mean representation and equity for all who share the identity/ies of the elected (e.g., the elections of Barack Obama and Kamala Harris, the candidacy of Pete Buttigieg). However, there is still great importance in the election(s) of individuals with minoritized identities (e.g., Goodman, 2022a), and specifically with regard to race, gender, sexuality, and the intersections of identity. For example, Black students in particular have been written about in different ways regarding college student government. Fries-Britt and Turner (2002) found that Black students at a predominately white institution (PWI) did not feel their campus was providing opportunities for Black students to get involved in student government, among other campus activities. Sutton and Kimbrough (2001) called for continued efforts to increase Black student participation in institutional policy spaces like student government, and nearly twenty years later, one finding in Mills’ (2020) study was (still) a lack of representation of Black or African American people on campus. In particular, participants in Mills’ (2020) study named a lack of representation in registered student organization contexts, and student government specifically. One participant in Harper’s (2009) study, DeSean, got involved in student government, among other campus governance structures as a way to present a more positive view of Black men. DeSean used this leadership in “mainstream clubs and organizations” as a way to develop relationships with white administrators who “had grown accustomed to viewing Black men as disengaged” (Harper, 2009, p. 706).

In a study about Black male undergraduate students at Historically Black Colleges and Universities (HBCUs), Harper and Gasman (2008) found that students were positioned below administrators and faculty, and specifically regarding the political risks associated with disagreements with administrators. One student government president shared about being “constantly at odds” with the student government advisor, and that it was hard for the students to lead; the participant shared, “[The advisor] really is in charge of the [student government], not those of us the students

elected” (Harper & Gasman, 2008, p. 346). Out of the twelve campuses in this study, nine were led by Black men student government presidents (Harper & Gasman, 2008). Findings in Hardaway and colleagues’ (2021) study on womyn student government presidents revealed tensions with both race and gender. One participant (Ashley) was a mother in addition to serving as student government president, and recalled her male presidential running mate suggesting that she was not capable of managing both the role of being a mother and student government president (Hardaway et al., 2021). The participant shared, “You’re expected to hold it together. You’re expected to be almost, excuse me, damn near perfect” (Hardaway et al., 2021, p. 141).

At PWIs, Workman et al. (2020) found additional challenges for women in student government, in that there was still a chilly climate and “boy’s club” that persisted in the environment (p. 44). While the previous paragraphs illuminate one subset of attention made toward racial dynamics in and missing from student government (e.g., for Black students, womxn-identified students), additional narratives have been illuminated across multiple dimensions of students’ identities. For example, Goodman (2021b, 2022b) explored the experiences of openly gay men in college student government. Visibility and representation were notable themes for gay men in student government, and there were several challenges associated with the work that involved nuances of leadership at the intersection of the identities. There are also social class considerations in the student government context. Positional leadership roles in spaces like student government require time commitments and flexibility, and at times monetary obligations (Houze, 2021). Thus, these expectations in student government illuminate a social capital needed to succeed (Houze, 2021). Success, then, is measured by students’ ability to raise money or financial support through their networks; campuses can seek solutions to increase access through this lens - identify forms of compensation (scholarships, hourly pay), and examine campaign spending (Houze, 2021). Notably, Templeton et al. (2018) found that 65.9% of student government presidents reported having some type of financial aid.

Study Context

This study brings forward data from student government presidents at 2- and 4-year U.S. degree-granting postsecondary institutions. In particular, respondents confirmed they were serving as student government president during the 2021-2022 academic year.

Methods. This survey opened November 2021, closed January 2022, and consisted of 35 voluntary questions. Recruitment involved posting on social media sites (e.g., Facebook, Instagram, LinkedIn, Twitter) and messages to student government advisors (e.g., via email and through the NASPA - Student Affairs Administrators in Higher Education Student Government Knowledge Community). A total of 242 surveys were started; 218 were completed and evaluated for the purposes of this article.

Once the survey closed, data were cleaned using listwise deletion and mean substitution techniques to address missingness (Reirhardt, 2019). One such technique, mean substitution, included averaging fill-in-blank numbers; if a respondent wrote “5-6” to indicate the number of times they met with the university president in a semester, the researcher changed that number to 5.5 for analysis purposes (Reirhardt, 2019). Additionally, for those who designated weekly or monthly frequencies for meeting, numerical values were assigned to those responses, known as quantizing

(e.g., weekly: 12; biweekly: 6; monthly: 3; and as needed: 1) (Johnson & Christensen, 2012). Further, as reflected below in the findings section, some write-in responses were not quantitized, but are brought forward as qualitative, verbatim descriptions. Quantitative analyses were completed using STATA.

Data analyses focused on descriptive statistics and relationships between student descriptors (e.g., straight women's perception of campus impact). The dataset included 34 variables, eight of which focused on student identity and demographics (e.g., first-generation status, gender, international student status, institutional size, institutional region, race, sexuality, and transgender identity). The remaining 28 variables focused on previous leadership experience, how student government presidents spend time in or compensation for their role, belief about the impact of their work, and perceptions of their social identities. The focus of this study is to gain deeper insight into how these student leaders understand themselves, their campus, and role in a more dynamic way by introducing multidimensional social identities as central to their work.

Researcher Positionality. Both researchers come to this work as scholar-practitioners who have worked with students in a multitude of ways as student affairs practitioners. Goodman is a former undergraduate and graduate student government president, and has been involved in supporting student governments for the past decade. He researches college student government and student body presidents, and is attuned to current events and present-day discourse about the student body presidency. Licata-Hoang is a higher education administrator and researcher with primary experiences in college student involvement and leadership development, identity development, and harm reduction. Collectively, we believe anyone can be a leader (Dugan, 2017), but understand that very few achieve the role of student government president. This is a small subset of who operates as a leader in higher education, yet their experiences are worthy of investigation and exploration.

Limitations. While this study advances what is known about student government presidents in the U.S. college experience, several limitations should be noted to contextualize the findings. The sample size is sufficient to complete statistical analyses but is small when compared to the larger higher education landscape. One undergraduate student from each campus may hold this leadership role in any given year. The National Center for Education Statistics (n.d.) listed 3,982 degree-granting postsecondary institutions in 2019-2020. This study represents roughly 5% of the undergraduate student government presidential experience. This study also excludes the investigation and reporting of graduate student government experiences. Finally, one question was omitted from analysis as it conflated university control (public vs. private), level (2-year, 4-year), and classifications (HBCU, Hispanic Serving Institution, PWI, etc.), causing respondents to submit incomplete answers. Taken together, the findings from this study complicate previous narratives of undergraduate student government leaders from a subsection of U.S. higher education.

Findings

Respondents were representative of multiple institution types (2-year, 4-year, public/private, HBCUs, Hispanic-Serving Institutions, community colleges, and religious-affiliated, among others), and located in 45 states and Washington, D.C. Respondents were located mostly in the Northeast and South, and around half were from institutions of 10,000 students or fewer (see region and size,

Table 3). Findings are organized into three sections of questions: *experiences*, *perceptions*, and *identities*. While findings from a survey such as these are more expansive than fully referenced below, future articles will explore additional nuances associated with survey questions.

Table 3. Distribution of 2021-2022 Student Government Presidents of Geographic Region and Institution Size by Percentage, n = 218

Geographic Region	Northeast CT, ME, MA, NH, NJ, NY, PA, RI, VT	23.85%
	Midwest IN, IL, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI	16.97%
	Mid-Atlantic DE, DC, MD, VA, WV	3.21%
	South AL, AR, FL, GA, KY, LA, MS, NC, OK, PR, SC, TN, TX	33.49%
	West AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY	21.1%
Institution Size	<2,500	15.6%
	2,501-10,000	34.86%
	10,001-15,000	16.97%
	15,001-20,000	6.42%
	20,001-25,000	4.13%
	25,001-30,000	5.5%
	>30,000	12.39%

Experiences. Experiences of student government presidents includes meeting frequency, committee assignments, and “work” hours. For example, on average, student government presidents designated they work approximately 24.41 hours per week. One respondent shared, “I’m not off the clock honestly.” Student government presidents noted they served on six committees as part of their role. Write-in responses included, “depends on how many require me to serve,” “more than i can count” (sic), and “all.” Of the presidents surveyed, 82.11% were compensated in some way as part of their role. Presidents were compensated with tuition remission (14.22%), a stipend or scholarship (66.51%), parking benefits (18.81%), or “some other benefit” (19.27%).

Some of the work of student government presidents consists of meeting with campus administrators, including the president, senior student affairs officer, and senior financial officer. On average, student government presidents meet with campus presidents four times per semester and senior vice presidents for student affairs 10 times per semester. Student government presidents meet much less with the senior financial officer of the institution, on average two times per semester. In open responses, student government presidents wrote that they meet with the institution president “as often as I would like and his schedule permits,” and “whenever I have a chance.” Write-in responses for meeting frequency with the senior student affairs officer included, “too regularly” and “frequently.” Consequently, some student government presidents wrote that they meet “whenever I ask to,” “as needed” (4), and “very few” with the senior financial officer.

Next, student government presidential elections are largely uncontested. Specifically, 42.66% of respondents noted that they ran unopposed in their last election. Additionally, 32.11% ran against one other person, 17.88% ran against two other people, and 7.33% ran against three or more other people. The elections themselves also lack participation, as student government presidents designated, on average, 16.84% of their study body voted in the last election. Student government presidents typically served 2.98 years in the organization prior to the presidency. For some, involvement in college student government was not a new governance experience, as 44.95% served in high school student government prior to college, and of those who were in student government in high school, 68.36% were in elected positions (30.73% of the total).

Perceptions. Student government presidents responded to several perception questions associated with various dynamics within their leadership position. Overwhelmingly, student government presidents noted that they feel they have relationships with senior administrators, in which 92.66% of respondents somewhat or strongly agreed. Next, 78.9% of respondents somewhat or strongly agree that student government is taken seriously at their institution, and 80.73% somewhat agree or strongly agree that student government has significant power at their institution. Presidents somewhat or strongly agreed (89.45%) that their “voice” and opinions were valued by administrators. Perceptions about student government feeling like a public office were mixed: 75.23% somewhat and strongly agree, 20.18% neither agree nor disagree and somewhat disagree. More than half of students reported efficacy in their roles. Men and women reported similar levels of their voice mattering to administrators with 54.59% strongly agreeing to the sentiment. Of those students, 58.76% of men and 59.18% of women strongly agree. Almost all men and women presidents agree to some level that their voice matters (94.85% of men and 91.84% of women).

Student government presidents were also asked about their perceptions related to student government as conservative or liberal. There were noticeable differences between the two: 57.8% of presidents somewhat or strongly disagreed that student government was conservative, compared to 8.72% who somewhat or strongly disagreed that student government was liberal. Conversely, 60.09% somewhat or strongly agreed that student government was liberal, compared to 7.34% who somewhat or strongly agreed that student government was conservative. Only 8.72% of presidents somewhat or strongly disagreed that student government was liberal. Said another way, presidents within the sample view the institution of student government as generally liberal.

Identities. Student government presidents were asked to respond to a series of questions regarding their social identities (see Table 4). Several cross-tabulations are not included to protect the privacy of respondents. First, 2.39% of respondents identified as transgender, and 4.79% identified as non-binary in some way (e.g., non-binary, non-binary and woman, non-binary and genderfluid). Notably, 46.89% of respondents identified as women, and slightly less (46.41%) identified as men. Considering the intersection of race and gender, 5.96% were African American/Black men, 3.21% were Asian American/Asian men, 1.83% were African American/Black and white men, and 5.05% were men with multiple racial identities. Further, 4.59% were African American/Black women, 3.67% were Asian American/Asian women, 3.21% Hispanic/Latino/a women, 1.83% African American/Black and white women, and 2.75% were women with multiple racial identities. Largely, most respondents identified as white: 25.68% men and 26.6% women.

This study also explored sexual orientation of student government presidents. One third of participants (29.82%) identified as lesbian, gay, bisexual, queer, or pansexual (LGBQP) in some way, of which 60% identified as LGB. Specifically, 30% of women identified as LGBQP, and 78.35% of men identified as heterosexual/straight. Within institutions over 25,001 students, most student government presidents were women (56.41%), white (53.84%), and straight/heterosexual (71.79%). One third (33.48%) of student government presidents identified as a first-generation college student, and slightly less (28.9%) identified as members of a sorority or fraternity (see Goodman & Arndt, 2022). Students who identified as a member of a sorority or fraternity were overwhelmingly straight/heterosexual (80.95%); less than twenty percent (19.05%) of sorority or fraternity-affiliated student government presidents identified as bisexual or gay. Very few student government presidents were international students (2.29%).

To view these demographics in another way, it is, perhaps, relevant to consider how students perceive others in student government. For example, 80.83% of white respondents somewhat or strongly agreed that they see people of the same race as them in student government. Conversely, 45.84% of African American/Black respondents, 44.44% of Asian American/Asian respondents, 50% of Hispanic/Latino/a respondents, and 51.61% of respondents who selected some form of multi-racial identity somewhat or strongly agreed they see people of the same race as them in student government. Next, 80.61% of women somewhat or strongly agree to seeing people of the same gender identity as them, compared to 53.61% of men who somewhat or strongly agree to seeing people of the same gender identity as them. Conversely, 75% of presidents who identified as non-binary in some way somewhat or strongly disagreed that to seeing people of the same gender identity as them. Regarding sexuality, 76.76% of heterosexual respondents somewhat or strongly agree they see people of the same sexual orientation as them; compared to lesbian (75%), gay (38.46%), and bisexual (40.91%) respondents. In total, 1 in 2 LGBQP respondents saw people of the same sexuality as them in student government.

Table 4. Distribution of 2021-2022 Student Government Presidents by Race and Gender by percentage, n = 218

Race/Ethnicity	African American/Black	11.48%
	African American/Black and White	3.83%

	Asian American/Asian	8.61%
	Hispanic/Latino/a	5.74%
	Hispanic/Latino/a and White	1.44%
	Middle Eastern/North African	0.48%
	Native American/Alaska Native	0
	Native Hawaiian/Other Pacific Islander	0
	White	57.42%
	Additional Race/Ethnicity	0.48%
	Additional Multiracial	9.57%
	Prefer Not to Disclose	0.96%
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Gender Identity	Agender	0.48%
	Genderqueer or Genderfluid	0.48%
	Māhū	0
	Man	46.41%
	Muxe	0
	Non-Binary	2.87%
	Questioning or Unsure	0.48%
	Two-Spirit	0
	Woman	46.89%
	Genderqueer or Genderfluid and Non-Binary	0.48%
	Non-Binary and Woman	0.48%
	Genderqueer or Genderfluid, Non-Binary, and Woman	0.48%
	Non-Binary and Additional Not Listed	0.48%
	Prefer Not to Disclose	0.48%
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Discussion

Student government, and the presidency in particular, is a form of work in higher education where students operate in a representative manner. However, it should be better understood what

“work” means for student government presidents, and who can be in and do this work. To meet with administrators and in committee capacities is an essential part of university governance, particularly shared governance (Goodman, 2021a; Kuh, 1995; Laosebikan-Buggs, 2006). It is of noteworthy observation that few students participate in the voting process. This has been documented in scholarship over the last several decades. For example, Templeton et al. (2018) found 22.1% student body voting in campus wide elections, compared to the nearly 17% reported in this study. Prior to these studies, Laosebikan-Buggs (2006) and Miles and Miller (2006) also made note of the low number of students who participate in the campus democratic process. Low voting numbers may question the legitimacy of the process of shared governance when so few participate (Laosebikan-Buggs, 2006). Tracking election participation is an important component of understanding student representation, and especially considering the power and administrator access gained by those who are elected. Schools like Louisiana State University, for example, have been tracking voter turnout for years, and in 2021, saw an increase from 10% of the study body in 2020 to 14% in 2021 (prior to COVID-19, turnout was 9% in 2018 and 10% in 2019) (Buzbee, 2022).

Low voter participation and uncontested presidential elections pose vital questions to the relevance and work of student government presidents. In particular, the high percentage of presidents who received some type of compensation means many will run either with low voter turnout, or no opponent at all, and receive access to decision-making and administrative power without competition. The number of presidents compensated in this study aligns with findings in Templeton et al. (2018), who found 79.1% of presidents received compensation of some kind. Compensation remains a contentious topic in student government, and has been debated by various student governments over time. At the University of Texas at Austin in 2021, students expressed frustration that Executive Branch members reserve \$30,000 for personal tuition stipends (Seipp, 2021). However, there are relevant implications for paying or not paying student government leaders. Considering social class (see Houze, 2021), who gets to be in student government may be contingent on who can and cannot afford time spent in this type of work.

The discourse on identity in college student government continues to evolve. While this study, as well as that of Lozano (2020) and Templeton et al. (2018), each had over 200 respondents, the identities and demographics of student government presidents are changing over time. Gone are the days where, as Alexander (1969) suggested, “student governments have even gained an image as being composed of irresponsible rah-rah boys” (p. 41). Yet, while gender dynamics position women as just slightly more represented than men, still there is work to do in both increasing diversity within the leadership position and also tracking representation over time (e.g., future studies that continue to assess and gauge the demographics of student government presidents). At Colorado College in 1941, women took greater responsibility of student activities and spaces like student government when a majority of male students were absent for World War II (Welcome to CC, 2021). Still, it would be years before many colleges and universities elected the first women, and even as recent as modern time are women of diverse racial identities being elected on many campuses. Even with increased representation, it should be further examined if student government maintains a chilly climate for elected women (Workman et al., 2020). Perhaps, the “firsts” still occurring in student government elections are a reflection of the gains needed to be made in this area.

In an op-ed, Gasman (2022) posited that the “interlocking” nature of COVID-19 and the racial justice turmoil of 2020 prompted Black students, specifically, to create change on campus by running for elected student government. Gasman (2022) wrote about Leslie Ekpe, a graduate student, who was elected president of the Graduate Student Senate at Texas Christian University in 2020. Ekpe is believed to be the first Black woman to serve in this presidential capacity at Texas Christian University (Gasman, 2022). In addition to race and gender, there is also a notable gap in the election of international students as student government president, with just over 2% in this study, and 3.5% in Templeton et al. (2018). One international student in Pepanyan and Meacham’s (2019) study talked about the need for international students in student government, and as a way to better understand the issues faced by international students. If international students make up 4.6% of students in U.S. higher education (Open Doors, 2021), then representation should be increased for this population of students.

Finally, as post-college public office is political and largely partisan, participant responses about conservative and liberal affiliations is of particular note. Although college student government presidents in this sample largely view their student government as liberal rather than conservative, this study does not describe how individual presidents themselves identify their political affiliation. Templeton et al. (2018), however, found that 34% of student body presidents identified as liberal or very liberal compared to 21.4% who identified as conservative or very conservative. It is unsurprising, then, that organizations like Turning Point USA want to influence student government elections, and in particular, engage conservative students to run and win (Ababiy, 2018; Garcia & Britton, 2019; Vasquez, 2017). The ethical considerations of that strategy are questioned and provide real implications for the student governance experience.

Implications

To continue to understand who student government officers are, data of this kind should be collected annually, with a wider scope of student government leaders. As such, there are several implications from this work, including recommendations for both practice and research.

Recommendations for Practice. Campus administrators and student government advisors may attend to the nuances associated with work and labor for student government leaders. Consider students working over 20 hours per week; administrators and leaders should ensure they are compensated for that labor. Further, equity concerns should be discussed as it relates to the amount a student works, and its effect on their coursework, academic expectations, personal commitments, and wellness. Who can be a student government president is, inevitably, contingent on those who have the financial ability and status to work in this leadership capacity. While many presidents are compensated, some students take on this role without remuneration. This especially negatively impacts undocumented and international students from running for the position, and in what ways they would—or would not—be compensated.

Meetings remain a significant component of the work of student government, and oftentimes committee membership is linked to the presidency (Goodman, 2021a); administrators and advisors can create transition consistency from one administration to the next. Prior to student government presidents completing their term, transition documents can be created to ensure elected student government presidents have an understanding of the scope involved in these meetings and

committee expectations. Further, administrators and advisors may evaluate what these meetings entail, and support students in maximizing the utility, regardless of frequency. For example, where there are a lot of meetings and committees at play, what, specifically, are students asked to do in these spaces? Who are they asked to represent? Is their voice heard? These questions should be explored by administrators and advisors annually.

Finally, findings such as sorority/fraternity life affiliation, the small number of international, transgender, and nonbinary students, and a lack of meeting frequency with the senior financial officer might also call for forged or increased relationships with departments on campus. Administrators and advisors may increase outreach to the campus International Student Services office, and better understand how international students seek out and access representative leadership in this way. Do international students see student government as representing them? How are they able to be compensated? Additionally, transgender and nonbinary students are largely underrepresented, and administrators and advisors can engage with the campus LGBTQ+ Resource Center, in which similar questions can be asked.

Recommendations for Research. While this research illuminates data associated with student government presidents specifically, the experiences, perceptions, and identities of student government Executive Branch officers across the entire cabinet, as well as on a team, are also worth investigating. As involvement in student government provides students with a foundation for working in groups and teams (Shertzer et al., 2005), learning more about student body vice presidents, student government financial officers, and even elected academic representatives will aid in a more well-rounded understanding of elected student leadership. Next, understanding who student government officers are and where they are serving is of great interest. Future research can include an examination of institutional demographics to more deeply understand what each presidency means in its greater context. Perhaps these future findings and comparisons will increase both the leadership training and development of students who fill these roles.

Lozano (2020) suggested that student trustees generally had no effect on how student government presidents viewed relationships with the campus governing board. As such, future research on college student governments might also consider the dual nature of those student government presidents who serve and who do not serve on their board of trustees, and how, if at all, these positions are intertwined. Further, representative bodies such as Residence Hall Association and sorority/fraternity councils are an additional area of leadership to be explored, and in particular, how student government presidents interact with presidents in these other representation-based roles. Politics may be at play here, as well, in that future research should examine the role of partisan groups in relation or opposition to student government agenda. Specifically, in addition to asking perceptions about student government as a whole, research might seek to understand students' political identifications.

Finally, it is worth investigating student government officers' experiences, perceptions, and identities *over time*. While many "firsts" are still happening in student government (e.g., Amaya Jernigan of West Virginia University and Kasiyah Tatem of the University of Delaware, the first Black women elected student government president at their respective institutions [Demick, 2022; West Virginia University, 2022]), it would be valuable to know emerging data and trends associated with those who are elected to these positions. Perhaps notable periods of time may be examined across

these elections (e.g., openly queer students elected during the fight for LGBTQ+ equity and equality; women student elections during the women's rights movement; and People of Color through multiple civil rights eras). It is one thing to capture this snapshot in 2021-2022; it is another to compare across years prior (including work done by Lozano and Templeton et al., as previously illuminated). What has changed over time, and in what ways? And, then, what can researchers—and practitioners—do with that information?

Conclusion

While this study captures only a snapshot of the thousands of student body presidents who exist each year, it contributes to higher education scholarship by adding to the discourse on who these students are today. Further, this study acknowledges some of the leadership nuances of this role, including labor equity, compensation, and the identities of the very students who fill these roles. Higher education administrators and student government advisors can use this broader information to (better) support students at their institutions as they more deeply understand and apply their own institutional contexts to advising and supporting.

References

- Ababiy, J. (2018, February, 2018). Ababiy: Turning point USA's history of mingling in student elections. *The Minnesota Daily*. <https://mndaily.com/218744/opinion/opcolumn2-5a776b91b6634/>
- Alexander, W. M. (1969). Rethinking student government for larger universities. *The Journal of Higher Education*, 40(1), 39-46. <https://www.jstor.org/stable/1979722>
- Broadhurst, C. J. (2019). Formal leaders and social change: A historical case study of student body presidents as activists. *New Directions for Student Leadership*, 161, 25-35. DOI: 10.1002/yd.20318
- Buzbee, J. (2022, February 5). LSU students voted at highest rate in SG elections in spring 2021. Will the trend continue? *Reveille*. https://www.lsureveille.com/news/l-su-students-voted-at-highest-rate-in-sg-elections-in-spring-2021-will-the-trend/article_36d7ec50-861d-11ec-8d62-3b8c460cae26.html
- Demick, S. (2022, April 12). Feature: Kasiyah Tatem, the university's first Black student government association president. *The Review*. <https://udreview.com/feature-kasiyah-tatem-the-universitys-first-black-student-government-association-president/>
- Dugan, J. P. (2017). *Leadership theory: Cultivating critical perspectives*. Jossey-Bass.
- Fries-Britt, S., & Turner, B. (2002). Uneven stories: Successful Black collegians at a Black and a white campus. *The Review of Higher Education*, 25(3), 315-330. <https://doi.org/10.1353/rhe.2002.0012>
- Garcia, R., & Britton, B. (2019, April 2). Turning point USA tried influencing elections at K-State. SGA just allocated them \$3,000 to host speakers on campus. *The Collegian* <https://www.kstatecollegian.com/2019/04/02/turning-point-tried-influencing-elections-at-k-state-sga-just-allocated-them-3000-to-host-speakers-on-campus/>
- Gasman, M. (2022, January 17). Black women are leading student governments with intention. *Forbes*. <https://www.forbes.com/sites/marybethgasman/2022/01/17/black-women-are-leading-student-governments-with-intention/>

- Goodman, M. A., & Arndt, A. L. (2022). Emerging data on sorority/fraternity-affiliated student government presidents. *Oracle: The Research Journal of the Association of Fraternity/Sorority Advisors*, 17(2), 51-64.
<https://scholarworks.wm.edu/oracle/vol17/iss2/3/>
- Goodman, M. A. (2022a). Former student government officers navigating multiple/minoritized identities in collegiate and post-college public office. *Journal of Campus Activities Practice and Scholarship*, 4(1), 22-32. <https://doi.org/10.52499/2022003>
- Goodman, M. A. (2022b). Openly gay undergraduate men in student government: Out, visible, and elected. *Journal of Diversity in Higher Education*, 15(6), 766-777.
<https://doi.org/10.1037/dhe0000273>
- Goodman, M. A. (2021a). Presidents as practitioners: The lived experience(s) of former student body presidents working in higher education, student affairs. *Journal of Campus Activities Practice and Scholarship*, 3(1), 34-45. <https://doi.org/10.52499/2021013>
- Goodman, M. A. (2021b). Re(-)presentation and advocacy: Openly gay men and the work of elected, undergraduate student government. *Journal of College Student Development*, 62(6), 692-707.
<https://www.muse.jhu.edu/article/850737>
- Goodman, M. A., Arndt, A., & Parks, B. (2021). Leadership is political: Social justice and college student government. In C-M. Reneau & M. A. Villarreal (Eds.), *Handbook of research on leading higher education transformation with social justice, equity, and inclusion* (pp. 141-155). IGI Global.
- Harper, S. R. (2009). Niggers no more: A critical race counternarrative on Black male student achievement at predominantly white colleges and universities. *International Journal of Qualitative Studies in Education*, 22(6), 697-712.
<https://doi.org/10.1080/09518390903333889>
- Harper, S. R., & Gasman, M. (2008). Consequences of conservatism: Black male undergraduates and the politics of historically Black colleges and universities. *The Journal of Negro Education*, 77(4), 336-351. <https://www.jstor.org/stable/25608703>
- Hardaway, A. T., Smith, T. C., & Lee-Johnson, J. (2021). Black womyn student leaders at HBCUs: The race-gendered experiences of former student government association presidents. In R. T. Palmer, D. C. Maramba, T. Ozuna Allen & A. T. Arroyo (Eds.), *Understanding the work of student affairs professionals at minority serving institutions* (pp. 135-152). Routledge.
- Hays, S. (2020). The leadership stories of students of color at dominantly white Christian institutions. *Growth: The Journal of the Association for Christians in Student Development*, 19(19), 19-34.
- Hotchkins, B. K., & McNaughtan, J. (2021). Examining the continuum of Black student leadership: From community to college and beyond. *Education Policy Analysis Archives*, 29(42), 1-19.
<https://doi.org/10.14507/epaa.29.4695>
- Houze, S. K. (2021). Social class barriers to traditional student leader roles. *New Directions for Student Leadership*, 2021, 77-84. DOI: 10.1002/yd.20423
- Johnson, B., & Christensen, L. B. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). SAGE Publications.
- Kuh, G. D. (1995). The other curriculum: Out-of-class experiences associated with student learning and personal development. *The Journal of Higher Education*, 66(2), 123-155.
- Kuh, G. D., & Lund, J. P. (1994). What students gain from participating in student government. In M.C. Terrell & M. J. Cuyjet (Eds.), *New Directors for Student Services: No. 66. Developing student government leadership* (pp. 5-17). Jossey-Bass Publishers.

- Laosebikan-Buggs, M. O. (2006). The role of student government: Perceptions and expectations. In M. Miller & D. P. Nadler (Eds.), *Student governance and institutional policy: Formation and implementation* (pp. 1-8). Information Age Publishing, Inc.
- Lozano, J. (2020). Bridging the divide: Exploring the connections between student governments and higher education governing boards. *Studies in Higher Education, 45*(9), 1878-1891. <https://doi.org/10.1080/03075079.2019.1593351>
- Lozano, J. M. (2016). The rise of student trusteeship in the United States. *American Educational History Journal, 43*(1), 93-109.
- Lozano, J., & Hughes, R. (2017). Representation and conflict of interest among students on higher education governing boards. *Journal of Higher Education Policy and Management, 39*(6), 607-624. <https://doi.org/10.1080/1360080X.2017.1377961>
- May, W. P. (2010). The history of student governance in higher education. *The College Student Affairs Journal, 28*(2), 207-220.
- Miles, J. M. (2011). Reflections of student government association leaders: Implications for advisors. *College Student Journal, 45*(2), 324-332.
- Miles, J. (2010). Experiences of community college student leaders. *The Community College Enterprise, 77*-88.
- Miles, J. M., Miller, M. T., & Nadler, D. P. (2008). Student governance: Toward effectiveness and the ideal. *College Student Journal, 42*(4), 1061-1069.
- Miller, M. T., & Nadler, D. P. (2006). Student involvement in governance: Rationale, problems, and opportunities. In M. Miller & D. P. Nadler (Eds.), *Student governance and institutional policy: Formation and implementation* (pp. 9-18). Information Age Publishing, Inc.
- Mills, K. J. (2020). "It's systemic": Environmental racial microaggressions experienced by Black undergraduates at a predominantly white institution. *Journal of Diversity in Higher Education, 13*(1), 44-55. <http://dx.doi.org/10.1037/dhe0000121>
- Murdock, J. (2006). Putting it all together: Making student government work. In M. Miller & D. P. Nadler (Eds.), *Student governance and institutional policy: Formation and implementation* (pp. 117-122). Information Age Publishing, Inc.
- National Center for Education Statistics. (n.d.). Degree-granting postsecondary institutions, by control and level of institution: Selected years, 1949-50 through 2019-20. Retrieved from https://nces.ed.gov/programs/digest/d20/tables/dt20_317.10.asp?current=yes
- Open Doors. (2021). Enrollment trends. <https://opendoorsdata.org/data/international-students/enrollment-trends/>
- Pepanyan, M., & Meacham, S. (2019). International students' alienation in a US higher education institution. *Journal for Multicultural Education, 13*(2), 122-139. DOI 10.1108/JME-10-2017-0057
- Reichardt, C. S. (2019). Pretest-posttest designs. In *Quasi-experimentation: A guide to design and analysis* (pp. 99-111). The Guilford Press.
- Seipp, S. (2021, December 24). UT student government slowly implodes. *The Austin Chronicle*. <https://www.austinchronicle.com/news/2021-12-24/ut-student-government-slowly-implodes/>
- Shertzer, J., Wall, V., Frandsen, A., Guo, Y., Whalen, D. F., & Shelley II, M. C. (2005). Four dimensions of student leadership: What predicts students' attitudes toward leadership development? *The College Student Affairs Journal, 25*(1), 85-108.

- Smith, T. C. (2018). Black student involvement: Student government association and developmental outcomes at historically Black colleges and universities. *Journal of Student Affairs, XXVII*, 43-49.
- Smith, E. A., Miller, M. T., & Nadler, D. P. (2016). Does it matter? What college student governments talk about. *Journal of Higher Education Theory and Practice, 16*(2), 46-53.
- Sutton, E. M., & Kimbrough, W. M. (2001). Trends in Black student involvement. *NASPA Journal, 39*(1), 30-40. <https://doi.org/10.2202/1949-6605.1160>
- Templeton, L., Smith, A., & MacCracken, A. (2018). *Student voice index*. NCLC: National Campus Leadership Council. Washington, D.C.
- Vasquez, M. (2017, May 7). Inside a stealth plan for political influence. *The Chronicle of Higher Education*. <https://www.chronicle.com/article/inside-a-stealth-plan-for-political-influence/>
- Welcome to CC. (2021). A timeline of CC history. From <https://www.coloradocollege.edu/basics/welcome/history/timeline.html>
- West Virginia University. (2021, March 11). Jernigan is first Black woman elected WVU student government president. *WVU Today*. <https://wvutoday.wvu.edu/stories/2021/03/11/jernigan-is-first-black-woman-elected-wvu-student-government-president>
- Workman, J. L., Hull, K., Hartsell, T., & Weimann, T. (2020). A chilly climate: Experiences of women student government association presidents. *The Journal of Campus Activities Practice and Scholarship, 2*(2), 39-54.

Establishing a Fiduciary Relationship Between Faculty and Trustees and the Enhancement of Shared Governance

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A fiduciary relationship between college and university faculty and trustees can be established because of the special circumstances surrounding their interactions. A fiduciary relationship between these two groups would be beneficial to both and would strengthen shared governance. However, the formation of their fiduciary relationship is hampered by the attitudes of mistrust and antipathy that co-exists between faculty and trustee. Fortunately, both of these attitudes can be managed so that a fiduciary relationship can blossom and shared governance will prosper.

Fiduciary Relationships

A fiduciary relationship exists between two parties “when one of them is under a duty to act for or give advice for the benefit of another upon matters within the scope of the relation” (Restatement (Second) of Torts §874, 1979). In a fiduciary relationship, there is “entrustment by one party (the beneficiary) in another (the fiduciary), an exercise of power and control by the fiduciary over the interests and well-being of the beneficiary,” and a subordination of the interests of the fiduciary in order “to pursue and protect the interests of the beneficiary” (Scharffs and Welch, 2005, pp. 164-165).

Fiduciary relationships arise in two ways: as a matter of law and as a result of special circumstances. The law of agency can create a fiduciary relationship. For example, attorneys, as agents of their clients, also serve as their fiduciaries (Agency, O. C. G. A. §10-6-1, 2018); *Ikon Office Solutions, Inc. v. Kuglar*, 2013). Fiduciary relationships may also arise as a result of the special circumstances surrounding the interaction of the parties: for example, between parishioner and church (*Doe v. Evans*, 2002) and between a customer and a bank (*Lash v. Cheshire Co. Savings Bank*, 1984).

Fiduciary Relationships in Academia

Legal Fiduciary Relationships in Academia. Statutes, regulations, and case law define academic fiduciary relationships. In terms of statutes, fiduciary relationships “automatically arise from particular relationships such as...principal-agent as a matter of law” (*Chou v. University of Chicago*, 2001, p. 1362); *Doyle v. Maruszczak*, 2003, p. 309). For example, trustees, as agents of their institution, are fiduciaries of that institution (Agency, O. C. G. A. §§ 10-6B-14 and 10-6B-40, 2018). Under the Employee Retirement Income Savings Act (ERISA), “employers managing retirement plans are deemed to be fiduciaries of the employees” (*Sacerdote v. New York University*, 2018, p. 279).

In academic regulations, “Governing board members bear major and ultimate responsibility as fiduciaries of the college or university they serve” (Association of Governing Boards of Universities and Colleges, 2013). At the University of Pennsylvania, “A trustee of the University shall stand in a fiduciary relationship to the University...” (2019, Article 2, Section 2.11). According to Connecticut College (2019), “As a duly elected body, the Board of Trustees has fiduciary responsibility for the Governance of Connecticut College.”

In terms of case law, the Court in *Squeri v. Mount Ida College* (2020) held that the College Board of Trustees members had a fiduciary relationship with the College but not with the students. At the University of Hartford, the Board of Trustees, the governing body of the University, “has sole fiduciary responsibility for the University” (*Bell v. University of Hartford*, 2021, p. 15).

Fiduciary Relationships in Academia as a Result of Special Circumstances. Where there are “special circumstances” between parties, a fiduciary relationship will arise (*Chou v. University of Chicago*, 2001). In *Chou* (p. 1362), the Court defined “special circumstances”:

A fiduciary relationship may also arise from the special circumstances of the parties’ relationship, such as when one party justifiably places trust in another so that the latter gains superiority and influence over the former. The relevant factors in determining whether the latter fiduciary relationship exists include the disparity in age, education, and business experience between the parties, and the extent to which the “servient” party entrusted the handling of its affairs to the “dominant” party and placed its trust and confidence in that party.

Consider the following cases of “special circumstances.” In *Chou* (2001), Chou was a researcher who claimed that her supervisor, also her department chair, promised he would protect her work and her inventions. He did not credit her for her inventions. The chair had the power to make patenting decisions, and he had more experience than Chou. The Court held that Chou adequately pleaded the existence of a fiduciary relationship between her and both the chair and the University based on the disparity of their positions. In another research case, a graduate student sued his advisors over misappropriation of his research ideas. The Court remanded the case for jury determination of the existence of a fiduciary relationship between the student and his advisors and the student and the University based on a showing of a “factual predicate of a fiduciary relationship” by the plaintiff (*Johnson v. Schmitz*, 2000, p. 98). Finally, Helm, a cancer researcher, was accused of plagiarism in his research (*Helm v. Ratterman*, 2017). Helm sued the University of Louisville for not following its research misconduct policy. According to Helm, the “Defendants owed special and heightened duties to a faculty member who may be accused of research misconduct” (p. 24). The Court held that Helm sufficiently pled the existence of a fiduciary relationship and the elements for a breach of fiduciary action based on the interaction of Helm and the defendants.

St. John’s University provided facilities and financial support to research professors. (*St. John’s University v. Bolton*, 2010). Per agreement, the University expected that any patentable discoveries would be assigned to the University. Instead, certain researchers sought, received, and claimed patents. The Court found that the researchers “were entrusted with St. John’s resources and the autonomy and discretion to use those resources, because they possessed the special knowledge and expertise requires to exploit those resources through useful research that might result in

patentable discoveries” (p. 168). The Court held that the researchers were indeed fiduciaries to the University’s benefit. The University was “vulnerable to (the professors) abuse of their position of trust which they willingly solicited and accepted” (p. 168).

In *Schneider v. Plymouth State College* (1999), a student faced persistent sexual advances from her professor advisor. Additionally, the professor demeaned Schneider in front of other faculty, downgraded her academic work, and held up support for her research. Schneider sued the professor and the University for among other things breach of the fiduciary relationship, and she prevailed. The Court held that the relationship between Schneider and the defendants was fiduciary in nature writing the following:

A fiduciary relationship does not depend upon some technical relation created by, or defined in, law. It may exist under a variety of circumstances and does exist in cases there has been a special confidence reposed in one who, in equity and good conscience, is bound to act in good faith and with due regard to the interest of the one reposing the confidence (p. 105).

The Court explained that “Students are in a vulnerable situation because the power differential between faculty and students makes it difficult for the students to refuse unwelcome advances and also provides the basis for negative sanctions against those who do refuse” (p. 105).

Gjeka sued Delaware County Community College (DCCC) and a professor alleging that the professor sexually harassed her for years and that the College knew or should have known about the harassment (*Gjeka v. Delaware County Community College*, 2013). Gjeka claimed that the professor and DCCC owed her a fiduciary duty and failed that duty by not providing a safe environment. With respect to the professor, the Court held that Gjeka’s claim was viable, because Gjeka became dependent on the professor which required the professor to act in “good faith” toward her. There existed “a professional relationship of trust and deference, rarely seen outside the academic community” (p. 20). These circumstances gave rise to a fiduciary relationship. The claim against the College was not addressed because it had not yet been decided whether a fiduciary relationship between a student and a college existed in that jurisdiction.

These cases demonstrate that a fiduciary relationship can exist in “discrete, special relationships, earmarked by specific characteristics including: long standing relations, an imbalance of bargaining power, and significant trust and confidence shared by the parties” (*Caton v. Leach Corp.*, 1990, p. 948).

In conclusion, the “special circumstances” that exist between faculty and trustees in higher education can give rise to a fiduciary relationship. The “special circumstances” underlying the relationship arise through the nature of their interactions. From a faculty perspective, the interactions that arise in dealing with trustees include hiring, contracts, promotion, tenure, salary, benefits, the development and the demise of academic programs, faculty involvement in board meetings, etc. In those interactions, faculty members place their trust and confidence in the dominant power- the board of trustees. Likewise, the trustees must place their trust and confidence in faculty members- the dominant power- when it comes to matters of curriculum, methods of instruction, courses, course content, grading, scholastic requirements, development and

maintenance of majors, faculty committees, etc. The manner in which these two bodies interact comprises and evidence the “special circumstances” that form the basis of a fiduciary relationship: faculty as beneficiaries and trustees as fiduciaries.

Duties Incumbent on Trustees as Fiduciaries

A fiduciary relationship between faculty members and trustees imposes three fiduciary duties on the fiduciary trustees: the duty of ordinary care; the duty of obedience; and, the duty of loyalty (Association of Governing Boards of Universities and Colleges, 2015, p. 4).

Specifically, the duty of ordinary care requires using reasonable care, due diligence, and skill in conducting the affairs of the institution and in interactions with the faculty. The duty of obedience demands that trustees be familiar with and obey the institution’s governing documents such as the institution’s mission and purpose statements, regulations and procedures, and all local, state, and federal laws. The duty of loyalty requires trustees to act honestly and fairly always placing their interests in subordination to those of the institution and of the faculty. To remain loyal, trustees must avoid conflicts of interest with the institution and with the faculty and resolve conflicts within the institutions conflict of interest policy (Association of Governing Boards of Universities and Colleges, 2015; John Carroll University, 2022).

Incidentally, college and university boards may have a code of ethics (e.g., Michigan State University, 2020). However, fiduciary duties “may extend beyond minimal compliance with codified ethics rules.” Also, “Even if no ethics code has been adopted, or if no code provision is on point,” trustees must “act in a manner that comports with their common law fiduciary duty obligations” (Johnson, 2019, p. 298).

Benefits of a Fiduciary Relationship

A fiduciary relationship between faculty and trustees will be beneficial to faculty, to trustees, and to the institution on the whole.

Benefits for Trustees. Fiduciary duties are instructive because they tell trustees what they are required to do (DeMott, 1988, p. 882). The fiduciary duties of ordinary care, obedience, and loyalty define the framework in which trustees must operate with respect to the faculty and to their institution. For example, in deciding whether to affirm or veto a tenure recommendation from the faculty and the administration, a trustee must utilize the guidelines of ordinary care, obedience, and loyalty in making their decision. Have I used due diligence in evaluating the candidate? Am I obeying the institution’s rules and all regulation regarding tenure decisions? Am I letting any of my prejudices or interests affect my decision? Am I caught in a conflict of interest? Fiduciary duties define the trustee’s obligations. In another realm, for example, courts have considered the physician/patient interaction to be a fiduciary relationship and have stated that “The fiduciary relationship model offers a promising framework for defining the clinician’s duties...” (Larazo-Munoz, 2014, p. 590). In summary, “Fiduciary law facilitates a purposefully expansive understanding of the obligations existing between parties that is consistent with the importance of their interactions and transcends strict, common law limits” (Rotman, 2017, p. 985).

Benefits for Faculty. The three fiduciary duties incumbent of trustees as fiduciaries also create benefits for faculty members. The trustees' fiduciary duties provide a framework upon which faculty can rely when evaluating trustees' policies and decisions. Should faculty be in discord with the trustees' decision or policy, they have a context within which to evaluate those decisions and to frame their concerns or perhaps even challenge the trustees. In fact, the fiduciary duties incumbent on trustees may be viewed as protection for faculty who are vulnerable "which fiduciary beneficiaries often are" (FitzGibbon, 1999, 332). Regarding fiduciary relationships and duties, FitzGibbon (1999, p. 332), cites J. Posner dicta:

The common law imposes that duty when the disparity between the parties in knowledge or power relevant to the performance of an undertaking is so vast that it is a reasonable inference that had the parties in advance negotiated expressly over the issue they would have agreed that the agent owed the principal the high duty that we have described, because otherwise the principal would be placing himself at the agent's mercy" (*Burdette v. Miller*, 1992, p. 1381).

Another faculty benefit as the beneficiary in a fiduciary relationship is that it provides for a method of redress should trustees breach any of their three duties. According to the Restatement (Second) of Torts § 874 (1979), "One standing in a fiduciary relation with another is subject to liability to the other for harm resulting from a breach of duty imposed by the relation." A breach of fiduciary duty is treated as a tort (DeMott, 2006, p. 927).

To successfully file a tort claim for breach of the duty of ordinary care, obedience, or loyalty by a trustee, a faculty member must demonstrate: (1) "the existence of a duty arising from a fiduciary relationship; (2) a failure to observe that duty; and (3) an injury to the beneficiary resulting proximately therefrom" (*Patel v. University of Toledo*, 2016, p. 991).

Once all the elements for breach of a fiduciary duty are satisfied in a suit against trustees, a variety of remedies is available to the faculty member. Remedies can be either legal or equitable depending on the nature of the breach (*Goettsch v. Goettsch*, 2014). Legal remedies include money damages (*Cahn v. Antioch College*, 1984), punitive damages if an egregious violation can be established (*ABKCO Music, Inc. v. Harrisongs Music, Ltd.* 1983), and damages for mental anguish (*Yuspeh v. Koch*, 2003). Equitable remedies include injunctions (*Crown Packaging International, Inc. v. Brown*, 2014) and accountings (*Soley v. Wasserman*, 2013). Equitable remedies also include reformation of an agreement (reframing a written agreement to accurately reflect the real agreement between the parties (*Mutual of Omaha Ins. Co. v. Russell*, 1968), and rescission where a court can "annul an agreement between the parties and therefore restore them to previous positions- to status quo ante" (Veitch, 2015, p. 206).

Benefits for the Institution. In shared governance, all institutional constituents play a role: the trustees, the administration, the faculty, and the students. However, not all constituents get to participate in every stage of decision making, and no one constituent exercises complete control over the decision making process (Olson, 2009). Shared governance is vital for an institution of higher education (DeAngelis, 2021). According to DeCesare (2017, para. 4), "if we fail to do the work required under principles of shared governance, then it will slowly but surely disappear."

The benefits of a fiduciary relationship between faculty and trustees will certainly accrue to the benefit of the institution on the whole in terms of enhancing shared governance. Knowing your duties and your rights as a beneficiary and as a fiduciary will clarify your role in the institution's governing process. The resultant spillover to the benefit of the institution will be advantageous and significant. As stated by the Association of Governing Boards of Universities and Colleges, "A culture of meaningful engagement among board members, administration, and faculty can elevate the outcome—as well as the experience—of shared governance" (2017, p. 6).

Clearly, a fiduciary relationship will benefit faculty members, trustees, and the institution on the whole. In sum, "Fiduciaries' duties and beneficiaries' benefits thus offset each other to create an equilibrium that maintains the parties' fiduciary interaction by removing the threats of self-interest and mistrust that might otherwise undermine or destroy the relationship" (Rotman, 2017, p. 988). In the end, "Relationships, rather than individuals, are the primary concern of the fiduciary concept" (Rotman, 2017, p. 989).

Potential for Conflict? Trustees as Fiduciary to Both Faculty and Institution

Assume that trustees are fiduciaries to both the institution (as agents) and to the faculty (by special circumstances). Could a conflict of interest (a violation of loyalty) potentially exist by serving as fiduciary to both? There are many situations in which the Board is the ultimate decision authority in issues arising from the administration and the faculty (e.g., tenure). Suppose that the administration recommends a faculty member who has applied for tenure, but the board of trustees does not concur and rejects the tenure application. Is that in any way a conflict of interest?

What comprises a conflict of interest? Generally, "the conflict is between the fiduciary's self-interest and her duty to the beneficiaries" (Valsan, 2016, p.16). Therefore, in our hypothetical, as long as the board made its decision free from self-interest, prejudice, etc., there is no conflict between the trustees and either the faculty member or the university.

On the other hand, consider the dilemma faced by Nikole Hannah-Jones, the co-creator of the 1619 Project which focused on slavery and the founding of the United State. As a faculty member at the University of North Carolina (UNC), she applied for tenure, and her application had the support of the University. Her application was pulled from the Board for consideration without explanation. Before her application was pulled, the Board received two emails urging that her application should not be processed. One email was from one of the Board members, and the other was from a UNC donor who wanted to avoid "the controversy of tying the UNC journalism school to the 1619 Project" (Jaschik, 2021). Was the Board's decision affected by these emails sent before their decision, and, if so, would that comprise conflict of interest between the Board and the University and/or the Board and Hannah-Jones?

More likely, our tenure hypothetical involves a "duality of interest" rather than a "conflict of interest". A duality on interest does not disqualify a trustee (*Fidelity Union Trust Co. v. Guaranty Trust Co. of New York*, 1947, p. 555). Regarding duality of interest, Marino & Richard (2022) wrote:

Duality of interest recognizes that, under certain circumstances, even if a board member has multiple interests, those interests do not necessarily create a conflicting situation.

The board in our hypothetical, assuming no conflictual matters, ultimately must be guided by their three overarching fiduciary duties: ordinary care, obedience, and loyalty. These three touchstones alone must comprise the basis for their decision.

Trust: The Condition Precedent for Fiduciary Relationships

Trust is essential for the formation of a fiduciary relationship (Scharffs & Welch, 2005). Trust can be defined as follows:

(W)illingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor and control that other party (Mayer et al., 1995, p. 712).

Trust is vital in higher education: “Within organizations (universities), trust is crucial in all types and directions of relationships” (Blaskova et al., 2015, p. 72). In a fiduciary relationship based on special circumstances, the beneficiary’s (faculty member) trust is placed in a fiduciary (the trustee) so that the latter gains superiority over the former (Chou v. University of Chicago, 2001).

Unfortunately, mistrust exists in academia. Mistrust can be defined as:

(M)ore often it is used to refer to uncertainty about whether trust should be offered or not. Mistrust, in this sense, is about being actively suspicious about whether to trust a person or thing but without having actually decided...Mistrust is a state of active uncertainty which may be fleeting or prolonged. Mistrust is not just about cognition, it is also often embedded emotional responses (for instance, fear, anger, love) (Breakwell, 2020, p. 510).

For example, a survey found that “differing personal agendas and a common ‘we/they’ mentality between faculty and trustees harbored mistrust...” (Van Ast, 1999, p. 564). At a City College of San Francisco board of trustees meeting regarding budget priorities, a trustee admitted that there was “a culture of mistrust between the board and the faculty” (Clyde, 2010). Also, “We are in an era of increasingly ‘activist’ boards, leading to significant mutual distrust between boards and faculty members...” (Ehrenberg et al., 2013, para. 3). Woefully, in academia, “trust can be destroyed very quickly” (Child-Kean, 2022, p. 1056).

A deleterious effect of mistrust is that it fosters antipathy. Antipathy “refers to a relationship based on dislike between two companions, either unilateral or mutual” (Chang, 2015, p. 408). Antipathy is an attitude that embodies an evaluation with the element of disfavor (Banaji & Heiphetz, 2010). For example, a study examining strategies in restoring trust in response to critical feedback found that “Mistrust can lead people to view critical feedback as a sign of the evaluator’s indifference, antipathy, or bias, leading them to dismiss rather than accept it” (Yeager et al., 2014, p. 805).

Antipathy toward immigrants and sexual minorities was predicted by among other things political distrust (Pacilli et al., 2022).

Reciprocal antipathy exists in academia between faculty members and trustees (DeAngelis, 2021). According to Bahls (2011, para. 1), faculty view trustees as “suits who engage in driveby management” and individuals who are “more concerned about the pictured selected for the cover of the college catalog than about the content found within the catalog.” They are “bean counters who want to run a college like a business.” Likewise, a survey revealed that university trustees felt that faculty act too slow in decision making and want authority without accountability (Association of Governing Boards of Universities and Colleges, 2017, pp. 7-8). Also, trustees view faculty as “professional contrarians, and the academy rewards them for it by giving them tenure” (Bahls, 2010, para. 1).

Completing the vicious cycle, antipathy in turns generates more mistrust. Politically, “(T)he growing partisan trust gap has effective roots tied to the well-known rise in antipathy toward out-partisans” (Citrin & Stoker, 2018, p. 59). Police officers who perceive antipathy from the public become much more distrustful of the public (Marier & Moule, 2018). And on and on!

Managing Mistrust and Antipathy

Mistrust and antipathy are negative interpersonal issues. Resolving interpersonal issues should focus on “conflict management” rather than on “conflict resolution”:

What we need for contemporary organizations is conflict management and not conflict resolution. Conflict management does not necessarily imply avoidance, reduction, or termination of conflict. It involves designing effective macro-level strategies to minimize the dysfunctions of conflict and enhancing the constructive functions of conflict in order to enhance learning and effectiveness in an organization (Rahim, 2002, p. 208).

Thus, management of mistrust and antipathy are better managed than resolved. However, how do you accomplish that?

Attitudes such as mistrust and antipathy can be changed resulting in a concomitant change in behavior (Petty & Cacioppo, 1986; Banaji & Heiphetz, 2010; Eagley & Chaiken, 1993). There are several models for attitude change or management. Regarding mistrust, for example, one model proposes there are two dominant trust repair strategies: short-term and long-term. Positive short-term strategies include: Verbal statements (such as accounts, excuses, explanations, and apologies); Apologies (includes verbally explaining the intent behind the breach of trust accompanied by “emotional content” such as regret and promises of changed behavior); and, Compensation (direct, tangible compensation with or without verbal statements). Positive long-term strategies include structural arrangement (reviewing policies, procedures, contracts, and monitoring); Reframing (reinterpretation of the trust violation); and, Forgiveness (accepting that a breach has occurred coupled with a willingness to resume relationship building) (Lewicki & Brinsfield, 2017, p. 296). Perhaps a trust building effort along these guidelines between faculty and trustees would significantly manage mistrust so that a fiduciary relationship becomes feasible.

With respect to managing antipathy, in the Elaboration Likelihood Model (ELM) developed by Petty and Cacioppo (1986). elaboration- the cognitive element of the model, i.e, the “belief”- is affected by two factors: the motivation of an individual and the individual’s cognitive ability. When a recipient of a message aimed at changing an attitude has little or no interest in the message (low motivation) and their cognitive processing is minimal (low ability), they do not examine a message thoroughly. Rather, they rely on their general impressions and take their cues from the context in which the message is presented. In this case, little attitudinal persuasion occurs that will be enduring. On the other hand, if a message recipient exercises cognitive ability about the message content and is motivated to receive the message, they arrive at a reasoned, thought out attitude that will endure and is predicative of future behavior. In the parlance of the ELM model, faculty and trustees certainly have the requisite cognitive ability to comprehend the permeating, deleterious effects of antipathy on their relationship and on their institution. The issue becomes one of motivation. One source of motivation for faculty and trustee alike is the perpetuation of sound shared governance in their college or university. Shared governance is vital for an institution of higher learning (DeAngelis, 2021). Enhancement of shared governance should provide sufficient motivation for the amelioration of antipathy.

In conclusion, although mistrust and antipathy are stumbling blocks for the formation of a fiduciary relationship between faculty and trustees, that impediment can be managed.

Conclusion

The relationship between college and university faculty and their trustees has been marginalized. Focus has been largely placed on contractual issues and ERISA controversies. Solidifying a fiduciary relationship between faculty and trustees based on their special circumstances is a worthwhile and viable pursuit. Establishing this fiduciary relationship would benefit faculty and trustee alike and would help promulgate the shared governance so crucial in higher education.

References

- ABKCO Music, Inc. v. Harrisongs Music, Ltd., 722 F. 2d 988 (2d Cir., 1983).
- Agency, O. C. G. A. §10-6-1 (2018).
- Agency, O. C. G. A. §§10-6B- 14 and 10-6B-40 (2018).
- Association of Governing Boards of Universities and Colleges. (March-April 2013). *Fiduciary behavior. What’s the responsible trustee to do (and not do)?* 21 (2). <https://agb.org/trusteeship-article/fiduciary-behavior-whats-the-responsible-trustee-to-do-and-not-do/>
- Association of Governing Boards of Universities and Colleges. (2015). *AGB Board of Directors statement on the fiduciary duties of governing board members.* <https://agb.org/agb-statements/agb-board-of-directors-statement-on-the-fiduciary-duties-of-governing-board-members/>
- Association of Governing Boards of Universities and Colleges. (2017, March). *Shared governance: Changing with the times.* An AGB White Paper, 1-16. <https://agb.org/reports-2/shared-governance-changing-with-the-times/>
- Bahls, S. (2010, January 10). *Administrators must dispel the derogatory myths about professors.* Chronicle of Higher Education. <https://www.chronicle.com/article/Administrators-Must-Dispel-the/63455/>

- Bahls, S. (2011, November 15). *Faculty myths about trustees*. Inside Higher Education. <https://www.insidehighered.com/views/2011/11/15/banishing-myths-about-college%E2%80%99s-board-and-administration>
- Banaji, M. & Heiphetz, L. (2010). Attitudes. In S. Fiske, D. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology*, (p. 353-393). John Wiley & Sons. [https://www.scirp.org/\(S\(351jmbntv-nsjt1aadkposzje\)\)/reference/referencespapers.aspx?referenceid=2657709](https://www.scirp.org/(S(351jmbntv-nsjt1aadkposzje))/reference/referencespapers.aspx?referenceid=2657709)
- Bell v. Univ. of Hartford, 577 F.Supp.3d 6 (D. Conn. 2021).
- Blaskova, M., Blasko, R., Kozubikova Z., & Kozubik, A. (2015). Trust and reliability in building perfect university. *Procedia-Social and Behavioral Sciences*, 205 (1), 70-79. <https://www.sciencedirect.com/science/article/pii/S1877042815050375>
- Breakwell, G. M. (2020). Mistrust, uncertainty and health risks. *Journal of the Academy of Social Science*, 15 (5), 504-516, 510. <https://www.tandfonline.com/doi/pdf/10.1080/21582041.2020.1804070>
- Burdette v. Miller, 957 F. 2d 1375 (7th Cir. 1992).
- Cahn v. Antioch University, 482 A. 2d 120 (D. C., 1984).
- Caton v. Leach Corp., 896 F.2d 939 (5th Cir.1990).
- Chang, C. (2015). The effects of friendship and antipathy networks on adolescent attitude similarity. *International Journal of Adolescence and Youth*, 20 (4), 407-428. <https://www.tandfonline.com/doi/full/10.1080/02673843.2015.1015038>
- Childs-Kean, L. (2022) Does the academy have trust issues? *American Journal of Pharmaceutical Education*, 86 (1), 10561058. <https://www.ajpe.org/content/86/10/ajpe8985>
- Chou v. University of Chicago, 254 F. 3d 1347 (Fed. Cir. 2001).
- Citrin, J. & Stoker, J. (2018). Political Trust in a Cynical Age. *Annu. Rev. Political Sci.*, 21, 49-70. <https://www.annualreviews.org/doi/10.1146/annurev-polisci-050316-092550>
- Clyde, D. (April 15, 2010). *Trustee apologizes for "culture of mistrust"*. The Guardian. <http://theguardian.com/trustee-apologizes-for-culture-of-mistrust/>
- Connecticut College. (2019). Board of Trustees, Charge and statement of responsibilities. <https://www.conncoll.edu/media/Board-of-Trustees-Charge-and-Statement-of-Responsibilities.pdf>
- Crown Packaging International, Inc. v. Brown, Ill. App. 140284 (Ill. App. Ct. 2014).
- DeAngelis, W. (2021). Antipathy in academia is subverting Shared Governance. *Journal of Higher Education Management*, 36 (2), 139-151. https://issuu.com/aaua10/docs/jhem_36_2_issue_.docx/s/13938483
- DeCesare, M. (Jan. – Feb., 2017, January 5). *Reaffirming the principles of academic government*. American Association of University Professors. https://www.aaup.org/article/reaffirming-principles-academic-government#.ZF_Qg3bMJPY
- DeMott, D. (1988). *Beyond metaphor: An analysis of fiduciary obligation*. *Duke Law Journal*, 37, 879. <https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=3050&context=dlj>
- DeMott D. (2006). *Breach of fiduciary duty: On justifiable expectations of loyalty and their consequences*. *Arizona Law Review*, 48, 925 (2006). <https://arizonalawreview.org/pdf/48-4/48arizrev925.pdf>
- Doe v. Evans, 814 So. 2d 370 (Fla. 2002).
- Doyle v. Maruszczak, 834 So. 2d 307 (Fla. 5th D C A 2003).
- Eagly, A. & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Janovich College Publishers.

https://www.researchgate.net/publication/258879638_A_review_Eagly_A_H_Chaiken_S_1993_The_psychology_of_attitudes_New_York_Harcourt_Brace_Janovich

Ehrenberg, R., Patterson, R., & Key, A. (May-June 2013). *Faculty members on boards of trustees*. Academe, American Association of University Professors. <https://www.aaup.org/article/faculty-members-boards-trustees>

Fidelity Union Trust Co. V. Guaranty Trust Company of New York, 140 N. J. Eq. 548 (Errors & Appeals, 1947).

FitzGibbon, S. (1999). *Fiduciary relationships are not contracts*. Marquette L. Rev. 82, 303. 3. <https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1403&context=mulr>

Gjeka v. Delaware County Community College and Preston,(U.S.D.C. E.D. Pa. 2013, May 23, Civil Action No.: 12: 4548).

Goettsch v. Goettsch, 29 F. Supp. 3d 1231 (N. D. Iowa 2014).

Helm v. Ratterman et al., No. 3:16-CV-00771 (D. C. W. D. Ky., June 28, 2017).

Ikon Office Solutions, Inc. v. Law Office of Craig Kuglar, No. 1:12-cv-1316 (N. D. Ga. Sept.23, 2013).

Jaschik, S. (July 6, 2021). *Hannah-Jones turns down UNC offer*. Inside Higher Education. <https://www.insidehighered.com/news/2021/07/07/nikole-hannah-jones-rejects-tenure-offer-unc-job-howard-u>

John Carroll University (2022). Board of Trustees: Legal Duties of Directors. <file:///D:/Fiduciary%20Angle/Legal%20Duties%20of%20Directors%20-%20Board%20of%20Directors.mht>

Johnson v. Schmitz, 119 F. Supp. 2d 90 (D. Conn. 2000)

Johnson, V. (2019). *The fiduciary obligations of public officials*. St. Mary's J. on Legal Malpractice & Ethics, 9, 298. <https://commons.stmarytx.edu/cgi/viewcontent.cgi?article=1039&context=lmej>

Larazo-Munoz, G. (2014). The fiduciary relationship model for managing clinical genomic "incidental" findings. *Journal of Law, Medicine and Ethics*, 42, 576. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4312667/>

Lash v. Cheshire Co. Savings Bank, Inc., 474 A. 2d 980 (1984).

Lewicka, D. (2022). Building and rebuilding trust in higher education institutions (HEIs). Student's perspective. *Journal of Organizational Change Management*, 35 (6), 887-915. <https://www.emerald.com/insight/content/doi/10.1108/JOCM-02-2022-0037/full/html>

Lewicki, R. & Brinsfield, C. (2017). Trust repair. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 287-313 <https://www.annualreviews.org/doi/abs/10.1146/annurev-orgpsych-032516-113147>

Marier, C. & Moule, R. (2018). Feeling blue: Officer perception of public antipathy predict police occupational norms. *American Journal of Criminal Justice*, 44 (5), 836-857. <https://doi.org/10.1007/s12103-018-9459-1>

Marino, S. & Richard, M. (March 21,2022). *How to handle conflicts of interest with board members*. The Giving Institute. <https://www.givinginstitute.org/news/617194/How-to-Handle-Conflicts-of-Interest-With-Board-Members.htm>

Mayer, R., Davis, J. & Schoorman, F. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20 (3), 709-734. <https://doi.org/10.5465/amr.1995.9508080335>

Michigan State University. (2022). Board of trustees code of Ethics and conduct. <https://trustees.msu.edu/about/code-of-ethics-and-conduct.html>

Mutual of Omaha Ins. Co. v. Russell, 402 F. 2d 339, 344 (10th Cir. 1968).

Olson, G. (2009, July 23). *Exactly what is “shared governance”?* Chronicle of Higher Education. <https://www.chronicle.com/article/exactly-what-is-shared-governance/>

Pacilli, M., Pagliaro, S., Bochicchio, V., Scandurra, C., & Jost, J. (June 2, 2022). *Right-wing authoritarianism and antipathy toward immigrants and sexual minorities in the early days of the coronavirus pandemic in Italy.* *Frontiers in Political Science.* <https://www.frontiersin.org/articles/10.3389/fpos.2022.879049/full>

Patel v. Univ. of Toledo 2016 Ohio 3153, p. 6 (Ohio Ct. Cl. 2016).

Petty, R. E. & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123-205. [http://dx.doi.org/10.1016/S0065-2601\(08\)60214](http://dx.doi.org/10.1016/S0065-2601(08)60214)

Rahim, M. (2002). Toward a theory of managing organizational conflict. *International Journal of Conflict Management*, 13 (3), 206-235. <https://doi.org/10.1108/eb022874>

Restatement (Second) of Torts § 874 (Am. L. Inst. 1979).

Rotman, L. (2017). *Understanding fiduciary duties and relationship fiduciarity.* McGill L.J., 62, 975. <https://canlii.ca/t/2f35>, retrieved on 2023-06-1

Sacerdote v. New York University, No. 1:16-cv06284 (S.D.N.Y.) (final judgment issued July 31, 2018)

Scharffs, B & Welch, J. (2005). *An analytic framework for understanding and evaluating the fiduciary duties of educators.* BYU. Educ. & L. J., 2, 159. <https://digitalcommons.law.byu.edu/cgi/viewcontent.cgi?article=1204&context=eljiary>

Schneider v. Plymouth State College et al., 144 N. H. 458, 744 A. 2d. 101 (N. H. 1999).

Soley v. Wasserman, No. 08 Civ. 9262 (S. D. N. Y. 2013).

Squeri v. Mount Ida College, No. 19-1624 (1st Cir. 2020).

St. John’s University v. Bolton, 757 F. Supp. 2d 144 (D. C. E. D. N. Y. 2010).

University of Pennsylvania. (2023). Statutes of the trustees. Article 2, Section 2.11. <https://secretary.upenn.edu/trustees-governance/statutes-trustees>

Valsan, R. (2016). *Fiduciary duties, conflict of interest, and proper exercise of judgment.* McGill Law Journal, 62, 1.

Van Ast, J. (1999). Community college faculty: Making the paradigm shift. *Community College. Journal of Research and Practice*, 23(6), 559-579. <https://doi.org/10.1080/106689299264585>

Veitch, E. (2015). *Where the court finds a breach of fiduciary obligation, should equitable or legal remedies flow?* University of New Brunswick Law Journal, 66, 200. <https://journals.lib.unb.ca/index.php/unblj/article/view/29094/1882524279>

Yeager, D., Purdie-Vaughns, V., Garcia, J., Apfel, N. Brzustoski, P., Master, A. Hessert W., Williams, M., & Cohen, G.(2014). Breaking the Cycle of Mistrust: Wise Interventions to Provide Critical Feedback Across the racial Divide. *Journal of Experimental Psychology: General*, 143 (2), 804-824 <https://www.apa.org/pubs/journals/releases/xge-a0033906.pdf>

Younger v Zurich American Ins. Co. 11 Civ. 1173 (S. D. N. Y. 2012).

Yuspeh v. Koch, 840 So. 2d 41 (La. App. 2003).

A University's Organizational Culture as Expressed by Its Approach to Physical Education During COVID-19: The Case of a Science and Engineering Higher Education Institute

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Due to the rapid growth in knowledge, many higher education institutions face the challenge of deciding what to eliminate from their core study programs and to be replaced by more updated topics. We propose that such decisions can be made by examining the organizational culture, in general, and in particular, during extreme times. Such an examination will indicate to the organization what its core activities are, which cannot be eliminated, and which activities can be relinquished if the organization faces difficult times. This paper illustrates this assertion by analyzing how the organizational culture of the Technion is reflected in its general approach to physical education, specifically during the COVID-19 pandemic.

Unlike many academic institutions around the world that shut down their physical education programs during the pandemic, the Technion continued operating its physical education programs under uncertain conditions, according to the spread of the pandemic and the national regulations, in a variety of formats ranging from online to on-campus. Based on Schein's model of organizational culture (Schein 1985, 1990), we show that the way in which the Technion addressed physical education during the pandemic reflects its organizational culture. Specifically, the extreme uncertain conditions that prevailed during the pandemic further highlight the importance that the Technion attributes to the contribution of physical education to students' well-being from several perspectives: motoric, social, emotional, cognitive, and academic.

The paper is structured as follows. Following a brief background presenting different approaches to physical education in science and engineering research universities (Section 2.1), the influence of the pandemic on higher education (Section 2.2), and Schein's framework of organizational culture (Section 2.3), we describe the research framework (Section 3). This includes the research objectives and questions (Section 3.1), a description of the research environment (Section 3.2), and a presentation of the data collection tools used (Section 3.3). In Section 4, we analyze the Technion's organizational culture through the lens of Schein's framework of organizational culture, relying on evidence collected during the pandemic with respect to physical education. We conclude in Section 5.

Background

Physical education in science and engineering higher education

Different science and engineering undergraduate programs express different approaches to physical education. On the one extreme, many higher education institutions do not require their students to take any physical education courses to complete their undergraduate studies. We will not address this approach. Rather, in this sub-section, we describe several physical education programs offered in higher education institutions in general and, specifically, in research universities of science and engineering like the Technion.

Higher education institutions that offer physical education programs exhibit one of two approaches. According to the first approach, as it is implemented by the Technion, physical education is mandatory as part of the students' undergraduate degree. Similar to the Technion, MIT also provides a variety of instructional physical activity courses for undergraduate students to complete the institute's general physical education and wellness requirement (four courses, 8 points) as well as the swim requirement (swim course or swim test). At Rice University, undergraduates must successfully complete one Lifetime Physical Activity Program (LPAP) course (1 credit) in order to satisfy the graduation requirement. Students may use up to four LPAP courses (4 credits in total) towards the total credits necessary for graduation. According to the second approach, physical education is offered by some universities as a minor or a full undergraduate program, and some offer it also as a graduate degree. For example, UC Berkeley's Physical Education Program offers a minor in health and wellness and a variety of courses in dance, fitness, aquatics, sports, and martial arts ranging from a beginner's level to more advanced levels.

In both cases, the requirement to engage in physical education reflects the approach whereby physical education is perceived and treated as part of the core of undergraduate science and engineering study programs.

Influences of COVID-19 on higher education

As far as we know, physical education activities were shut down on most higher education campuses as soon as the pandemic broke out; the campuses closed and learning and teaching moved to online platforms. As highlighted in various publications, the pandemic, in general, and the closed campuses, in particular, significantly influenced a variety of aspects of academic life, including mental health. To overcome this problem, different solutions were offered, such as tele-mental health services (Kafka, 2021), in-person or virtual counseling services and campus well-being events (Markowitz, 2021), and early identification of students who may be in need of mental health services (Jenzabar, 2021). Another approach to coping with mental challenges, discussed in this paper and which was already known prior to the pandemic, is to engage in physical activities (Schuch et al., 2018). Specifically, physical education reduced students' mental stress during the pandemic thanks to (a) the continued exercising itself, and (b) the students' realization that they need not be concerned about the timely completion of their studies, since not only did the academic courses continue to be offered, but also the physical education courses continued as normal.

Organizational culture

The term *organizational culture* refers to the norms, values, and beliefs of an organization, from which the employees' behavior in general, and the way individuals interact with each other and with people outside the company in particular, are derived. Edgar Schein (1985, 1990) presented a three-level hierarchical model for describing organizational cultures (Figure 1).

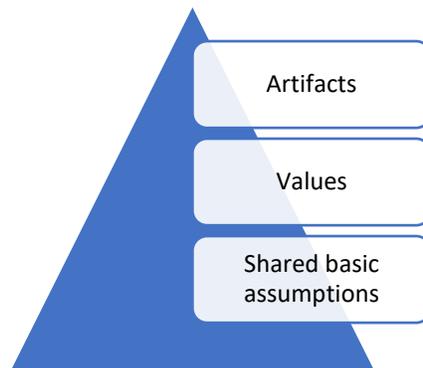


Figure 1. Schein's model of organizational culture

The basic level, the unspoken and unseen level, is that of the *shared basic assumptions* that reflect how the organization really works, regardless of its spoken values (the second level) or the visible artifacts (the upper level). The second level of the organizational culture consists of the *values* delivered by the organization. In a healthy organizational culture, these values are consistent with the shared basic assumptions, and the members of the organization work according to those values. The third level, the visible level, consists of *artifacts*, i.e. what is seen in the organization. These, as it turns out, have a huge impact on the behavior of the members of the organization. The artifacts level includes the dress code, the spoken language, the rank hierarchy, the office allocation and furniture, working hours, facilities offered to the members of the organization, the way the parking lots are organized, and so on.

Organizational culture is shaped in a long process that reflects the main events the organization experienced, how it coped with challenges, and how it leveraged opportunities. The actual culture of an organization is determined by the tightness and consistency between the three levels. The stronger the consistency between the levels, the clearer the organizational culture is to its members and, as a result, they know how to behave without needing to constantly consider what the correct behavior is.

Research Framework

The research was reviewed and approved by the Behavioral Sciences Research Ethics Committee of the Technion. Requirement for consent was waived by the ethics committee since the data was collected anonymously.

Research objective and research questions

The research objective was to document and characterize the process that the Technion underwent during the pandemic with respect to its undergraduate physical education programs.

This research objective led to the following research questions:

- How did the Technion manage its physical education programs during the pandemic?
- Is the Technion's organizational culture reflected in the way in which the Technion managed its physical education programs during the pandemic? If it is, how? If not, why?

Research environment

The Technion

The Technion, which is the first higher education institute established in Israel, will celebrate its 100th anniversary in 2024. It is a leading science and engineering research university and ranks among the top 100 universities worldwide (83th in 2022)¹. The Technion is the main provider of scientists and engineers to Israel's industry, and its graduates play a significant role in the growth of the Israel's economy and its technological competitive advantages.

Some 10,000 undergraduate students study in the Technion 17 science and engineering faculties. In addition, the Department of Humanities and Arts provides elective courses in social sciences and liberal arts and is in charge of the Physical Education Unit.

Physical education at the Technion

Many sports facilities are available on the Technion campus, including three gymnasiums, a fitness center, an Olympic sized swimming pool and two outdoor, 25-meter long swimming pools, tennis and squash courts, a basketball court, a turf field, a running track, and a perimeter track (see Figure 2). All of these facilities serve the entire Technion community.

Physical education courses and team sports are an integral part of the undergraduate study programs at the Technion. These courses grant students academic accreditation and their grade is included in the calculation of their academical average. During their undergraduate studies, students are required to accumulate 2 credit points (out of 155/120 credits in 4/3 years programs, respectively) by participating in either courses (1 credit point per course of 13 weekly lessons) or team sports (1.5 credit points, 13 weeks, twice a week). Most students choose to take more than just the mandatory 2 credits in physical education.

In regular semesters, students are offered more than 200 courses in 51 sports categories, and at all levels: beginners, advanced, and competitive teams. Sports categories include HIT (high intensity training), Pilates, Zumba, TRX, volleyball, basketball, soccer, handball, rugby, functional training, kickboxing, freestyle aerobics, jazz dance, ballet, salsa, Yoga, swimming, AquaForza, water exercises, tennis, badminton, squash, karate, judo, taekwondo, ninjutsu, karting, sailing, kayaking,

¹ See the Shanghai Ranking

wave and SUP surfing, track and field, long-distance running and more. In addition, a special course for students with disabilities is offered and special groups for freshmen are available. On average, courses include up to 25 students.

The grading policy for the sports courses is based on the student's attendance (65% of the final grade, with a minimum requirement of 8 lessons for courses and 14 for teams) and on the teacher's evaluation of the student's progress or, alternatively, on a measurable evaluation test (35% of the final grade).



Figure 2. Some of the Technion's various sport facilities

Data collection tools

Data was collected using the following data collection tools.

Document analysis:

Systematic documentation of the implementation of physical education during the pandemic. The head of the Technion's Physical Education Unit and first author of this paper maintained very systematic documentation of the different physical education-related events that took place during the pandemic. This documentation included regulations, mail correspondence, memos, etc. Eventually, this detailed documentation served as the basis of our analysis. Appendix 1 presents the documents we analyzed.

National documents and websites (e.g., Wikipedia pages on The Influence of the Corona Pandemic on the Educational system and the Corona Pandemic in Israel).

Student surveys: Two end-of-semester surveys were distributed to students who were enrolled in physical education courses during the first two semesters of the pandemic (Spring 2019-2020 and Winter 2020-2021) in which the format of physical education courses changed according to national regulations. (The relatively high response rate to both questionnaires should be noted as it reflects the importance the students attributed to physical education, especially during the pandemic.)

The first survey (Document 17 in Appendix 1) was distributed at the end of the Short Spring 2019-2020 semester (on July 31, 2020). This semester started late due to the outbreak of the pandemic and took place outdoors, in small groups, after the first lockdown in Israel was lifted. Of the 509 students who took courses in this semester (see Table 1), 208 completed this survey (a 40% response rate).

The second survey (Document 21 in Appendix 1) was distributed at the end of the online Winter 2021 semester, in which all physical education courses took place remotely. Of the 1070 students who took physical education courses this semester (see Table 1), 376 completed this survey (a 35% response rate).

Findings: Analysis of the Technion's organizational culture during the pandemic with respect to physical education

In this section, we analyze, by Schein's model, how the organizational culture of the Technion is reflected in the way that it managed its physical education programs during the turbulent period of the pandemic.

Table 1 presents the number of students who enrolled in physical education courses in each semester during the pandemic until life went back to normal (at the start of the 2021-2022 academic year). For the sake of comparison, we also present these numbers for the period prior to the outbreak of the pandemic.

Appendix 2 provides details of the Technion's activities and policy with respect to physical education in each semester during the pandemic. This detailed description sets the stage for the analysis of the Technion's culture during the pandemic with respect to physical education, presented in this section.

We focus on the first two semesters of the pandemic as they were the most extreme in terms of the changes that took place in the setting of the physical education lessons: During the first of those two semesters, the lessons took place on campus in small groups and in the second semester, they took place remotely via Zoom.

Table 1. The number of students enrolled in physical education courses during the pandemic, by semester

Semester	COVID-19 events	On-campus/online	# of students enrolled in physical education courses
Prior to the pandemic			
Winter 2018-2019	-	On-campus	3340
Spring 2018-2019	-	On-campus	3229
Summer 2018-2019	-	On-campus	123
Winter 2019-2020	-	On-campus	3266
COVID-19 arrived in Israel			
Spring 2019-2020 (March 18-July 2, 2020, 13 weeks)	Lockdown	Online, two theoretical courses	400
Short Spring 2019-2020: Added after the first lockdown (May 31-July 31, 2020, 9 weeks, Document 11)	Purple Regulations (social distancing, small groups, sports activities adjusted to the regulations)	On-campus	509
Summer 2019-2020	Purple Regulations	On-campus	108
Second academic year of the pandemic			
Winter 2020-2021	Campus closed	Online	1070
Spring 2020-2021	Green Regulations (only vaccinated or recovered students can participate)	On-campus	1987
Summer 2020-2021	Green Regulations	On-campus	133
Third academic year of the pandemic – Almost back to normal			
Winter 2021-2022: Towards the end, the Omicron variant arrived and compulsory attendance was canceled.	Green Regulations	On-campus	3259
Spring 2021-2022	No restrictions	On-campus	3291
Summer 2021-2022	No restrictions	On-campus	145

As we shall see, the three levels of Schein's model, as reflected in the Technion's activities with respect to physical education during the pandemic, support and reinforce each other. This coherence between the expression of the three levels of Schein's model of the Technion's culture

with respect to physical education in such a time of crisis further attests to how the Technion's organizational culture is exhibited with respect to physical education in regular times as well.

Basic assumptions: Excellent multi-faceted science and engineering education

The basic assumptions level of Schein's model refers to how the organization works, regardless of what is verbalized or presented. The basic assumption of the Technion's culture highlighted in this section is the provision of *excellent and multi-faceted science and engineering education*².

As a leading science and technology research university, the Technion's vision is to be "among the world's top ten, dedicated to the creation of knowledge and the development of human capital and leadership, for the advancement of the State of Israel and all humanity."³ As part of this academic excellence, physical education is included in the undergraduate program to deliver its contribution to academic achievements and emotional well-being. This commitment to excellence led the Technion management to decide that it will not let the pandemic detrimentally affect its students' studies, in general (e.g., study time will not be extended and graduation will not be postponed, see Document 6 in Appendix 1) and, specifically, that physical education, which has a recognized contribution to academic excellence, will continue.

This decision delivers the message that science and engineering education is multi-faceted and is not based solely on theoretical lessons. In this spirit, all undergraduate science and engineering programs at the Technion include actual wet labs, which are not replaced with simulations as is the case in many academic institutions. During the pandemic, therefore, both wet labs and physical education lessons continued in accordance with national regulations. In other words, the extreme situation caused by the pandemic exposed the Technion's basic assumption that physical education is part of an excellent multi-faceted scientific and engineering education.

The multifaceted contribution of physical education to students' well-being was expressed by the students in the questionnaire distributed to them at the end of each of the first two semesters of the pandemic. In both semesters, the students were asked whether the physical education course they took contributed to various aspects of their life (motoric, social, emotional, cognitive, etc.), and if it did – how? Table 2 presents illustrative quotes regarding each such aspect.

Table 2. Students' quotes regarding the multi-faceted nature of physical education during the pandemic

Facet	Short Spring 2019-2020 semester in small groups	Winter 2020-2021 online via Zoom
Motoric: Due to the circumstances, most of the students indicated that	<ul style="list-style-type: none"> Physical activity is important at any time and in any circumstance. 	<ul style="list-style-type: none"> The course contributed to me a lot in improving my physical fitness. I began running and the

² The Technion also excelled in sports education and, prior to the pandemic, ranked second (after the Wingate Academic College whose focus is sports) in competitions organized by the national Academic Sports Association. The many cups won by the Technion's competitive teams are on display in the Sports Center.

³ Technion vision: <https://www.technion.ac.il/en/technion-vision/>

<p>they improved their physical abilities. They also mentioned the fact that they can apply what they learned in the course in other times as well.</p>	<p>All the more so when it comes to group sports that are not otherwise possible.</p> <ul style="list-style-type: none"> • The course contributed because other than during the classes, I didn't get up and do any sports. It was good for me to know that I have it once a week. Also, the instructor made sure to vary the work of the different muscles. 	<p>course provided me with a framework in which I could do sports in a controlled and regular manner.</p> <ul style="list-style-type: none"> • The course improved my quality of life a lot! In the Spring semester my body simply became stiff from sitting endlessly at the computer, when even the short walks from class to class were gone. I suffered from terrible back pain! And this semester, a short workout once a week and I'm already not suffering from all of that. I think that during the corona period the importance of a sports course that makes us get up and move a little is 100 times greater than during a regular semester!
<p>Social: Not surprisingly, in times of social distancing, the physical education courses enabled the students to fulfill their basic need for social interaction.</p>	<ul style="list-style-type: none"> • I met new people, something that I missed very much during that period, and I felt a sense of success. • I finally saw people rather than black rectangles with names. I went outside of the apartment – significant contributions. 	<ul style="list-style-type: none"> • The teacher let us run and then come back and share the results of the run. It felt really good and gave us reason to leave the house during such a time when everyone was stuck at home all the time. • The course was wonderful. We met up, three students, in the same apartment, to do the class and it was a good experience. I was very happy that this is how we did the course.
<p>Emotional: This facet received the most attention in students' responses. It includes improving the mood, refreshing the mind and body, releasing pressure and tension, and the option of leaving home and being in the open air. In</p>	<ul style="list-style-type: none"> • It affected me very much! It affected me emotionally in an amazing way. It influenced me positively in all aspects. • The sports activity helped a lot in coping emotionally with the 	<ul style="list-style-type: none"> • It saved the semester for me from a mental and physical perspective (otherwise I would have barely moved). • I'm happy I took an online sports course. Doing sports during the semester and going outside for workouts were an important part of maintaining my sanity and my health. I liked

<p>the Short 2019-2020 semester, during which classes took place in small groups, many students also indicated the personal attitude of the teachers which is not possible in regular semesters in larger groups.</p>	<p>pressure of my studies and these times.</p> <ul style="list-style-type: none"> • The course helped a lot with my anxieties about the present times. Even at the height of the exams, I wanted to go to class in order to leave the house, meet people, and of course do sports. 	<p>the outdoor aerobic workouts (walking/running) more than the body weight-based workouts at home. [...] Getting ready for class and connecting to the class were easy and required almost no effort. A very convenient sports class.</p>
<p>Academic: This facet includes learning new sports activities, improving personal management skills, and increasing awareness of health issues.</p>	<ul style="list-style-type: none"> • It helped me keep a normal daily routine (a central anchor). • It absolutely contributed. The coach explained a lot of things to us that I hadn't known about sports and thanks to him I'm continuing to persist in doing physical activity. 	<ul style="list-style-type: none"> • I took swimming (via Zoom) in order to learn how to swim. Nevertheless it was fun and I got a lot of flexibility back. I got a good background on which exercises to do. [...] In general, I don't have a background in sports and how to do a workout correctly is something that I am interested in learning. • Thanks to the sports course, I began a weekly workout routine and I learned a variety of activities that I will be happy to continue doing in the future.
<p>Cognitive: With respect to this facet, the students indicated the contribution of physical education to their ability to concentrate and study during this intense and tense period of time.</p>	<ul style="list-style-type: none"> • It helped me improve my concentration. • Going outside to do sports improved my ability to get back to my studies. • It occupied my head with other things besides my studies. 	<ul style="list-style-type: none"> • It contributed a lot! The sports class contributed greatly to coping with an atmosphere of constant sitting in front of the monitor and it also helped physically as well as mentally. • I'm very happy that I took the sports course during COVID. The second corona semester was even harder than the first, mentally, and sports really gave me a framework in which I could step out of my routine of sitting all day.

Values: Flexibility and adaptation to change

On the *values* level of Schein's model of organizational culture, as exhibited with respect to the Technion's physical education activities during the pandemic, we recognize the values of *flexibility*

and adaptation to change, which eventually support the Technion's basic assumption of providing an excellent multi-faceted science and engineering education. Specifically, in order to implement different physical education frameworks, flexibility had to be expressed. Similarly, the ability to adapt to change had to be exhibited in order to keep up with the frequent changes in the national regulations (sometimes on a daily basis) and the need to adjust the format of physical education courses accordingly. See Appendix 2 and Documents 2, 3, 6, and 8 in Appendix 1.

These values reflect the Technion's culture as part of the "startup nation" (Senor and Singer, 2011) and highlight several characteristics of Israelis in general: risk taking (Lautman, 2017) and acceptance of failure, on the one hand, and on the other hand, avoidance of uncertain situations (Hofstede 1991, 2001, 2011; Hofstede & Bond, 1988)⁴, all of which have helped make Israelis outstanding entrepreneurs in general (Senor & Singer, 2011). By balancing these three characteristics with respect to physical education during the pandemic, the Technion took the risk of continuing to offer physical education during the pandemic, even at the price of failure (after all, who else dared teach physical education via Zoom in higher education institutions during the pandemic?). Yet, as we shall see when we discuss the *artifacts* level, as part of the characteristic tendency of Israelis to avoid uncertainty, the Technion formulated very strict rules that were implemented in the physical education lessons during the pandemic.

The values of flexibility and adaptation to change were supported also by the low power distance that characterizes the Israeli society. Power distance, which is another dimension of Hofstede's framework (Hofstede 1991, 2001, 2011; Hofstede & Bond, 1988), is defined as "*the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally*"⁵. This characteristic enabled intensive, on-going communication between staff members of all Technion units, at all levels of seniority, who were involved in the decision-making processes that took place during the pandemic with respect to physical education (including the Physical Education Unit of the Humanity and Arts Department, the Undergraduate Studies office, the Center for the Promotion of Learning and Teaching, and the Technion management). Such intensive discourse was only natural thanks to the low power distance that characterizes the Technion, as part of Israel's culture.

Artifacts

The *artifacts* level completes the analysis of the Technion's organizational culture during the pandemic as exhibited with respect to physical education by showing how the visible things reflect and support the *basic assumptions* and *values* levels of Schein's model of organizational culture. With respect to the focus of this paper, i.e., physical education at the Technion during the pandemic, several artifacts were exhibited as described below.

Figure 2 shows the regular sport facilities available on the Technion campus; Figure 3 shows the facilities that were purchased or built especially for the outdoor physical education lessons that

⁴ The high score that Israel receives on the 'avoidance of uncertain situations' dimension can be explained by the national security situation that forces it to be ready for all possible situations (Source: <https://www.hofstede-insights.com/country-comparison/israel,the-usa/>).

⁵ Source: <https://www.hofstede-insights.com/country-comparison/israel,the-usa/>.

took place during the pandemic. This investment reflects the Technion's commitment to provide its students with a multi-faceted science and engineering education also during the pandemic (the *basic assumption* level), which could be executed thanks to the Technion's values of flexibility and adaptation to change (the *values* level).

But building new facilities was not sufficient. To provide a safe learning environment, strict regulations had to be formulated as well. This included the requirement to adhere to the Purple Regulations, which was facilitated by using 2-meter social distancing floor markings to ensure proper distance between students and determining the number of students in each group accordingly, offering masks at the entrance to the sports facilities to be taken off only during the class itself, placing disinfectants at the entrance to all sports facilities (both outdoor and indoor), and posting notices with the rules of required behavior. Furthermore, the students were encouraged to bring personal equipment from home, and public facilities and equipment were disinfected at the beginning and end of each class. Finally, in each class, the teacher (or someone on his or her behalf) was appointed to be in charge of COVID-19 compliance.

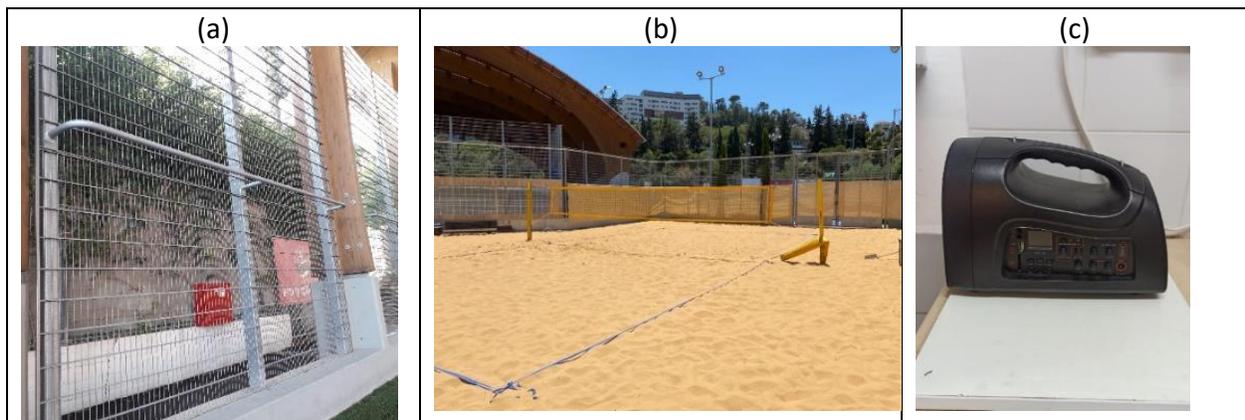


Figure 3. Outdoor facilities purchased or built at the Technion campus during the pandemic for outdoor physical education lessons: the TRX facility (a), the beach volleyball facility (b), and the wireless outdoor speakers purchased for the physical fitness courses: TRX, Pilates, functional, HIT, etc. (c).

Such strict rules are compatible with the *values* level of the Technion's organizational culture, which, as we saw, is supported by the tendency to avoid uncertainty. Indeed, the students mentioned these rules when they described the safe atmosphere they felt in the physical education classes they took during the pandemic. Following are several illustrative quotes from the survey distributed at end of the Spring 2019-2020 semester, which took place on campus in accordance with the Purple Regulations:

- It was evident that the issue of the coronavirus was very important to the person in charge of the course that took place in the gym. Thank you for understanding the situation and for the flexibility.

- It was especially important and beneficial in the present time to get out of the house and engage in physical activity. It is important and it contributed to me both physically and mentally! I think that it was done taking into account a calculated risk and adhering to the guidelines in a reasonable and good way!
- The green stickers in Gymnasium B helped us adhere to the guidelines of the Purple Regulations. I felt safe in terms of health – keep it up!

Furthermore, in that survey, in response to the question “Were you concerned about participating in the physical education courses in the 2019-2020 Spring semester?”, 41.1% of the students declared that they were not at all concerned, 44.4% declared that they had some concerns, 11.6% noted that they were concerned, and the rest, 2.9%, said that they were very concerned. We should recall that this semester took place just after the first lockdown in Israel, and still about half of the students did not worry. Furthermore, in response to the question, “Did you feel safe from the health perspective during the lessons?”, 83% indicated “I felt safe all the time” or “I felt safe”.

Conclusions

The research objective was to document the process the Technion underwent during the pandemic with respect to its undergraduate physical education programs; eventually, it turns out that the analysis of this documentation reflects the organizational culture of the Technion.

We now answer the research questions:

1. How did the Technion manage its physical education programs during the pandemic?

Appendices 1 and 2 present a detailed description of this process as well as the background for the analysis of the Technion’s organizational culture as expressed with respect to physical education during the pandemic (described in Section 4). Instead of shutting down its physical education courses, the Technion continued with its physical education program in accordance with national COVID regulations. Thus, by continuing to offer physical education classes, not only did the Technion support its students’ mental health and alleviate their stress, but it also further exhibited its belief in the importance of physical education, since organizational beliefs and values are usually tested during extreme times.

2. Is Technion’s organizational culture reflected in the Technion’s physical education programs during the pandemic? If yes, how? If not, why?

As described in Section 4, the three levels of Schein’s model of organizational culture, as reflected by the Technion’s approach to physical education in general, and during the pandemic in particular, support and reinforce each other. For example, the *basic assumption* of providing excellent and multi-faceted science and engineering education led to the investment of financial resources in *artifacts* for outdoor facilities to improve students’ well-being, including emotional and cognitive facets required for academic success, while demonstrating the *values* of risk taking and adaptation to change.

In general, the analysis of an organization's culture during extreme times reveals its basic assumptions regarding its treatment of its different activities and its allocation of its different resources during such times. Such analysis, when carried out in extreme cases, highlights which activities are valued and which can be eliminated without causing any harm. Based on these observations, the organization can characterize its culture by examining how these two kinds of activities are reflected in its artifacts, values, and basic assumptions as well as the coherence between these three levels of the organizational culture.

With respect to higher education institutions, such examinations can guide their decision process regarding the core curriculum that cannot be compromised even in the event of the imposition of various restrictions. Such restrictions can be either positive (e.g., competitions and the need to update study programs due to the increasing body of available knowledge) or negative (e.g., budget restrictions or a pandemic). The case of science and engineering education, discussed in this paper, is especially interesting due to the need to adjust the curriculum and the teaching methods also to new approaches implemented in this industry. Thus, for example, questions such as, "can interdisciplinarity be implemented and if yes, how?", can be answered by checking what organizational artifacts, values, and underlying assumptions support its adoption or alternatively, reject its adoption, as well as by examining the coherence between these levels of the organizational culture.

Looking back at the history of the Technion, we can see that in the past 70 years (since the early 1950s), physical education has been a mandatory component in all of the Technion's academic programs. What was initially a program that included one sports hall, two teachers, and three courses (physical fitness, artistic gymnastics, and ball games) grew in subsequent decades, as the physical education teaching staff was expanded, dozens of courses were added (totaling ~200 courses today) including team sports, and multiple facilities were constructed. Indeed, the founders of the Technion set the cornerstone for the working assumption that sees physical education as part of the excellent multi-faceted science and engineering education that the Technion provides its students.

References

- Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. London, UK: McGraw-Hill.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*. Thousand Oaks, CA: Sage (co-published in the PRC as Vol. 10 in the Shanghai Foreign Language Education Press SFLEP Intercultural Communication Reference Series, 2008)
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, Unit 2. Retrieved from <http://scholarworks.gvsu.edu/orpc/vol2/iss1/8>
- Hofstede, G. & Bond, M. H. (1988). The Confucius connection: from cultural roots to economic growth. *Organizational Dynamics*, 16, 4-21.
- Jenzabar (2021). *Mental Health: The Elephant on Campus and What Institutions Can Do*, Jenzabar, Inc..
- Kafka, A. C. (2021). *Building Students' Resilience: Strategies to Support Their Mental Health*, Chronicle of Higher Education.

Lautman, O. (2017). Five Things That Make Israelis Who We Are: Entrepreneurs. *OLM Consulting*.
<https://olm-consulting.com/five-things-make-israelis-entrepreneurs/>

Markowitz, E. (2021). Covid Impact: Online Learning Gains Favor, Student Mental Health Suffers, *Fierce Education*.

Schein, E. H. (1985). *Organizational Culture and Leadership*, Jossey-Bass, San Francisco, CA.

Schein, E. H. (1990). Organizational culture, *American Psychologist* **45** (2), pp. 109-119. doi:10.1037/0003-066X.45.2.109.

Schuch, F.B., Vancampfort, D., Firth, J., Rosenbaum, S., Ward, P. B., Silva, E. S., Hallgren, M., Ponce De Leon, A., Dunn, A.L., Deslandes, A.C., Fleck, M.P., Carvalho, A.F., Stubbs, B. (2018). Physical Activity and Incident Depression: A Meta-Analysis of Prospective Cohort Studies, *American Journal of Psychiatry* **175** (7), pp. 631-648.

Senor, D. & Singer, S. (2011). *Start-up Nation: The story of Israel's Economic Miracle*, Twelve.

Appendix 1. The documents analyzed in this research

Document No.	Title
Just before Spring 2019-2020 semester: Documents 1-15	
1	Since the Technion was expected to shut down in the near future, the Technion management sent a letter to all its students, teaching staff, and administrative staff, delivering a calming message and stating that the Technion was making all necessary preparations to start the Spring semester remotely. Online remote learning was mentioned for the first time. It was also decided to avoid delaying students' graduation. With respect to physical education, it was decided to continue to operate the physical education courses that were planned for the Spring 2019-2020 semester in general, and specifically for students who were nearing the end of their studies.
2	Correspondence between the head of the Humanities and Arts Department and the head of the Physical Education Unit (first author of this paper) regarding the first alternative for facilitating physical education courses during the pandemic.
3	Details of the first alternative for the physical education courses program during the pandemic are discussed in Document 2.
4	March 14, 2020: Email from the Technion's general director to all Technion students and employees conveying COVID-19 updates.
5	March 15, 2020: Email from the Technion's president to all Technion students and employees conveying the Technion's approach to the next stage of the pandemic.
6	March 16, 2020: Email from the Dean of Undergraduate Studies to all Technion students regarding the cancellation of their enrollment in the physical education courses in the Spring 2019-2020 semester. Students in the last semester who needed to complete their physical education requirements were requested to approach the undergraduate office in their faculty.
7	March 13, 2020: List of courses proposed by the head of physical education for facilitation in the Summer 2019-2020 semester.
Spring 2019-2020: Documents 8-15	

8	April 21, 2020: List of online courses proposed by of the head of physical education for the continuation of the Spring 2019-2020 and Summer 2019-2020 semesters.
9	May 20, 2020: National emergency regulations for gyms.
10	May, 11, 2020: Technion's emergency regulations for gyms.
11	May 14, 2020: Undergraduate policy regarding registration to the short Spring 2019-2020 semester.
12	The Ministry of Health's regulations for sports units in different organizations, specifically regarding the use of sports facilities during the pandemic.
13	Course schedule for the Spring 2019-2020 semester.
14	A message to all undergraduate students regarding the short Spring semester (that began late in the Spring 2019-2020 semester).
15	Instructions compiled by the Technion's Safety Unit regarding physical education courses during the pandemic, including a list of courses for the short Spring Semester 2019-2020.
Summer 2019-2020: Documents 16-18	
16	Course schedule for the Summer 2019-2020 semester.
17	Students' feedback to the survey distributed at the end of the Short Spring 2019-2020 semester (on July 31, 2020).
18	Online seminar for the teaching staff.
Winter 2020-2021: Documents 19-22	
19	Instructions for the physical education teachers in preparation for the online Winter 2020-2021 semester.
20	List of online courses offered in the Winter 2020-2021 semester.
21	Students' feedback to the survey distributed at the end of the online Winter 2020-2021 semester.
22	Announcement of the end of mandatory attendance in the courses in the Winter 2021-2022 semester, 9 weeks into the semester, due to the outbreak of the Omicron variant.

Appendix 2. The Technion's policy in each semester during the pandemic with respect to physical education

(The document numbers mentioned in Appendix 2 refer to Appendix 1.)

Date	Technion activities and policy with respect to physical education
March 2020, towards the opening of the Spring 2019-2020 semester (on March 18, 2020):	200 courses were ready to begin at all of the Technion's on-campus facilities, as well as off-campus facilities used (e.g., the Haifa beach).
Prior to Spring 2019-2020 semester (6 days: 11-17, March 2020)	
March 11, 2020	Since the Technion was expected to shut down in the near future, the Technion management sent a letter to all its students, teaching staff, and administrative staff, in order to deliver the message that the Technion was making all necessary preparations to start the Spring semester remotely. See Document 1. Online remote learning was mentioned for the first time.

	<p>It was also decided:</p> <ul style="list-style-type: none"> to avoid delaying students' graduation and to provide all students who were in their last semester the opportunity to complete their studies. to continue operating the physical education courses that were planned for the Spring 2019-2020 semester in general, and specifically for students who were nearing their graduation. Different options were considered, including recorded lessons and lectures on different topics related to physical education. See Documents 2 and 3.
March 12, 2020	<ul style="list-style-type: none"> The government decided to shut down all academic institutions in Israel.
March 14, 2020	<ul style="list-style-type: none"> Discussions about how to continue offering physical education courses continued. Some ideas were rejected due to safety reasons. For example, one of the options considered was to offer students a list of videos of physical education lessons, from which each student could choose two and exercise with them. If the student had questions, he or she could approach the teacher by email. This option was rejected because in this scenario, the teacher cannot see the students and cannot ensure their safety. The Technion's sports center, swimming pool, and gym were closed.
March 16, 2020	<ul style="list-style-type: none"> Student enrollment in all physical education courses in the 2019-2020 Spring semester was canceled. Students in their last semester who had not yet completed their physical education requirements were asked to approach their faculty undergraduate office to find a solution. See Document 6.
Spring 2019-2020 semester	
Semester starts: March 18, 2020	<ul style="list-style-type: none"> The Technion moved to online learning. Only two physical education courses (debate and chess), which include mainly theoretical content, were offered online and only to students in their last semester who were nearing graduation. The Technion's human resources department distributed a pre-recorded relaxation and meditation lesson, presented by one of the Yoga teachers, to all Technion employees.
April 4, 2020	First lockdown in Israel began, lasting until April 18, 2020.
Short Spring 2019-2020 semester	
May 31, 2020 - July 31, 2020: 9 weeks (instead of 13 weeks of a regular semester)	<ul style="list-style-type: none"> After the lockdown ended, a decision was made to offer students physical education courses on-campus in accordance with the Purple Regulations. See Documents 9-15. Outdoor sports facilities were built for these courses (see Figure 3, in Section 4.3). Students in advanced semesters were given priority in enrollment. The first end-of-semester survey was distributed. See Document 17.
August 1-15, 2020	<ul style="list-style-type: none"> Teachers' training: An online workshop for the Technion's physical education staff was held, focusing on pedagogical methods to be used in courses taught according to the Purple Regulations. See Document 18.
Summer 2019-2020 semester	
	<ul style="list-style-type: none"> A small number of outdoor courses were offered on campus in accordance with the Purple Regulations. See Document 16.

Winter 2020-2021 semester: Online	
	<ul style="list-style-type: none"> • All physical education courses were taught remotely via Zoom. • 95 courses were opened compared with 210 in a regular semester prior to the pandemic. See Document 20. • Since the courses could not be taught as planned, on campus, using the required sports facilities (e.g., swimming in the swimming pool), course contents were adjusted to include mainly physical fitness workouts targeting the respective sport. For example, the volleyball course emphasized the skills needed for this sport, such as jumping, muscle strength, and agility. • A workshop for the Technion's physical education staff was facilitated in cooperation with the Technion's Center for the Promotion of Learning and Teaching. The workshop focused on how to make remote physical education lessons active and safe (rather than passive). See Document 19. • The second end-of-semester survey was distributed. See Document 21.
Spring 2020-2021 and Summer 2020-2021 semesters	
	<ul style="list-style-type: none"> • Courses were taught on campus. • Green Regulations were applied, restricting the participation in these courses only to vaccinated students and students who had recovered from COVID-19.
Winter 2021-2022 Semester	
	<ul style="list-style-type: none"> • During the first nine weeks of the semester, physical education classes took place as planned without any restrictions. • Groups were relatively small. • January 3, 2022: Due to the outbreak of the Omicron variant, attendance in the physical education classes was not mandatory for the last three weeks of the semester. Students could attend the lessons on-campus if they wished; only a few students showed up. See Document 22.
Spring 2020-2021 semester	
	<ul style="list-style-type: none"> • Back to normal: All COVID-19 restrictions were lifted in Israel. • The number of students who registered for physical education courses returned to pre-pandemic values. See Table 1.

How a Journal Club Can Support Change Leadership by Bridging Research and Practice

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Context

As we move beyond the acute phase of the Covid-19 pandemic, universities are adjusting policies and practices regarding flexwork, defined here as flexibility in where and when work responsibilities are fulfilled. The researcher of the current study accepted a senior leadership position in higher education administration shortly after the university released a pilot policy that allowed administrative staff to work from home up to two days per week based on business needs. The researcher was tasked with implementing this pilot flexwork policy for her team of 35 full and part-time staff members.

In speaking with colleagues at various universities, the researcher recognized that many higher education leaders were dealing with the same change leadership issues related to the transition to flexwork. The researcher had conducted a significant amount of research on flexwork in her prior role and had served on the Flexwork Committee of a large research university in the northeast. The researcher appreciated the benefit of her background knowledge of flexwork research as she explored how best to practice flexwork in her new work environment and with her team. The researcher realized that access to relevant research may also be helpful to other leaders who were spearheading the transition to flexwork at their institutions.

The researcher decided to bring together a coalition of female leaders from various institutions with the goal of creating a collaborative space where female leaders could learn about and discuss challenges and opportunities related to transitioning staff to more flexible work environments. The intended outcome was to empower leaders in higher education to spearhead change management efforts that result in optimal and equitable realization of the benefits of flexwork for their organizations and administrative staff beyond the acute phase of the Covid-19 pandemic. The researcher chose to focus on female leaders as key participants because her prior research highlighted the importance of leaders in creating an environment that is supportive of flexwork, a concept that is also evident in the literature (Bayazit & Bayazit, 2017; Clark, 2000).

Action Step Design

Understanding that adult and workplace learning opportunities can provide powerful and valuable support for participants' skill development and self-improvement (Merriam & Bierema, 2014), and that individual learning can in turn support organizational learning and improve overall productivity (Beitler & Miltacher, 2007), the researcher designed a workplace learning experience to support female leaders in higher education who are charged with spearheading change management efforts in the transition to flexible work environments beyond the acute phase of the Covid-19 pandemic.

The researcher's professional history included work at two medical schools. Through her work in medical education, the researcher was exposed to the concept of a journal club. Journal clubs are popular in medical education, in part because they often provide continuing education credits, which medical practitioners need for license renewal. The basic framework of a journal club consists of monthly meetings where participants discuss academic journal articles that have been chosen by a journal club moderator. A major goal of a journal club is to provide a bridge between research and practice. (Kleinpell, 2002; Honey & Baker, 2011).

The researcher conducted a literature review on the journal club framework. There were some studies of the effectiveness of the journal club as a support for research-informed practice in healthcare fields (Lindquist, et al., 1990; Kleinpell, 2002). The researcher could not find any peer-reviewed articles related to the use of the journal club framework outside of medical education. The researcher then defined a research question to specify the journal club framework as the mechanism being studied in the context of change leadership support. The resulting research question was "Is a journal club an effective mechanism for bridging research and practice in higher education administration?"

Journal Clubs as Adult Learning

Journal clubs have been used effectively in healthcare fields to bridge the gap between research and practice (Lindquist, et al., 1990; Kleinpell, 2002). Research on journal clubs in healthcare settings shows that they promote critical thinking skills, facilitate professionals' ability to stay current on knowledge, and allow professionals to apply research to improve practice (Kleinpell, 2002; Honey & Baker, 2011). Journal clubs are structured around a shared review and analysis of expert research (Kleinpell, 2002), and may resonate with higher education professionals, who may be more inclined to pursue learning experiences with a more traditional approach based on the dissemination of expert knowledge (Mercieca, 2017). A journal club may therefore provide a valuable framework for a workplace learning experience for leaders in higher education who are managing change efforts.

The effectiveness of a journal club as a support for change leadership may stem from the fact that the framework satisfies many of the tenets of adult and workplace learning, including the qualities of being self-directed, situated in the learner's experience, problem-centered, and immediately applicable (Knowles, 1980). Because the overarching goal of a journal club is to bridge the divide between research and practice, journal clubs include content that is highly relevant for participants and supports their ability to fulfill their roles and responsibilities (Zemke & Zemke, 1995). The time between journal club meetings provides an opportunity for reflection, which is critical to adult learning (Bennett, 2012; Wittich, et al., 2010). Opportunities to reflect on journal club discussions support participants' ability to apply learnings from the research to their own practice.

Action Step Activities

The researcher contacted female leaders in higher education with a request to participate in the journal club. The researcher was able to secure participation from nine women in senior leadership positions at six different universities. Each leader completed pre-work prior to the collaborative

sessions, including an assessment of why the group is relevant to their practice and what they were hoping to gain from participation. The researcher carefully chose nine research articles that explored different research themes related to flexwork. Each participant committed to read the two assigned articles prior to each journal club session, with three assigned on the last session so that each leader had a chance to facilitate a discussion.

The researcher created a schedule for the group to meet four times virtually over Zoom in the fall of 2022. The researcher also scheduled two focus groups to collect participant feedback after the conclusion of the journal club meetings. The researcher gained approval from participants to share names and professional information and collected biographies of each participant. These were distributed prior to the program so that participants had professional context for their co-participants. The researcher created a shared Google folder where journal club articles and artifacts were shared. The researcher also created a group email so that participants could communicate with one another between sessions and share resources if they chose. The researcher provided background on the journal club framework to all participants.

Each of the first three meetings covered two peer-reviewed research articles related flexwork, with the fourth meeting covering three articles. This was done so that each journal club participant would have an opportunity to facilitate the discussion of one article. The researcher also provided additional optional artifacts, including podcasts, videocasts, and blogs, that participants could utilize between sessions. The researcher assigned each participant as facilitator for the discussion related to one of the articles to promote stakeholder engagement. The researcher took care to review the positions that each leader has in her institution and her goals for participation in the journal club and assigned a research article that aligned with that role and interest. For example, a woman who leads a large information technology team was assigned to facilitate discussion of a research article on e-leadership.

Synopsis of the Research Design

The research project employed an action research methodology in the context of qualitative research. Qualitative research allows for the exploration of broad research questions, rather than a narrower focus on proving or disproving a pre-determined hypothesis (Fossey, et al., 2002). Auerbach and Silverstein (2003) make the important point that, because qualitative research does not involve testing a hypothesis, it allows for an exploration of difference that is difficult with research methodologies that focus on generalizable results. Action research involves systematic inquiry (Stringer, 2014) of social phenomena (Bradbury, et al., 2015) that recognizes that knowledge is socially constructed (Brydon-Miller, et al., 2003) and engages researchers and participants in collaborations (Herr & Anderson, 2015) aimed at generating knowledge that can promote social change (Bradbury, et al., 2019; Brydon-Miller, et al., 2003).

Action research is conducted by scholar-practitioners and enables robust, relevant, and applicable research on human experience. Knowledge generated through action research may be used to effect positive social change. Supporting the success of flexwork for administrative staff in higher education and ensuring that the benefits of such arrangements are applied equitably to all staff members relies on understanding human experiences related to the utilization of flexwork and appreciating the change management challenges and opportunities related to transitioning to more

flexible work environments for administrative staff. Qualitative action research enables the insights and understanding that can inform the strategy development to manage change successfully.

Participants and Collaborators

Research participants included nine female senior administrative leaders from six different universities located along the east coast. All participants hold the title of Director, Executive Director, Vice President, Assistant Dean, or Associate Dean. The universities of all participants have endorsed a post-Covid-19-pandemic shift to flexwork for administrative staff in support of staff recruitment and retention goals, cost efficiencies, and other reasons. External stakeholders include all administrators in higher education who wish to support improved professional practice through research to practice connections. The researcher has held leadership roles at two of the research sites, both of which have expressed support for this project.

Evaluation

The researcher conducted two focus groups after the conclusion of the four journal club meetings to assess effectiveness of the journal club framework. The participants were divided into two focus groups to accommodate schedules and assure each journal club participant could participate and provide feedback. The first focus group, which took place on December 8, 2022, involved five journal club participants and the second focus group, which took place on December 12, 2022, involved four participants. Each focus group lasted for one hour and took place via Zoom.

Prior to the focus groups, the researcher coded the transcripts of the journal club meetings and highlighted findings from the research articles. The researcher conducted two types of coding on the journal club meeting transcripts. The first was concept coding (Saldana, 2016). For this level of analysis, the concept codes that emerged mirrored those found in the researcher's prior research and related to challenges and opportunities associated with flexwork success. The researcher conducted a secondary level of coding using provisional coding (Dey, 1993; Miles et al., 2014, as cited in Saldana, 2016). Provisional code lists may be based on established conceptual frameworks or prior research (Saldana, 2016). In this case, the researcher used Kotter's 8-Step Change Model framework (1995) as the basis for the provisional code list. Kotter's framework provides a helpful construct for analyzing the journal club participant's feedback in the context of applicability to change leadership. The researcher provided a summary of the themes and codes that emerged from the journal club meeting transcripts to the participants prior to the focus groups. The researcher asked that each journal club participant review the summary to refresh memories of the journal club articles and discussions. This also enabled the researcher to perform member-checking (Saldana, 2016) to ensure the accuracy and validity of the data.

Findings

This study explored two research questions; "Can collaborative discussions among female leaders in higher education support these leaders' self-efficacy to lead change in the transition to flexible work environments beyond the acute phase of the Covid-19 pandemic?" and "Is a journal club an effective mechanism for bridging research and practice in higher education administration?" Findings related to the first research question are not explored in this paper. Instead, the focus of

this article is to analyze findings related to the research question, “Is a journal club an effective mechanism for bridging research and practice in higher education administration?”

Effectiveness of a Journal Club in Higher Education Administration

Findings from the research indicate that the journal club format can support the development of change leadership skills for higher education administration professionals by providing a bridge between research and practice. Participants reported that the knowledge and insights they gained from the journal club enabled them to validate their opinions and influence others. They cited professional benefits associated with familiarity with relevant research and with the practices of other institutions. Participants shared that the journal club supported them as change leaders by providing them with intentionality, research-informed expertise and practice, and benchmarking capability.

Intentionality. The structure of the journal club provides space for busy leaders to have intentional conversations and creates a framework that holds them accountable. As one participant described,

I do think the framework made me do it. I think without that framework, and without something scheduled, and without something planned, I would intend to do it. I would maybe start to do it and then not do it. So, I liked having the structure of a short-term group focused around a specific topic. I thought that that was really valuable, and I liked a lot of the discussions. You know, the journal articles were a starting point, and then, having one of us be the facilitator to bring us back to that point, I found that really helpful.

Journal club participants reported feeling “hectic” during the early phases of the pandemic. Participants felt that they were reacting to an ever-evolving landscape rather than approaching change thoughtfully. Participants reported that the journal club supported their ability to be intentional when considering how to support flexwork success in their own institutions. As one participant observed,

Having the journal club now was actually great timing, because we've lived through the past. We were forced to deal with flexwork during the pandemic. But now we can actually be thoughtful and design what we want the next phase to look like.

Research Informed Expertise and Practice. In addition to providing space for participants to approach change thoughtfully, participants also felt that the journal club provided a bridge between research and practice. Several members commented on the relevance that journal club readings and discussions had to their own work situations. Participants described many ways that they were able to apply learnings from journal club readings and discussions in their own work environments.

Participants highlighted that research is particularly important in academic settings. As one participant shared, “We’re an educational institution so people want to know what’s going to inform the decisions.” Participants reported that the journal club had “cemented” and “enhanced” their interest in research relevant to their professional practice. The journal club supported participants’ ability to advocate in support of solutions, by providing what one participant referred

to as “more concrete information to support my arguments.” Another participant agreed that the journal club had improved her ability to influence outcomes at her institution, sharing “I think we have a lot of believers in our leadership team, but we also have some skeptics, so that allowed me to share information with some of the more skeptical people.” Participants were able to function as honest brokers, bringing new data to discussions and supporting efforts to arrive at solutions. As one participant shared,

I saved all my articles with my highlights, because I am hoping to leverage them in various conversations when the time arises. We’re having these ongoing conversations. So, being able to set cite an article, it's kind of a cool thing to have.

Participants found that journal club participation improved their professional practice by providing an opportunity to share research from sources that differed from those more commonly accessed and referenced by others. One participant described that being in the journal club “definitely helped in that it tapped into a little bit of different research coming from other areas that I hadn't used before. Certainly, this group was a huge help in that.” For some, the ability to contribute knowledge and expertise helped to close the faculty-staff divide. As one participant shared, “We're now trying to really impress upon the faculty, and on the college community as a whole, that the contributions of staff, the intellectual discovery that the staff do, is also important.” Several participants shared that they planned to implement journal clubs at their own institutions, and all indicated that they would continue to look to research to inform their practice. One participant commented,

We were talking about being able to see national data. It’s a pocket of resources that I had not really previously considered in order to drive my own point home. To find supporting research. I would definitely begin to research something when I'm proposing other strategic initiatives in my role.

Benchmarking Capability. Another benefit of the journal club reported by participants was the ability to bring external perspectives back to their own institutions. As one participant shared, “It's easier to back up the things that we're proposing when we can point to the research and how it's impacted other institutions.” Participants were able to share data that enabled their institutions to benchmark against the experiences of both peer institutions and national trends. One participant commented,

I don't know about you, but as soon as I mentioned that I'm meeting with other members from other universities, people sort of perk up and say, ‘What are you talking about? What are the journal articles you're reading?’ That is sort of is a nice lead in as well.

Participants also reflected on the benefits of hearing from other schools with characteristics that differed from their own. One participant observed, “It gave perspectives from big schools that are bigger than mine, and from different departments, and showed that it's not just a side issue that our little school is thinking about. It's not going away. It's not a fad.” The ability to serve as a conduit to other institutions, and as an expert sharing research on national trends, supported journal club

participants' professional practice and enhanced their change leadership capacity. As one participant summarized,

People are obviously coming to it from a different direction than I was, so it was interesting to hear how other people had processed or interpreted the research in a way that expanded a bit of what my experience had been. And honestly, I think anytime you get a group of women in similar roles together, the conversation can be invaluable in that you get a lot out of that, just hearing about other obstacles that people are facing. Being able to discuss the same article and understanding how it was shaped by other people's perspectives was interesting to me. It's always helpful to have a few points from similarly situated people to be able to either test your thinking, or prod your thinking, or confirm your thinking. It's really helpful.

Conclusion

This study found that a journal club for female leaders in higher education administration supported participants' change leadership development by providing a bridge between research and practice. The journal club enabled participants to validate their own opinions, learn from the experiences of others, and share their authority and expertise in their own organizations. This study validated the journal club framework as an effective mechanism for bridging research and practice in a field outside of medical education, namely higher education administration.

Recommendations and Future Research

Prior research on journal clubs was largely, if not solely, conducted in healthcare related fields. This research project demonstrated that a journal club provides an effective mechanism for bridging research and practice in higher education administration and supports the professional development of leaders in higher education administration who are charged with spearheading change leadership efforts. Additional research on the use of journal clubs in higher education administration to explore problems of practice is warranted.

References

- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. ProQuest Ebook Central.
- Bayazit, E. Z., & Bayazit, M. (2019). How do flexible work arrangements alleviate work-family conflict? The roles of flexibility i-deals and family-supportive cultures. *International Journal of Human Resource Management*, 30(3), 405–435.
<https://doi.org/10.1080/09585192.2017.1278615>
- Beitler, & Mitlacher, L. W. (2007). Information sharing, self-directed learning and its implications for workplace learning. *The Journal of Workplace Learning*, 19(8), 526–536.
<https://doi.org/10.1108/13665620710831191>
- Bennett, E. E. (2012, June). A Four-part model of informal learning: Extending Schugurensky's conceptual model. *Proceedings of the Adult Education Research Conference*. Saratoga Springs, NY: AERC.

- Bradbury, H. et al. (2019). What is good action research: Quality choice points with a refreshed urgency. *Action Research*, 17(1), 14-18. doi:10.1177/1476750319835607
- Brydon-Miller, m., Greenwood, D., & Maguire, P. (2003). Why action research? *Action Research*, 1(1), 9–28. <https://doi.org/10.1177/14767503030011002>Cambridge University Press.
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human relations*, 53(6), 747-770. <https://doi.org/10.1177/0018726700536001>
- Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732. <https://doi.org/10.1046/j.1440-1614.2002.01100.x>
- Herr, K., & Anderson, G. L. (2015). *The action research dissertation: A guide for students and faculty*. SAGE.
- Honey, C. P., & Baker, J. A. (2011). Exploring the impact of journal clubs: A systematic review. *Nurse Education Today*, 31(8), 825-831. <https://doi.org/10.1016/j.nedt.2010.12.020>
- Kleinpell. (2002). Rediscovering the value of the journal club. *American Journal of Critical Care*, 11(5), 412, 414–414. <https://doi.org/10.4037/ajcc2002.11.5.412>
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy*. Follet Publishing Association Press.
- Kotter, J. (1995) *Leading Change*, Boston: Harvard Business Review Press.
- Lindquist R., Robert R.C., & Treat, D. (1990). A clinical practice journal club: bridging the gap between research and practice. *Focus on Critical Care*, 17(5):402–406.
- Mercieca, B. (2017). What is a community of practice? In: McDonald, J., Cater-Steel, A. (eds) *Communities of Practice*. Springer, Singapore. https://doi.org.ezproxy.neu.edu/10.1007/978-981-10-2879-3_1
- Merriam, S.B. & Bierema, L. L. (2014). *Adult learning: Linking theory and practice*. (First edition.). Jossey-Bass.
- Saldana, J. (2016). *The coding manual for qualitative researchers*. SAGE.
- Stringer, E. T. (1996). *Action research: a handbook for practitioners*. Sage Publications.
- Wittich, C. M., Reed, D. A., McDonald, F. S., Varkey, P., & Beckman, T. J. (2010). Perspective: Transformative learning: a framework using critical reflection to link the improvement competencies in graduate medical education. *Academic Medicine*, 85(11), 1790–1793. <https://doi.org/10.1097/ACM.0b013e3181f54eed>
- Zemke, R., & Zemke, S. (1995). Adult learning: What do we know for sure? *Training*, 32(6), 31-39.

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