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Manhattanville College

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Manhattanville College is an independent, coeducational liberal arts institution dedicated to academic excellence, and social and civic action. Founded in 1841, the college offers more than 45 undergraduate areas of study as well as graduate programs in education, business, and creative writing. Manhattanville prepares students to be ethical and socially responsible leaders in a global community.

Located just 30 minutes from New York City in Purchase, New York, Manhattanville serves more than 1,400 undergraduate students and 1,000 graduate students from more than 30 states and 50 countries.

Cover Photo: Reid Castle, named after Whitelaw Reid, publisher of the New York Tribune and owner of the estate to which in 1952 the college moved from its earlier location in the Manhattanville section of northwestern Manhattan in New York City. Other nearby buildings form a central outdoor quad designed by famed landscape architect Frederick Law Olmstead, designer of New York's Central Park.

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"This Would Not Count": Do Institutions of Higher Education Support Faculty as Public Intellectuals?

M. Yvonne Taylor
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For nearly as long as institutions of higher education have existed, institutions have administered a promotion and tenure (P&T) process for faculty members (Niles et al., 2020; Schimanski & Alperin, 2018; Seipel, 2003). This P&T process usually consists of a faculty member needing to publish in top-tier journals and earn grants and research funds, providing high-quality instruction to students, and performing institutional and community service (Jacobs & Townsley, 2011; Niles et al., 2020; Sommer & Maycroft, 2008). However, as online media sources continue to grow, there is an increased sense that there are more outlets in which to publish scholarly intellectual work than ever before (Gasman, 2016; Institute of Education Sciences, 2022). In the 1960s and 1970s, only a handful of education journals were dedicated to publishing education-related content. Fast forward to the 2020s, and there exist thousands of journals that purport to publish educational research of some kind (Institute of Education Sciences, 2022). As a result, satisfying P&T requirements has become more competitive than ever, with top-tier publications being far outnumbered by less competitive journals and predatory publishers that reflect poorly on a faculty member's curriculum vitae (Seipel, 2003; Taylor, 2019).

Even though P&T processes have maintained focus on top-tier publishing, institutions of higher education also desire for their faculty members to contribute to their cultural zeitgeist and position themselves as public intellectuals (Boyer, 1990; Keren & Hawkins, 2015; Kezar, 2018). This sense of public intellectualism often requires a faculty member to speak to the public as an educated but relatable member of academe, inserting both a faculty member's name and their institution into important and influential societal conversations (Boyer, 1990). Common forms of public intellectualism may include opinions and editorials (op-eds) in popular, mainstream publications, appearing on radio, television, and podcasts, or public speaking appearances, all of which are not typically rewarded by institutional P&T processes (Boyer, 1990; Bhattacharyya & Murji, 2013; Kezar, 2018). As a result, faculty members must both publish in top-tier journals to an academic audience while translating their academic work to a more general audience and promote oneself and the institution as a public intellectual (Kezar et al., 2018; Rose, 2018; Ream et al., 2019).

Therein lies the tension: Institutional P&T processes support traditional forms of scholarship, such as publishing in top-tier journals, by providing faculty members with relief from teaching loads, sabbaticals, and travel and research dollars (Boyer, 1990; Tien & Blackburn, 1996). Public intellectualism, however, is increasingly expected of faculty members but is not rewarded through traditional P&T processes (Childs & Johnson, 2018; Kezar et al., 2018; Rose, 2018). Moreover, as the

process of earning tenure for junior faculty has become more rigorous (Guillaume & Apodaca, 2020; Ream et al., 2019; Tien & Blackburn, 1996), it is increasingly important for researchers to produce groundbreaking scholarship that speaks to specific contingencies in an expeditious manner. This places faculty members, especially junior faculty, in the precarious position of trying to hurdle traditional P&T processes to maintain one's career, while also creating a platform for public intellectualism with little to no institutional support or reward (Childs & Johnson, 2018; O'Meara, 2005; Ream et al., 2019).

As a result, this intensive case study liberates the voices of 14 tenure-track and tenured faculty to reflect upon their experiences within a R-1 public flagship institution as it relates to recruiting, producing, and disseminating public scholarship. Herein, we explore faculty members' P&T processes as they relate to public intellectualism, and provide insight on faculty socialization, P&T processes, and emerging pressure to produce public scholarship. Our study was guided by the following questions:

> RQ1: How do faculty members describe public scholarship as it relates to promotion and tenure processes?
>
> RQ2: Are faculty members supported by their institution to produce public scholarship? If so, how do they describe this support?

Our study highlights how faculty and institutional leaders can navigate university structures related to P&T, meet the demands of producing rigorous scholarship, while also liberating faculty voices to reach the public and deliver timely scientific information that can inform current events.

Literature Review

Decades of scholarship has explored different forms of public scholarship (Calavita & Krumholz, 2003; Day & Golan, 2005; Taylor, 2021) and its influential nature within various social sectors (Jacobs & Townsley, 2011; Sommer & Maycroft, 2008). For these reasons, a comprehensive literature review related to public scholarship and its effects is unnecessary to acknowledge research gaps and successfully answer this study's research questions. Instead, this literature review will focus on the traditional promotion and tenure process, what those institutional processes support and reward, and whether public intellectualism has been explored as a future prong of the P&T process.

The Promotion and Tenure (P&T) Process

Earlier work on the P&T process has described it as a multipronged approach that evaluates the quality of faculty members across three broad categories: research, teaching, and service (Miller, 1987; Saaty & Ramanujam, 1983; Tierney & Bensimon, 1996). However, there has been an inherent tension within this process, as institutions of higher education vary in terms of research, teaching, and service expectations on each campus, with P&T committees being comprised of faculty members within that institution who also have idiosyncratic conceptualizations of quality and rigor (O'Meara, 2005). As a result, the P&T process at many institutions of higher education has been highly variable and subjective, with some researchers going as far as attempting to standardize the

process through complex waiting algorithms of research productivity, teaching effectiveness, and institutional and community service (Cabrera et al., 2018).

However, the P&T process has remained relatively unchanged in the last century of academia, with most institutions continuing to prioritize publishing in top-tier journals, followed by earning grants and research funds, satisfactory teaching evaluations, and both community and institutional service (i.e., serving on institutional committees, maintaining active membership in professional associations, building community partnerships) (Niles et al., 2020; Seipel, 2003; Schimanski & Alperin, 2018; Tien & Blackburn, 1996; Tierney & Bensimon, 1996). As this process has remained unchanged, researchers have explored inequitable and disproportionately negative P&T evaluations of marginalized faculty members (Childs & Johnson, 2018; Guillaume & Apodaca, 2020; Joseph & Hirshfield, 2011; Turner, 2002; Turner et al., 2008). These studies have often found that the P&T process discriminates across many marginalized identities, largely privileging faculty members who are men, White, access elite education systems, and have pre-existing connections to academe before their faculty career begins (Childs & Johnson, 2018; Croom, 2017; Guillaume & Apodaca, 2020; Joseph & Hirshfield, 2011; Turner, 2002; Turner et al., 2008).

Institutional Support of Faculty Members and P&T

Decades of work has chronicled how the promotion and tenure process rewards peer-reviewed scholarship in top-tier academic journals, deterring faculty members from using valuable time and resources to produce public scholarship that may not be rewarded (Niles et al., 2020; Schimanski & Alperin, 2018; Seipel, 2003). As a result, institutions with high research profiles often employ grant writers and facilitate research support so faculty members can produce academic work more efficiently and effectively (Niles et al., 2020; Schimanski & Alperin, 2018). Junior faculty members may also be paired with a senior faculty member to serve as a mentor who can help the junior member navigate the institutional P&T process (Zellers et al., 2017).

Given that many external forces impact faculty members' ability to conduct research, perform high-quality teaching, and earn tenure, institutions often provide other forms of support to tenure-track faculty members. First, institutions often facilitate course releases to allow tenure-track faculty members to teach less than peers in order to have more time for research (Pastore, 2013). Second, institutions often provide familial support for working parents, so personal obligations do not negatively impact a tenure-track faculty members' research output, even though studies have suggested that support is not equitable across gender or race (Childs & Johnson, 2018; Croom, 2017; Taylor, 2021; Turner, 2002; Turner et al., 2008). Moreover, institutional support can vary across institution types, depending on the mission and vision of the institution (Park & Riggs, 1993).

Institutional Support of Public Intellectualism and P&T

Gasman's (2016) work highlighted the importance for diverse faculty members to engage in public scholarship to place a spotlight on issues related to equity and inclusion, especially among pre-tenure faculty members during the P&T process. Gasman (2016) also asserted that faculty members are often motivated to explore new ways of connecting with the general public through social media because marginalized populations may be better able to access this form of information than traditional, peer-reviewed scholarship. This access thus liberates information, and subsequently,

people, from oppressive systems. Yet, Ream et al. (2019) insisted that many faculty members may resist engaging in public scholarship until they have earned tenure out of a fear for job security or personal safety. Bhattacharyya and Murji (2013) similarly reasoned that faculty of color may feel at risk when producing public scholarship given the societal tensions around race, race relations, and the emotional toll of critically engaged research. Moreover, this phenomenon may be amplified and differentiated across academic disciplines, as MisirHiralall et al. (2018) argued that religious scholars often face threats to personal safety when producing public scholarship, as religious issues may often be socio-emotionally and socio-politically charged, endangering the faculty member's professional standing and personal livelihood.

To date, little research exists that articulates how institutions of higher education support faculty members' public scholarship. O'Meara (2005) suggested that the promotion and tenure process ought to embrace multiple forms of scholarship to ensure that diverse faculty members are provided ample opportunity to share their idiosyncratic intelligence with their students and find appropriate avenues for their work, thus improving alignment to many institutional missions. Cabrera et al. (2018) suggested that institutions should reconceptualize P&T evaluation techniques to encompass faculty members' social media outreach and influence. However, the authors did not articulate how institutions do or could support faculty members in this way. Other researchers have insisted that institutions of higher education must embrace their faculty members' public intellectualism in the digital sphere, otherwise higher education writ large will lose its relevance to the general public (Gasman, 2016; Kezar, 2018; Taylor, 2021). In fact, the research is so sparse that Giroux (2013) opined that institutions of higher education were actively helping erase the notion of the faculty member as public intellectual, suggesting that the public intellectual was "disappearing" and bringing into question the idea of "higher education as a public good" (Giroux, 2013, p. 6).

Theoretical Framework

There does not exist a theory of public intellectualism that appropriately articulates the aims and data of this study, yet we do draw upon related work to frame this study's data and findings. Namely, we posit that Coleman's (1990) articulation of the rational system appropriately captures our conceptualization of institutions of higher education and the promotion and tenure process. Moreover, Kezar's (2018) model of the scholarly educator properly situated this study in the current literature and will inform our work.

Extending literature related to open and closed organizational systems, Coleman (1990) argued that rational organizations combine elements of open and closed systems, much as universities do. Coleman (1990) articulated that rational systems are composed of two types of actors: individuals with interests, rights, and resources; and the organization itself as a corporate actor with interests, rights, and resources. Moreover, as a collective system, the organization (in this case, the university) must maintain many forms of viability by providing resources to actors to carry out action to benefit the organization. Here, we conceptualize faculty members as individual actors and the action of earning tenure as an interest of an individual actor (faculty member). Similarly, the institution has a vested interest in maintaining viability through its faculty members' production of research and generation of grant activity (action). However, we want to explore how faculty members experience the receipt of resources and support to perform actions (producing public

scholarship) that may increase both actors'—the collective institution and individual faculty members—viability.

Finally, modern faculty should embrace a scholarly educator model that positions faculty members as public intellectuals who constantly engage with the general public at large (Kezar, 2018). As a part of a rational system (Coleman, 1990), Kezar's conceptualization of scholarly educators would insist that faculty members as individual actors should seek academic opportunities outside of the rational system (i.e., the general public), thus increasing the public viability of the institution and the faculty member. Moreover, Kezar (2018) suggests that institutions of higher education ought to value the public intellectualism of faculty members, as promoting higher education as a public good works to steward positive relationships between the rational system of the university and the vast, open system that is the general public.

Research Design and Methods

The following sections outline how the research team conceptualized and justified the case study site, how the team collected and analyzed data, and how the team navigated limitations and established delimitations. This study was fully approved by our institutional review board, and all participants were made aware of the risks and benefits associated with the study. Both the institution and the participants remained anonymous and were assigned pseudonyms.

Site and Justification

A major tenet of case study research is that cases should be selected to provide an intensive, detailed description of a person, group, or organization in order to generate "theory about some agent, intervention, treatment, or characteristic" (Cunningham, 1997, p. 403). As a result, we conceptualized the University of the Southmost as an exceptional case study to explore institutional support for faculty members when producing public scholarship.

The University of the Southmost is an R-1 public flagship university in the United States South that regularly enrolls over 50,000 students (~35,000 undergraduates and 15,000 graduate students). The institution employs thousands of faculty and staff and features top-tier research programs in business, engineering, education, and more. Consistently ranked in the fifty Top Colleges per U.S. News & World Report, faculty at Southmost are expected to routinely publish in top-tier peer reviewed journals in their field, procure research grants, and teach 2-2, 2-3, or 3-2 course loads during their tenure-track years. However, what makes Southmost unique is its Public Affairs and Media Relations department, which employs professionals to provide strategic academic networking between faculty members and media outlets.

It is the job of these professionals to research and understand the academic work performed by faculty members. They then connect these faculty members to media outlets for quotes in stories related to their research and expertise, written by journalists, and to publish public scholarship, written by the faculty member, about their research to a lay, public audience. For example, an education faculty member trained in Critical Race Theory might be recruited for a quotation or opinion piece to respond to news about K-12 curriculum reform and the inclusion of Critical Race Theory literature. Here, many institutions of higher education do not have such a robust public relations arm to both recruit public scholarship opportunities to support faculty members' research

but also cultivate relationships with journalists that help insert faculty voices into stories, amplifying the voice of both the institution and their faculty members.

As a result, Southmost makes a fascinating case study, as research has posited that institutions prioritize peer-reviewed scholarship and grant activity as essential to successful navigation of the promotion and tenure process (Jacobs & Townsley, 2011; Niles et al., 2020; Sommer & Maycroft, 2008). As an R-1 institution, Southmost may prioritize this type of peer-reviewed scholarship and grant activity, yet Southmost also features a unique Public Affairs and Media Relations department, which seemingly facilitates the production and dissemination of public scholarship, even though traditional P&T processes do not reward it (Childs & Johnson, 2018; Kezar et al., 2018; Rose, 2018). Here, this tension between institutional expectations for P&T and institutional support for public scholarship render Southmost a worthy case study.

Recruiting Participants and Data Collection

We performed purposive and snowball sampling to identify tenure-track and tenured faculty members who published an op-ed, a form of public scholarship, while working for Southmost. Once participants were recruited, the team utilized a phenomenological qualitative approach (Seidman, 2019) using semi-structured 1-1 virtual (Zoom) interviews with 14 faculty members (junior and tenured) to explore their attitudes regarding their lived experiences of institutional organization and support of public scholarship. We decided upon a purposive sampling procedure to only recruit tenured and tenure-track faculty members, as the promotion and tenure process relates to strictly this population.

The team also performed snowball sampling based on personal references and word-of-mouth recruiting, as COVID-19 had and has placed considerable demands on faculty members across the United States and the world. As a result, to mitigate stress on faculty members, the team snowball sampled to recruit faculty members who the research team knew would be open to discussing their publication history, scholarship, and career and who would also be reliable participants in such a hostile, stressful, and virtual environment that COVID-19 has produced. A display matrix of interview participants can be found in Table 1.

Data Analysis

The research team employed both a focused and open coding process guided by Coleman (1990) and Kezar (2018), as this is the first study of its kind to investigate how faculty members view institutional support of public intellectualism. In the first round of coding, the research team independently reviewed all interview transcriptions separately and then as part of one larger document, to allow each team member the opportunity to review how individuals—and then the larger group of interviewees—articulated their experiences with institutional support of public intellectualism. Then, following the aims of our first research question and Coleman's (1990) notion of a rational system, we coded data for references to how the institution connected (or did not connect) faculty members (actors) to resources to produce public scholarship (action). We also coded data for faculty members' notion of traditional conceptualizations of earning promotion and tenure (action), and whether these faculty members negotiated traditional ideologies with emerging ones related to public intellectualism.

Table 1

Matrix of interview participants (n=14)

Pseudonym	Gender	Self-Described Race	Academic Rank
Adam	Man	White	Full Professor
Allison	Woman	White	Associate Professor
Amanda	Woman	White	Associate Professor
Brenda	Woman	Black/African American	Full Professor
Carlos	Man	Black	Associate Professor
Chad	Man	Latino	Full Professor
Greg	Man	Black/African American	Full Professor
Jason	Man	White	Full Professor
Mark	Man	White	Associate Professor
Stacey	Woman	Latina	Assistant Professor
Priscilla	Woman	Egyptian American	Associate Professor
Ramon	Man	Black	Full Professor
Santiago	Man	Indigenous/Latino	Full Professor
Tyler	Man	White	Full Professor

In the second round of coding, the research team again independently reviewed all interview transcriptions separately and then as part of one larger document. Guided by Kezar's (2018) model of the scholarly educator, we coded interview data for tenets of Kezar's model, including (re)commitment to the public good, academic freedom, and professional development, as the research team hypothesized that faculty members may tie their identities to their communities and community education (the public), while also exercising their right to academic freedom and professional development through the production of public scholarship. The research team then came together collaboratively to compare codes, contrast findings, and negotiate how each team member coded data. We then consolidated themes to target this study's research questions and hone our focus on 1.) faculty identities as they do or do not inspire and influence faculty members to produce public scholarship and 2.) faculty members' reconciliation of their identities with their public scholarship and other forms of more traditional scholarship.

Researcher Positionalities

Three authors collaborated for this study. The primary author is a queer Black woman who worked for more than 20 years as a public affairs and communications staff member at four institutions of higher education, including R1 and R2 institutions. She has also facilitated faculty public intellectualism, including op-eds, while publishing op-eds herself. Her lived experience provided unique direct insight into how university communication professionals facilitate and promote faculty scholarship and op-ed writing. Her marginalized identities helped the team develop protocol questions soliciting more in-depth answers from faculty members related to questions about experiences of threats they may have received due to writing that connected with marginalized identities.

The second author is a cisgender White man who has worked for 12 years in education at four different institutions of higher education across the Midwest and Southern United States, including R1, R2, and R3 institutions. His background is in linguistics and communication in education, having both worked and researched in these subfields at the K-12 and higher education level. His identities and professional background helped inform how institutions of higher education may provide stratified resources across different stakeholders, as well as inform how faculty members with prior experience at different institutions and geographies may participate in public intellectualism.

The third author is a cisgender Black man who has worked in higher education for six years at a large R1 higher education public institution. His background is in education policy and athletics, having been a former Division 1 college athlete and lobbyist. His identities and professional background helped inform how universities engage collaboratively with key stakeholders and how organizational change can be supported through influential policies and practices.

Limitations

As with any study, there are numerous limitations that the research team strived to address and mitigate throughout the work. These limitations are primarily related to the sample size, the institution of the participants, and the restrictions of COVID-19 research environments.

First, this study only focuses on the lived experiences and perspectives of 14 tenured and tenure-track faculty members. There are tens of thousands of faculty members across the United States and the world, and the perspectives of 14 faculty members does not and will not adequately articulate the experience of the collective professoriate. Moreover, the faculty members were all ranked professors in Southmost's Institute for Education, rendering their responses shaded by their discipline and academic fields. Several faculty members belonged to Special Education departments, while some came from Educational Psychology or Student Affairs. However, all participants in this study were ranked professors of education, rendering this study's findings limited.

Second, all participants from this study were recruited from a single institution in the U.S South, rendering this study's findings limited, in part, by geography. To be clear, the faculty members in this study hold terminal degrees from a wide variety of institutions across the United States and hold diverse perspectives emanating from those graduate experiences, positionalities, and research agendas. However, each faculty member in this study held their primary academic appointment at Southmost, and moreover, many of the participants in this study knew each other yet did not know they were participating in the study. Overall, future research should investigate faculty perspectives toward op-eds and public scholarship in other geographic and institutional settings.

Finally, given the restrictions of COVID-19, the interviews for this study were conducted in a remote environment on the Zoom video conferencing platform. Although interviews each lasted between 45 minutes and 1 hour, the interviews were not nearly as in-depth or personal as they could have been if the interviews had been held in person or under less stressful circumstances. As a limitation for many qualitative studies in the COVID-19 era, this study was also limited by the necessity for virtual communication. As a result, future studies could replicate this work and conduct interviews in a more personal, perhaps more comfortable, setting.

Findings

After speaking with faculty members as they described public scholarship, the promotion and tenure process, and institutional support for public intellectualism, the research team arrived at four core themes that successfully answered this study's research questions:

> RQ1: How do faculty members describe public scholarship as it relates to promotion and tenure processes?
>
> RQ2: Are faculty members supported by their institution to produce public scholarship? If so, how do they describe this support?

Major themes include (1) Traditional Promotion and Tenure Does Not Support Public Scholarship; (2) Institutional Support of Public Intellectualism Varies (Inequitably); and (3) Intentional and Informal Institutional Networks Facilitate Public Scholarship, with two major themes including the sub-themes (2a) No Risk-Absorption or Defensive Support for Personal Threats and (3a) Institutional Support for Public Scholarship Has Improved (Marginally).

Traditional Promotion and Tenure Does Not Support Public Scholarship

Overwhelmingly, faculty members expressed feelings that traditional promotion and tenure processes did not value public scholarship, as such scholarship is often difficult to quantify outside of numbers of readers. As Tyler articulated, peer-reviewed articles can be measured by the impact factor of the journal and the number of citations garnered over the life of the article, while a work of public scholarship published on a website may be more difficult to perceive or measure as scholarly or impactful on a scientific community or broader community. For this reason, Tyler argued, "Publish or perish is still the primary vehicle through which you are evaluated. Public scholarship may be a nice way to garner attention for you and the university, but you don't have to do it."

Other faculty members echoed this sentiment, and several spoke specifically to the divide between tenure-track and tenured faculty. Amanda reasoned that before she earned tenure "...if I asked for advice in my department, they would say not to spend time on it." Meanwhile, Carlos was much more straightforward when asked if promotion and tenure processes support public scholarship:

> You know, with tenure, you are guaranteed a job for life if you don't break the law. And so you, again, you know, you have more freedom. You feel like you have more freedom to write in ways that are uncensored.

Here, not only did Carlos express that traditional promotion and tenure processes do not support public scholarship, but that such processes may "censor" academics into writing what is acceptable to P&T review committees, instead of what the faculty member feels is most powerful or speaks most accurately to their work. Overall, faculty members strongly suggested that traditional promotion and tenure processes did not support public scholarship, with tenured faculty expressing feelings of liberation once they earned tenure and could perform public intellectualism unabated.

Institutional Support of Public Intellectualism Varies (Inequitably)

Not every university has the resources to support faculty in this endeavor. For example, Mark mentioned that while his previous institution's leadership was supportive of his public-facing writing, with the university president often reaching out to him to thank him, he had to cultivate relationships with journalists on his own, as there was no internal support for that work at the university, an R2 institution. Smaller or less prestigious universities' inability to provide internal support for public scholarship may hinder faculty participation if faculty do not have the time or ability to pursue those connections themselves.

Faculty in our study also spoke of receiving mixed messages due to the tenure process, which generally does little to recognize the value of public scholarship. While one faculty member in our study said that public scholarship was strongly valued within the tenure process in his Curriculum and Instruction department, the majority of faculty said public scholarship was something they included in their tenure dossiers with the understanding that it was less important than research or teaching. Several faculty recalled being cautioned not to engage in public scholarship prior to earning tenure, as such writing could take time away from writing for peer-reviewed publications. For example, Amanda recalled:

> I was very explicitly told that this would not count toward tenure and that I should be using my time to do peer reviewed articles. So I stopped investing in [public scholarship]. … I think post-tenure, I would like to get back to writing more. I think I care less what people think now.

Further, Amanda noted that her department did not encourage op-ed writing and that she suspected this was because many in her field (special education) did not engage in public-facing work. "I think people knew it [her op-ed] was published because it had been shared, but no one, I don't think they cared. My department really doesn't do public scholarship in that way, so I don't think they cared," Amanda said.

Allison also pointed out that although Southmost supported public scholarship by participating in the Op-Ed Project, lack of recognition of the value of the writing within the tenure process or through financial remuneration sent a mixed message to faculty:

> I feel like often the university says they want that, but then … you don't get a raise, you don't get more money, you can't get a dean's fellowship, for example. It's not the same as scholarly writing, but it is getting your scholarly writing into way more hands. And so I think sometimes the university is supposed to figure out, do you really want that?

No Risk-Absorption or Defensive Support for Personal Threats

Allison's prior mixed message of support also extended to how and whether faculty felt supported after composing a particularly controversial piece of public scholarship. Issues in education, which can include discussions involving race and gender, often call forth highly reactive and emotional responses from the public. Adam mentioned increased politicization of education-related issues as

a consideration and potential deterrent to publishing public scholarship. He stated that he had several ideas for public scholarship that he felt were too political to share due to his concerns about the "hate mail" he might receive. This fear is founded. Several faculty respondents discussed times that they had published public scholarship that generated hostile feedback, with readers searching out and finding their university contact information and writing to them privately, calling their office phones, threatening them or their family members, and doxing them online. Support from the university after faculty published controversial public scholarship was often inconsistent or completely absent. Such was the case for Santiago, who received an email with pictures of people with their heads cut off after he published an op-ed that dealt with race and ethnicity. Santiago, who is Indigenous, recounted the email:

> I took a picture of it because I had to call the university police department. When they came in, the first officer that came in was this White guy and said, 'Oh, you know, that person is entitled to their own opinion. You know, just like you have opinions. He's entitled to say whatever he wants.' And I said, "These are pictures of people getting their heads chopped off! These are threats." And so I called back, and I said that I was not happy with the person that came by. They said they were going to send somebody else and they never did…. Later, they called me and they told me that they had found out who it was. It was this elderly, White gentleman somewhere in Wisconsin. They told me that if I felt threatened, they could have security in my classroom or security following me around campus. And that it might be a good idea for me to install cameras in my house.

After this traumatic event, Santiago did not receive any support or counseling from his institution, nor did he hear back from the police regarding any possible punishment for the person responsible for the threat. This lack of consistent response left some faculty feeling on their own in handling the aftermath of receiving threatening communication.

Intentional and Informal Institutional Networks Facilitate Public Scholarship

Despite the inconsistent support Santiago and others experienced when it came to institutional defense of public scholarship, Southmost did—intentionally or otherwise—support faculty through the facilitation of scholarly networks, which spurred public scholarship and intellectual partnerships across the institution. One of the intentional mechanisms employed by the institution was participation in the Op-Ed Project.

The Op-Ed Project is a nonprofit organization that facilitates op-ed writing and pitching workshops with the goal of increasing the number and reach of marginalized expert voices in the public sphere. The university paid for a select group of faculty to participate within a cohort model in the project each year. Those who participated in the Op-Ed Project did so for a variety of reasons and found the support helpful in achieving their goals. For example, Brenda said, "I went into the Op-ed Project wanting to become a better writer and to learn how to … make my work more understandable and to translate it to a larger community. … And I did feel like it was a different form of writing and that it would strengthen my ability as a writer." Allison found participation in the project so useful that she expressed surprise that faculty who had not participated in it could develop the ability to become successful op-ed writers:

> I'm always amazed that people write op-eds without having done that project only because you worked so hard in grad school to learn how to write for academia and its particular way of writing… but if you want to be a public scholar, then your whole way of writing and even speaking or doing interviews has to change, has to shift fast.

However, while funded through the university at the institutional level, the Op-Ed Project was a resource not offered to all faculty, and participation in it was supported at varying degrees at the college and departmental levels. For example, Allison recounted that she had to "sneak my way in" because her dean did not want anyone to participate in the project. Despite this inconsistency, the intentional resource for public writing provided those who participated with a cohort, which gave them access to a community of faculty across the university with similar interests in public scholarship. For example, Carlos, who had long-held aspirations to become a public scholar, stated that he felt "privileged" to be among the university's inaugural cohort of project participants. Allison referenced leaning on her faculty cohort for help in editing op-eds and "scraping off the academic jargon" within her writing in order to clarify her thoughts. In these ways, the Op-Ed Project helped faculty develop a network that served as a valuable institutional support.

While those who participated in the project developed networks through their cohort, faculty who did not participate in the Op-Ed Project found other ways to access informal networks on their own. As the university promoted faculty op-ed writing via university and college websites and social media, faculty gained awareness of colleagues who received media attention. Some of those faculty sought each other out in order to garner support for their own public scholar aspirations and concerns. For example, Mark recounted a time "the Regents made [a statement implying that] free speech is not fully something that faculty have. That concerned me." He subsequently sought counsel from Ramon, a faculty member who was well known on campus as a prolific op-ed writer and one who frequently took on sometimes polarizing issues regarding race and ethnicity. In this way, informal networks were developed through the university's support of faculty op-ed writing as demonstrated by their promotion of Ramon's writing on Southmost's website, and Southmost's public affairs department's frequent promotion of Ramon as a commentator and resource for media contacts.

Institutional Support for Public Scholarship Has Improved (Marginally)

As the institution has facilitated intentional and informal networks to encourage public intellectualism, faculty members reported improved broader support for public scholarship, albeit marginally. Tangible university support for faculty production of public scholarship at Southmost positively influenced faculty's comfort and ease with writing for a public audience, which influenced their decisions to engage in public scholarship. Like many Research 1 universities, Southmost's Public Affairs and Media Relations department provides strategic academic networking between faculty members and media outlets, including assistance with writing and publishing public scholarship. All faculty interviewed for this study referred to these staff members, crediting them for connecting them with opportunities with newspapers and magazines, helping with the editing process, helping them generate ideas and sharing their public scholarship on university websites and social media accounts.

For example, Adam stated that he had many ideas for public scholarship in the past and would have engaged in it earlier in his career had such staff been present in his college at the time. His college created a communications team, with media relations and public scholarship support, in 2013. Prior to that, Adam said:

> My main critique has been, there was a point I think about 2007, 2008, 2009, when I could have done a lot of these things. I didn't really think there was this same level of interest or support from the university and that was kind of unfortunate. Probably within the last 10 years, I think this method of disseminating knowledge and experience from professors has been more recognized and appreciated, and I wish it would have been even earlier.

Adam also mentioned that after one of his op-eds was published, the university president reached out to him to congratulate and thank him and "that was a really powerful experience for me."

Discussion and Implications for Institutional Practice and Policy

After speaking engaging with 14 faculty members to explore their attitudes toward and experiences with public scholarship, we successfully answered this study's research questions:

> RQ1: How do faculty members describe public scholarship as it relates to promotion and tenure processes?
>
> RQ2: Are faculty members supported by their institution to produce public scholarship? If so, how do they describe this support?

First, this study's findings echoed a wealth of prior research that asserts traditional systems of promotion and tenure does not support public scholarship (Jacobs & Townsley, 2011; Niles et al., 2020; Sommer & Maycroft, 2008), leading to inequitable outcomes for marginalized faculty members (Childs & Johnson, 2018; Guillaume & Apodaca, 2020; Joseph & Hirshfield, 2011; Turner, 2002; Turner et al., 2008). However, participants in this study reasoned that due to the rigid, inequitable nature of the P&T process, junior faculty members may feel censored and pressured into writing for traditionally valued scholarly outlets, potentially stifling the career growth and trajectory of these faculty members.

Higher education researchers have long opined that the professoriate does not reflect the student body and is not as diverse as it ought to be (Turner, 2002; Turner et al., 2008), yet findings in this study suggest that the assessment and filtering mechanism of P&T could be stifling the diversity of the professoriate. Talented, diverse junior faculty may bring new ways of knowing, teaching, and writing into the professoriate, with ideas highly sought after by journalists looking to publish work of public intellectualism. These new ways and ideas could connect with a large, influential audience in the sphere of the general public. However, this scholarship may be strongly deterred by their institution or senior peers. As a result, failing to embrace new forms of scholarship may be stifling faculty diversity across many identities writ large. From here, institutions ought to consider revisiting P&T processes to better understand how public scholarship may fit into one's research agenda or scholarly profile (Kezar, 2018), better supporting the new, innovative public scholarship

that faculty members may produce, simultaneously girding the faculty member and connecting the institution to its public.

Next, although the P&T process seemingly does not support public scholarship directly, institutions could be supportive of such scholarship more broadly, even though that support may vary depending on a faculty member's department, college, rank, or other institutional positioning. Prior work has hinted at how institutions can support public intellectualism (Gasman, 2016; Kezar, 2018; Kezar et al., 2018), but our study makes unique contributions to the literature in this instance. Participants in this study indicated that institutional support of public intellectualism varied (often inequitably): One faculty member was praised for their public scholarship by the university president, while another faculty member flatly said, "I was very explicitly told that this would not count toward tenure."

Here, institutions should better inform junior faculty members about what is and is not supported on their path to tenure, especially outlining the support mechanisms for conducting public intellectualism. For faculty members' experiences to be so disparate within the same institution is troubling. Junior faculty members should not have to decode an institution's (or department's) hidden curriculum in order to be productive and successful. Here, institutions ought to consider a more standard approach to assessing promotion and tenure merits, while communicating this approach to junior faculty. Often, junior faculty meet with a senior faculty member or administrator during a mid-tenure review process to discuss progress and map goals: We feel these meetings should be more frequent, more transparent, and more aligned across an institution so junior, diverse faculty members are not further marginalized from the system.

What did not marginalize faculty members in this study was the intentional and informal networks facilitated by the institution to help faculty members learn the ways and networking of public intellectualism. Multiple faculty members at all stages of the tenure process in this study noted the Op-Ed Project was a positive, influential catalyst for not only learning how to be a public intellectual and facilitating better writing and teaching, but also finding an inter-institutional community of other faculty members who have similar goals and interests. In Coleman's (1990) sense, the institution was connecting actors to each other within an internal system rather than attempting to connect an individual actor to external resources. This type of intentional, internal networking was praised by faculty members in this study, and other institutions could consider this type of approach to improve junior faculty socialization and expose these faculty members to new forms of scholarship to reach a broader, public audience.

Moreover, the intentionality of the institution through the Op-Ed Project and the formalization of communications departments supporting and promoting faculty op-ed writing, facilitated several informal networks. These intentional supports propelled the impact of the Op-Ed Project and the university public affairs and communication departments beyond the parameters of the project and departments' goals of external communication. Here, institutions could consider such socialization tactics beyond those focused on public intellectualism: Intentionally forming faculty writing groups and interdisciplinary networks could increase cross-department communication, support junior faculty socialization, and help produce interdisciplinary scholarship to elevate the institution's research profile and public exposure.

Yet, as critical as some faculty members were of their institution and the opaque P&T process, senior faculty members also often discussed how support for public intellectualism has improved, albeit marginally. Several faculty members noted the rise of social media and the speed at which scholarship of all forms can reach the general public as potential reasons for this improvement. Given this scenario, researchers could expand upon Gasman's (2016) work to better understand how a democratization of information facilitated by social media and the Internet has changed institutional attitudes toward public intellectualism. Do institutions really want to support the public intellectualism of their faculty members? Or are these institutions simply embracing the inevitable? Moreover, this study implies that incremental shifts in the support of public intellectualism may differ across institutions, with wealthier, better-resourced institutions being able to provide faculty with greater levels of support and networking, potentially gatekeeping faculty members from less privileged institutions from public intellectualism. In this regard, organizations such as the American Association of University Professors (AAUP) and any state-level faculty unions should explore how institutions may be providing stratified support to faculty members, working to help throttle the gatekeeping of public intellectualism that well-resourced institutions may (or may not) be encouraging.

Conclusion

This study explored how faculty members perceive institutional support of public intellectualism, and this work makes several important contributions to the literature and the everyday work of faculty members. For faculty members to engage in public scholarship, institutions of higher education need to acknowledge and reward this form of labor, as it has become increasingly important as a way for institutions to increase their profile (Kezar, 2018) and better connect with the public (Gasman, 2016). Not only does public scholarship promote the higher education institution, but also allows faculty members to influence local, national, and global conversations and policies. Public scholarship also provides opportunities for researchers to engage with a broader audience that typically does not interact with pay-walled journal articles. As knowledge has transformed and transferred rapidly since the beginning of the 21st century, with the Internet playing a critical role on how information is captured and disseminated, it is vital for researchers to engage the general public through other avenues that are not traditionally part of academia.

In addition, public intellectualism offers an avenue for marginalized faculty members—mainly faculty of color and women faculty writing in fields traditionally dominated by men (engineering, mathematics, chemistry)—the opportunity to accomplish two goals. First, these faculty members can circumvent a potentially discriminatory peer review process and immediately reach marginalized people through public scholarship. This includes writing in publications that specifically focus on certain populations, topics, or areas of interest. Second, faculty members can work to shift what it means to produce scholarly work, and the value of public scholarship based upon publication and readership. For example, an op-ed published in Forbes may reach millions of readers overnight, whereas a peer-reviewed journal article may only be read by a few hundred scholars with subscriptions to that journal over many years.

Ultimately, as technology and culture shifts demand change in faculty work, it is critical to understand how institutions of higher education can better support public intellectualism. This is especially true in modern society and in the face of so many challenges, including the persistent

COVID-19 pandemic, systemic racism against BIPOC communities, communities of Color, queer communities, and individuals from marginalized groups. If institutions can better support public intellectualism—possibility diversifying professoriate in the process—the general public can learn from and better connect with academics, ushering a new era of school-community relations and collective societal learning

References

Bhattacharyya, G., & Murji, K. (2013). Introduction: Race critical public scholarship. Ethnic and Racial Studies, 36(9), 1359-1373. https://doi.org/10.1080/01419870.2013.791399

Boyer, E.L. (1990). Scholarship Reconsidered: Priorities of the Professoriate. Princeton University Press.

Cabrera, D., Roy, D., & Chisolm, M.S. (2018). Social Media Scholarship and Alternative Metrics for Academic Promotion and Tenure. Journal of the American College of Radiology, 15(1), 135-141. https://doi.org/10.1016/j.jacr.2017.09.012

Calavita, N., & Krumholz, N. (2003). Capturing the Public Interest: Using Newspaper Op-Eds to Promote Planning in Conservative Times. Journal of Planning Education and Research, 22(4), 400–406. https://doi.org/10.1177/0739456X03022004006

Childs, J., & Johnson, S. (2018). When they go low, we go high: Scholars of color, activism, and educational research in a post-truth era. education policy analysis archives, 26, 146. https://doi.org/10.14507/epaa.26.3342

Coleman, J. S. (1990). Rational Organization. Rationality and Society, 2(1), 94–105. https://doi.org/10.1177/1043463190002001005

Croom, N.N. (2017). Promotion Beyond Tenure: Unpacking Racism and Sexism in the Experiences of Black Womyn Professors. The Review of Higher Education 40(4), 557-583. http://doi.org/10.1353/rhe.2017.0022

Cunningham, J.B. (1997). Case study principles for different types of cases. Quality & Quantity 31, 401–423. https://doi.org/10.1023/A:1004254420302

Day, A.G. & Golan, G. (2005). Source and content diversity in Op-Ed Pages: Assessing editorial strategies in The New York Times and the Washington Post, Journalism Studies, 6(1), 61-71. https://doi.org/10.1080/1461670052000328212

Gasman, M. (2016). Academics Going Public: How to Write and Speak Beyond Academe. Routledge.

Giroux, H. (2013). The disappearing public intellectual and the crisis of higher education as a public good. Trans Scripts, 3, 6-26. https://cpb-us-e2.wpmucdn.com/sites.uci.edu/dist/f/1861/files/2014/10/2013_03_02.pdf

Guillaume, R.O. & Apodaca, E.C. (2020) Early career faculty of color and promotion and tenure: The intersection of advancement in the academy and cultural taxation. Race Ethnicity and Education. https://doi.org/10.1080/13613324.2020.1718084

Institute of Education Sciences. (2022). Education Resources Information Center (ERIC). https://eric.ed.gov/?journals

Jacobs, R.N., & Townsley, E. (2011). The Space of Opinion: Media Intellectuals and the Public Sphere. Oxford University Press.

Joseph, T.D., & Hirshfield, L.E. (2011) 'Why don't you get somebody new to do it?' Race and cultural taxation in the academy. Ethnic and Racial Studies, 34(1), 121-141. https://doi.org/10.1080/01419870.2010.496489

Keren, M. & Hawkins, R. (2015). Speaking Power to Truth: Digital Discourse and the Public Intellectual. Athabasca University Press.
Kezar, A. (2018). A new vision for the professoriate. Change: The Magazine of Higher Learning, 50(3-4), 84-87. https://doi.org/10.1080/00091383.2018.1509616
Kezar, A., Drivalas, Y., & Kitchen, J.A. (eds.) (2018). Envisioning Public Scholarship for Our Time: Models for Higher Education Researchers. Stylus Publishing.
Miller, R. (1987). Evaluating Faculty for Promotion and Tenure. The Jossey Bass Higher Education Series. Jossey-Bass.
MisirHiralall, S.D., Fici, C.L., & Vigna, G.S. (Eds.). (2018). Religious Studies Scholars as Public Intellectuals (1st ed.). Routledge. https://doi.org/10.4324/9781351139120
Niles, M.T., Schimanski, L.A., McKiernan, E.C., & Alperin, J.P. (2020). Why we publish where we do: Faculty publishing values and their relationship to review, promotion and tenure expectations. PLoS ONE 15(3): e0228914. https://doi.org/10.1371/journal.pone.0228914
O'Meara, K. A. (2005). Encouraging Multiple Forms of Scholarship in Faculty Reward Systems: Does It Make a Difference? Research in Higher Education, 46(5), 479–510. http://www.jstor.org/stable/40197355
Park, B., & Riggs, R. (1993). Tenure and promotion: A study of practices by institutional type. The Journal of Academic Librarianship, 19(2), 72-77. https://doi.org/10.1016/0099-1333(93)90074-F
Pastore, D. (2013). Faculty perspectives on Baldwin and Chang's mid-career faculty development model. The Journal of Faculty Development, 8(2), 25-32. https://www.ingentaconnect.com/content/magna/jfd/2013/00000027/00000002/art00004
Ream, T.C., Devers, C.J., Pattengale, J., & Drummy, E. (2019). The Promise and Peril of the Public Intellectual. In: Paulsen M., Perna L. (eds) Higher Education: Handbook of Theory and Research. Higher Education: Handbook of Theory and Research, Vol 34. Springer. https://doi.org/10.1007/978-3-030-03457-3_6
Rose, M. (2018). Writing Our Way into the Public Sphere. Teachers College Record, 120(10), 1-18. https://www.tcrecord.org/Content.asp?ContentID=22240
Saaty, T.L., & Ramanujam, V. (1983). An objective approach to faculty promotion and tenure by the analytic hierarchy process. Research in Higher Education, 18, 311-331. https://doi.org/10.1007/BF00979603
Schimanski, L.A., & Alperin, J.P. (2018). The evaluation of scholarship in academic promotion and tenure processes: Past, present, and future. F1000Res, 7, 1-20. https://dx.doi.org/10.12688%2Ff1000research.16493.1
Seidman, I. (2019). Interviewing as qualitative research: A guide for researchers in education and the social sciences (5th ed.). Teachers College Press.
Seipel, M. (2003). Assessing Publication for Tenure, Journal of Social Work Education, 39(1), 79-88. https://doi.org/10.1080/10437797.2003.10779120
Sommer, B., & Maycroft, J.R. (2008). Influencing Public Policy: An Analysis of Published Op-Eds by Academics. Politics & Policy, 36(4), 586-613. https://doi.org/10.1111/j.1747-1346.2008.00122.x
Taylor, Z.W. (2019). The Hunter Became the Hunted: A Graduate Student's Experiences with Predatory Publishing. Publishing Research Quarterly, 35, 122–137. https://doi.org/10.1007/s12109-019-09639-7
Taylor, Z.W. (2021). Op-Eds and Their Potential Effect on Tenure, Promotion, and Public Scholarship: An Interview with M. Yvonne Taylor and Dr. Joshua Childs. College & University, 96(1), 34-40. https://www.proquest.com/docview/2499092444

Tien, F.F., & Blackburn, R.T. (1996). Faculty rank system, research motivation, and faculty research productivity. The Journal of Higher Education, 67(1), 2-22. https://doi.org/10.1080/00221546.1996.11780246

Tierney, W.G., & Bensimon, E.M. (1996). Promotion and Tenure: Community and Socialization in Academe. SUNY Press.

The Op-Ed Project. (2021). Whoever tells the story, writes history. https://www.theopedproject.org/

Turner, C.S.V. (2002). Women of Color in Academe, The Journal of Higher Education, 73(1), 74-93. https://doi.org/10.1080/00221546.2002.11777131

Turner, C.S.V., González, J. C., & Wood, J. L. (2008). Faculty of color in academe: What 20 years of literature tells us. Journal of Diversity in Higher Education, 1(3), 139–168. https://doi.org/10.1037/a0012837

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Learning From Hidden Realities of Latinx Contingent STEM Faculty at Hispanic Serving Institutions: Policies to Support Latinx Contingent STEM Faculty

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The Conference for Latinx Contingent Faculty Members convened a group of faculty members in STEM fields at Hispanic Serving Institutions (HSIs) in the California State University System. The two-day event explored the often hidden, or unacknowledged realities of contingent faculty participants, with the purpose of gathering information about barriers and trade-offs these faculty experience professionally and personally that impact their work. This report provides an overview of barriers and challenges that were raised in the conference, and a brief review of the literature of strategies that could address these experiences, and better support Latinx contingent faculty in STEM.

Participation and Data Collection

The conference convened a group of faculty participants who shared similar demographic characteristics (e.g., racial and ethnic identity) and job classifications (e.g., non-tenure track faculty), but who had a range of experiences to bring to bear on the research questions. Participants were recruited through a maximum variation strategy. This ensured that the research team could document both 1) diverse contexts and conditions, and 2) patterns that arose across these diverse contexts. This approach is helpful in identifying cross-cutting themes that arise despite underlying heterogeneity.

The participants brought diverse experiences and perspectives to the discussion. Sixty-eight percent of the 22 participants indicated they were first-generation college students, which reflects the experience of many students at HSIs; 65 percent of students at HSIs in the U.S. are first generation students (RTI International, 2019). A majority of faculty participants (55 percent) were men, though the gender imbalance generally reflected the overall gender split of postsecondary teachers; in

2019, 55 percent of postsecondary instructors identified as men, and 45 percent identified as women (U.S. Census Bureau, 2022). Additionally, the gender imbalance in STEM fields is heavily tilted toward men, who make up 77 percent of the STEM workforce in the private sector (Edwards et al., 2021). In some fields, this gender disparity is even more stark, and women of color are particularly underrepresented. Women account for 25 percent of the computer science workforce, and 16 percent of the engineering workforce (Singh, 2020). Black women account for 2.5 percent, Latina/Hispanic women make up 2.3 percent, and Indigenous women make up less than one percent of the STEM workforce (Singh, 2020). Most participants held a master's degree. Half of participants had fewer than 5 years of experience teaching, and half had more experience. There was substantial representation of both faculty who taught at a single campus, and those who taught at multiple campuses, and twelve distinct campuses were represented. A summary of the participant demographics is provided in Table 1.

Table 1

Conference Participant Demographics

Variable	**Number**	**Percent**
Gender		
Man	12	55
Woman	9	41
Nonbinary	1	5
Highest Degree		
Bachelors	2	9
Masters	12	55
MD	2	10
PhD/EdD	6	27
First-Generation Student		
No	7	32
Yes	15	68
Teaching Assignment		
Single Campus	12	55
Multicampus	10	45
Teaching Load		
Full Time	4	18
Part Time	18	82
Years of Teaching Experience		
1-5 years	12	55
6-10 years	4	18
11+ years	2	10
Not Answered	4	18
CSU Campuses Represented	12	

Source: Pre-conference survey, collected Spring 2022

Notes: (1) Percentages may not add to 100 due to rounding.

Structured discussion and group activities provided the primary formats to generate and collect information from participants. Three guest speakers were invited to share their research and work about contingent faculty; the information provided was intended to inform participants of relevant research, contextualize the experience of the faculty participants, and to provide a starting point for participant conversations about their own experiences. After each speaker, participants reflected on the presentation, its resonance and connection with their experience in higher education as contingent faculty through a facilitated discussion and/or activity. Data generated during these discussions was collected through several mechanisms including gallery walks, google forms, and self-recorded lists by the participants. The research team took notes of small and large group discussions throughout the meeting space. Participants produced artifacts that synthesized small group thinking (for example, a few activities generated virtual Jamboards, and another activity produced large physical post-its for a gallery walk). Finally, participants shared individual thoughts and commentary through survey and short-response platforms. This brief synthesizes information that was collected through the group conversations, collected through the research team notes and participant-generated artifacts.

Leveraging and Supporting the Assets of Latinx Contingent Faculty in STEM at HSIs

Participants discussed the strengths and assets they bring to their work as contingent faculty in STEM departments at HSIs. Each participant named specific assets that they individually bring to their job. Patterns emerged; what arose were collective themes of how Latinx-identifying contingent faculty deliver instruction, support their students, and contribute to their departments and institutions. Some of these identified assets are skill-based, but perhaps insufficiently recognized in academia. Another set of identified assets are rooted in the advantage Latinx faculty have in connecting with and supporting students at HSIs.

Interpersonal Skills

Each faculty participant brings skills to their job in the forms of deep content and teaching expertise; these are table stakes for faculty positions in STEM departments. Yet the job skills most often mentioned as important assets of faculty participants were interpersonal and social-emotional skills. This included descriptions of communication and collaboration skills, both with fellow faculty, as well as with students. Many participants also spoke to their work ethic and adaptability; these seen as both prerequisites of and responses to the nature of contingent faculty roles (the complexity of which are discussed later in this brief). Finally, participants shared their expertise while building trust with colleagues and students by demonstrating empathy and authenticity.

Higher education systems can foster and support the further development of contingent faculty's interpersonal skills. These skills are often embedded in competencies that are recognized and rewarded, but not necessarily explicit (Dervenis et al., 2022). Since these competencies are not explicit, they may not be adequately recognized or promoted. HSIs can support contingent faculty skill development, and support them to leverage these skills. During the conference, one of the invited expert speakers, Dr. Alexandra Coso-Strong, currently an Assistant Professor of Engineering

Education at Florida International University, discussed the importance of Latinx faculty leveraging their identified skills to navigate the higher education labor market and employment conditions by exploring different "moves" (Coso-Strong, 2022). HSIs can enable and empower Latinx contingent faculty to leverage their interpersonal skills.

Identity-Centered Student Connection

The interpersonal skills that faculty bring to their work are foundational for the connections that they build with students, but their ability to build bridges with students is often rooted in a shared racial and/or ethnic background. Participants described that they often have had similar experiences as their students. Sometimes this was rooted in a shared culture, similar upbringing, or experiences of economic and financial challenges while navigating college, which can include food insecurity and experiencing homelessness (Flannery, 2017). Many participants shared the experience of being first generation college and/or graduate students, as two thirds of participants were first generation college students themselves. These participants deeply understood the experience of students who were the first in their families to navigate higher education. Often, Spanish-speaking participants emphasized that a shared language with many students helped build rapport in the classroom, and helped students access the content and instruction. Female participants spoke of their ability to represent gender diversity in many male-dominated STEM fields, of particular importance for female and Latina students. These strong identity-based connections translated to positive relationships between participants and students. Faculty oftentimes served as role models, mentors, and social-emotional supports to students in addition to academic instructors. As one participant described: "We're more than professors. We're counselors." Effectively, representation matters not just in and of itself, but is a critical strategy to support Latinx students at HSIs.

Valuing and validating Latinx identity through the systems and structures of the university is critical to supporting Latinx faculty and students alike. The model of cultural community wealth presented by Yosso (2005) provides a fruitful model for exploring the work lives of contingent Latinx faculty in STEM and the assets they bring into academia. For example, Yosso explores linguistic capital where "intellectual and social skills attained through communication experiences in more than one language and/or style" (p. 78). Latinx contingent STEM faculty that are bilingual, bicultural, and/or sensitive to the linguistic and cultural needs of their students allows for the possibility of improving learning outcomes in their students. Yosso explores the concept of familial capital as the "cultural knowledge nurtured among familia (kin) that carry a sense of community history, memory, and cultural intuition." (p. 79). Having faculty on campus that understand and feel a sense of ethnic belonging builds confidence, pride, and motivation necessary to connect to others. The importance of a shared connection and community wealth between student and teacher builds on previous research by Moll et al. (1994), which demonstrated that a deeper understanding of student and family "funds of knowledge" facilitates the productive connection between students and instructors. Thus, the mutual understanding and connection between Latinx faculty and their students at HSIs should inform how administrators and departments value linguistic and familial forms of capital that faculty possess. This can influence faculty retention and hiring processes. Hiring committees could be served by understanding this kind of contribution that Latinx faculty have for university environments, further serving faculty and students alike.

The cultural and community capital that Latinx faculty bring to their roles positions them to build and implement culturally responsive, relevant, and sustaining pedagogy and instruction. Culturally-relevant and culturally-sustaining pedagogies supports students to see themselves in academic settings, to feel valued and welcomed, and able to express and build upon their cultural identities; culturally relevant pedagogies do not require students to trade off their identity for their academic and professional success in school (Ladson Billings, 2014). Ladson-Billings endorses culturally sustaining pedagogy, an update of culturally-relevant pedagogies which have, arguably, become formulaic. Educators should strive for more than merely relevant, and as Ladson-Billings states, scholars and practitioners should "learn from and not merely about" African American students and other students whose identities and communities have been minoritized and marginalized (Ladson-Billings, 2014, p. 76). Instead, educators should reach for sustainability– which "supports the value of our multiethnic and multilingual present and future" (Paris, 2012, p. 93). Belonging and culturally sustaining pedagogy reinforce student success, and are critical to HSIs and higher education institutions ability and mission to appropriately serve students – particularly Hispanic and Latinx students (Doran, 2021).

Alleviating Barriers and Challenges Faced by Latinx Contingent Faculty

Participants identified several challenges they experience in the course of their work that serve as barriers to effective and quality instruction and support of students. These challenges often prevented participants from being able to bring their skills and assets to bear on their position and work. Emergent themes of barriers that were mentioned and resonant with faculty participants included challenges in the role structure of contingent faculty in the STEM departments and campuses represented; a perceived lack of recognition; negative aspects of campus culture; and resource scarcity. We take each of these themes in turn, provide context and examples of these barriers, and offer policy and practice solutions found in the literature.

Challenging Employment Conditions

Participants spoke to interrelated challenges that were rooted in the way their role was constructed including compensation, job predictability and security, and workload. Participants mentioned that not only was pay often below a living wage, but it was also unpredictable given the just-in-time nature of class, new course preps, and section assignments, and the fact that pay and benefits are tied to a faculty member's course load. Participants explained the experience of uncertainty about their total compensation semester-to-semester because they lacked visibility into the number of courses they would be asked to teach. The lack of job and pay security at a particular campus also led participants to take multicampus teaching assignments. While the ability to teach on multiple campuses offered employment opportunities, it is not without a cost. Participants spoke of uncompensated work including the administrative and mental burden of coordinating multicampus scheduling, the time and opportunity costs and financial costs of commuting between campuses. These burdens detract from time with students.

Faculty participants also cited uncompensated work like informal mentoring and supporting students outside of the classroom academically and/or social-emotionally. As mentioned, Latinx faculty are often well-positioned to help students – particularly with whom they share identity and community– navigate the complexity and challenges of higher education. As Ponjuan (2011) has

addressed, Latinx faculty often face additional burdens of mentoring apart from other work obligations. Faculty participants explained that, while they often value and enjoy the work of mentoring students, they are not compensated for their time, and it involves emotional labor, which is particularly draining as faculty try to navigate the institutions and employment conditions for themselves (Misra et al., 2021). While these ancillary tasks are often done by faculty as a whole, contingent non-tenure faculty do not reap the benefits of these endeavors; for example, contingent faculty do not request letters of support from students for tenure.

To better support Latinx contingent faculty, HSIs can provide more job and pay certainty, and provide appropriate compensation for currently uncompensated work. To address pay uncertainty, HSIs can work toward "pay parity" between tenured and non-tenured faculty positions. While the benchmark for pay parity is often 75 percent (Davis, 2017, p. 32), it is valuable to interrogate the assumptions underlying this model. Outlining the responsibilities associated with teaching – including preparation, the time tax of multi-campus teaching, and out-of-class duties like mentorship– could help identify sources of wage gaps. Pay should also be offered for currently uncompensated work, like student mentorship. This could build on existing models of peer-to-peer mentorship that are compensated through stipends. For example, one of the co-authors participated in an interdisciplinary tenured to pre-tenured faculty mentorship program on their campus. The goal of the program is to support pre-tenured faculty on their research journey to tenure. Mentors in this program were provided with a stipend which compensated them for their mentorship work over several months. A similar program with contingent faculty could support the growth and development of contingent faculty, as well as promote collaboration between contingent and tenure-track faculty. Associations could likewise take an active role in providing these connections and relationships.

Further, there are policy changes that could support employment certainty for contingent faculty. HSIs could address rehiring policies for current contingent faculty, where current faculty, given they meet performance expectations, are given first right of refusal for classes before departments hire new contingent faculty for those classes. Departments could also be required to sign contracts with a minimum guarantee for contingent faculty to provide some income guarantee to staff who bear the burden of last-minute course schedule changes. Additionally, to combat the challenges of the just-in-time hiring that underlies much of the employment insecurity faced by contingent faculty, departments could also incur a penalty for course cancellation (Modern Language Association of America, 2011). This could encourage better semester-to-semester planning of hiring needs that, in turn, support more predictable scheduling.

Recognition and Promotion

Participants expressed that they often felt undervalued by their employers, particularly relative to tenured or tenure-track faculty. This manifested in terms of who was recognized by the department, received resources, and had preferred course assignments. For example, participants mentioned having interest and expertise in teaching higher-level mathematics courses, yet were never assigned to those classes because they were reserved for tenured faculty.

Relatedly, participants discussed a vicious cycle where their job conditions disadvantaged contingent faculty from receiving recognition and promotion. Participants reported piecing together

employment either through multicampus teaching assignments, or additional jobs to deal with low pay, variable benefit eligibility, and unpredictable scheduling. This employment structure often meant that participants were unable to be as present for students as they said they wanted to be. Instead of holding office hours, participants reported they would be in transit to another campus, or working an additional job. Participants felt this employment arrangement often contributed to less connection with students and other faculty, which negatively impacted course evaluations, or relationships that would support their own recognition and promotion.

To better support Latinx contingent faculty, HSIs should audit their systems for recognition and promotion to ensure both tenure-track and non-tenure track faculty have pathways to upward employment mobility. One strategy is creating more pathways from contingent to tenure-track positions. This could drive satisfaction, as many contingent faculty are interested in pursuing tenure-track. For example, in a study of non-tenure track faculty at ten community colleges, Ott and Dippold (2018) found that "two thirds of the adjuncts who participated in this study were at least somewhat interested in becoming full-time faculty at a postsecondary institution, with 47% expressing strong, immediate interest in such a position." This aligns with data captured at the HSI Conference, where 40 percent of participants were interested, and 35 percent were maybe interested in pursuing a tenure track position.

One of the pathways to more supportive employment that Kezar and Sam (2010) discuss is converting non-tenure track faculty to tenured lines where both part-time and non-tenure-track faculty would be eligible for these positions. This type of modification facilitates meeting teaching, research, and other university goals (Supiano, 2022). Unions have also sought this acknowledgement of non-tenure-track faculty labor in their renegotiation of contracts efforts. As in the case of the California Faculty Association and the CSU system which negotiated an updated contract in 2022, where topics under consideration included more hybrid classifications that would capture lecturer experiences and other pathways to permanency and more stable employment for contingent faculty (California Faculty Association, 2022).

In creating pathways for contingent faculty to access tenure-track or long-term positions, universities should be mindful of the review and evaluation processes that can facilitate career mobility. Scholars have pointed to the significance of consistent instructor evaluations (Drake et al, 2019). In a study involving twenty contingent faculty, the authors found that the evaluation processes for their participants varied widely from yearly reviews to never being reviewed by their department. For example, only a quarter reported the fact that they were reviewed annually. These findings point to a lack of leadership and poor communication between faculty and department chairs and deans (Drake et al., 2019). The authors go on to state that while some contingent were supported "others felt a lack of communication from leadership left them confused about their contracts, evaluation, and promotion processes" (Drake et al., 2019: 1654). Ultimately, offering more opportunities for contingent faculty to pursue tenure-track positions can better support these faculty.

Enabling more mobility between contingent and tenure-track roles and establishing more secure career pathways for contingent faculty may impact student outcomes as well. Prior work explores the outcomes of students in four-year colleges who initially majored in STEM fields. The study found that "For every 1% increase in the share of faculty members who work full-time and off the tenure

track, students' chances of graduation drop 1.75%. If a college's professors predominantly work off the tenure track, students are 1.5 percent more likely to change out of a STEM major" (Danaei, 2019: 23). The findings suggest that having more faculty working on the tenure-track benefits students.

Campus Culture

Feeling devalued by the institution is one experience that stems from identified challenges in campus culture. Faculty participants spoke to a lack of community and collaboration in their departments and on their campuses. Although generally attributed to undergraduate students, the participants in our study did voice experiences of "belonging uncertainty" defined as when in "academic and professional settings, members of socially stigmatized groups are more uncertain of the quality of their social bonds and thus more sensitive to issues of belonging" (Walton and Cohen 2007, 82). They also spoke to feelings of alienation and exclusion based on their racial and/or gender identities. Departments were described as fragmented: there was an in-group/out-group dynamic between contingent and tenure-track faculty. Participants described few opportunities to meet with tenured and tenure-track faculty, let alone to collaborate or coordinate. This could be due to logistical as much as cultural challenges; one reason participants cited that prevented collaboration with other faculty was that meetings were often held during times that participants had to teach. Departments were also described as siloed, and participants were unaware of what other departments on campus were doing. Examples of cross-department coordination or collaboration were rare.

Critically, participants mentioned racialized experiences. Participants were struck by the racial and ethnic disparities between tenured and contingent faculty in their departments and across their campuses. Participants mentioned that they were often the only Latinx faculty member, or that they were one of few. This also contributed to the experience of in-group/out-group dynamics. Further, participants mentioned that they encountered racialized – and gendered—expectations about their work. Participants, particularly those who identified as female/Latina, described being responsible for, what they called, the "emotional labor" of supporting students' mental health needs, or helping Latinx students navigate higher education.

Addressing campus culture, and building a culture that is reflective and inclusive of Latinx faculty is critical to support these staff. One key approach departments can use to build a supportive culture for Latinx contingent faculty is by providing formal mentorship. Unfortunately, most research highlights the lack of such programs at the majority of universities and colleges. Specific programs such as the Adjunct Mentoring Program at Lesley University and the Delphi Project have advocated for this type of commitment to adjunct faculty. Mentorship for early career and contingent faculty can help them navigate the institution, build networks that can be supportive for career growth, and find collegiality. Formalizing mentorship programs is important to ensure that mentorship opportunities exist, and are equitably available to faculty (Misra et al., 2021).

Mentorships programs can take the shape of one-to-one mentorship, or mentorship groups and networks, and/or reciprocal mentorship (Misra et al., 2021, Sorcinelli and Yun, 2007). Full time faculty could be an ideal source for the mentorship of adjunct faculty as they are well positioned to provide comprehensive mentorship regarding teaching, scholarship, and service needs (Santisteban

et al., 2014). The literature on faculty mentorship emphasizes that new faculty orientation and mentorship are critical in incorporating adjunct faculty into campus communities (Danaei, 2019; Rogers et al., 2010; Santisteban et al. 2014). This can be a first step in the development of adjunct faculty careers, professional goals, and potentially promote a sense of community for this group of faculty. For Latinx faculty, prioritizing mentorship with faculty who share cultural identity or background can be particularly helpful; research indicates that same-race and same-gender mentorships provide more psycho-social support than cross-race and cross-gender relationships (Smith et al., 2000).

Formalizing mentorship programs for contingent faculty can benefit faculty members and students alike. Programs like these can improve adjunct faculty morale and their commitment to their places of employment, and improve the quality of instruction and support for students (Danaei, 2019; Diversi and Mecham, 2005). Additionally, peer mentorship could buttress contingent faculty ongoing attempts at mentorship of students. Student learning and mentoring needs could be accommodated more fully if contingent faculty can be made to feel part of the university or college which potentially manifests as more time on campus (Poteat et al., 2009). This could result in students having access to both tenure/tenure track and contingent faculty as potential mentors and role models. This would likely provide a more diverse campus pool of faculty that come from not only minority racial and ethnic populations but first generation, working class, and low-income backgrounds, which directly benefits students from similar backgrounds. Thus, investments in mentorship programs facilitate the broader culture for Latinx faculty and students alike, and likely contribute to better relationships and support for the Latinx community on college campuses.

Access to Campus Resources

Participants identified a lack of resources to support teaching and instruction that interfered with the effectiveness and quality of their work. Some of these resources were physical: participants mentioned a lack of access to the materials, hardware and/or software needed to teach their courses. For example, one faculty member in a geology department described teaching with materials that were decades out of date, and insufficient rock samples to share with the class. Other participants mentioned that physical space was a challenge. Some, particularly those who taught on multiple campuses, did not have access to office space. Others were assigned to shared offices with inadequate space for multiple faculty, let alone students who might be seeking help outside of class. Inadequate physical resources presented tangible barriers to faculty. All faculty require space to address the various demands on their work which includes teaching, service, and research. Faculty need to be provided with an office or shared office space conducive to allowing faculty to meet with students, colleagues, prepare for teaching, and meet other on campus obligations (Kezar and Sam, 2010). This space should come with clerical support and equipment in order to meet the needs for teaching, service, and research demands. (Kezar and Sam, 2010).

Faculty also discussed a lack of support from their departments to improve their practice. They cited a lack of training either on course content, or on pedagogy. Few participants felt they were effectively coached toward best-practices in their classrooms. Danaei (2019) and others (Kezar and Sam, 2010; Eny et al., 2008) have pointed to the lack of professional development support for adjunct faculty which limits their career growth. One report commissioned by the U.S. House of Representatives pointed out that 89% of adjuncts received no professional development support of

any kind (House Committee on Education and the Workforce Democratic Staff, 2014). Perhaps these opportunities were not offered, were offered at times when contingent faculty could not attend, or were not made accessible. Adjunct faculty typically spend their own funds for professional activities which includes traveling to conferences and other opportunities to improve their craft. This is more challenging for staff who are already paid less and face variable scheduling. In the long term these conditions impact faculty aspirations for full time tenure-track positions (Danaei, 2019). Teacher training is another need voiced by contingent faculty. Boylan and Saxon (2012) found that "providing training to adjunct faculty teaching developmental courses is probably one of the most cost-effective investments community college administrators can make" (p. 45). Kezar and Sam (2010) state that faculty would benefit from advanced teacher training on instruction through their campuses which could include instruction on syllabus development and access to university resources.

Addressing professional development opportunities and transitions for non-tenure track faculty, Kezar and Sam (2010) and others (Drake et al., 2019) discuss several practices and "symbols of support." They range from administrators communicating messages of respect, providing start-up funds, standardizing the hiring process, providing faculty with a sense of department norms. These practices can include using full time faculty as mentors, establishing multiyear contracts, and a clear system when it comes to hiring and assigning classes. More efforts at providing resources for the teaching and research needs of contingent faculty could take advantage of the internal and professional commitments that these individuals have to their profession and roles on their campuses (Kezar and Sam, 2010). Additionally, campus opportunities for professional development available to contingent faculty should be geared towards their needs. The benefits from this intentionality toward contingent faculty is that these resources can allow for networking within and between disciplines. Such actions would address the emotional and social support needs typically found among Latinx scholars in STEM fields (Muñoz and Villanueva, 2022).

Elevating the Benefits of the Contingent Faculty Role

Participants spoke to aspects of the role that they valued. First, participants emphasized throughout the conference that they are deeply drawn to and committed to the work of supporting students, and value that their role as contingent faculty provides them the opportunity to interact with students. Second, participants emphasized aspects of the job structure and working conditions that benefit their personal and professional goals.

Student-Faculty Relationships

As discussed earlier, participants spoke to their unique, often identity-centered, position to support and develop relationships with students. There is also evidence that contingent faculty inspire students to persist, particularly in the subject where they learn from contingent faculty (Bettinger and Long, 2010). Participants also spoke to the deep mentorship and emotional support that they provide students. This work was often outside of the traditional scope of the contingent faculty role, but was one that many participants embraced. Contingent faculty are highly likely to focus on teaching and instruction (over research or departmental service, like tenured faculty), and Latinx faculty build important relationships with students with whom they share a cultural background

(Hurlburt and McGarrah, 2016; Ponjuan, 2011). Taken together student-faculty relationships are connections and create belonging for faculty and students alike.

Beneficial Employment Conditions

Participants found some aspects of the contingent role were important to their personal and professional goals. One benefit of the role that participants mentioned was that it was removed from the tenure process, which they perceived as incredibly competitive. While 40 percent of participants were interested in entering the tenure track, others were unsure (35 percent) or were certain they did not want tenure (25 percent). For participants who had no or uncertain interest in tenure, the contingent role provides an opportunity to work with students and to teach without having to pursue a career pathway that holds little interest.

Flexibility was also a particularly important aspect of the contingent faculty role that participants valued. For many participants, the contingent role provided them the opportunity to hold other jobs that they also valued. Female participants in particular spoke to the importance of the flexibility of the role as a working parent. For example, their teaching schedule enabled them to be at drop-off or pick-up for their children, or enabled them to provide care for their children, which, several participants mentioned, was important especially given the high cost of childcare. Ultimately, the flexibility of the role provided work-life balance that participants valued.

Conclusion

Contingent faculty play critical roles at HSIs. They are heavily, and increasingly relied upon for instruction. Latinx contingent faculty play a particularly important role, providing formal and informal mentorship to students and contributing to a campus that truly serves Hispanic and Latinx students. This brief outlined strategies for HSIs to better leverage and support contingent faculty, and to minimize the tradeoffs they face.

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References

Bettinger, E. and Long, B.T. (2010), “Does Cheaper Mean Better? The Impact of Using Adjunct Instructors on Student Outcomes.” The Review of Economics and Statistics; 92(3), 598–613. https://doi.org/10.1162/REST_a_00014

California Faculty Association (2022), “Collective Bargaining Agreement Between the California Faculty Association and the Board of Trustees of the California State University, Unit 3: Faculty.”

Accessed September 10, 2022: https://www.calfac.org/wp-content/uploads/2022/04/2022-2024-CBA-FINAL.pdf
Coso Strong, A. (2022, April 29), “Assets, Barriers, and Capacity Building,” Lecture, HSI Conference. California State University, San Bernardino.
Dervenis, C., Fitsilis, P. and Iatrellis, O. (2022), "A review of research on teacher competencies in higher education", Quality Assurance in Education, 30(2), 199-220. https://doi.org/10.1108/QAE-08-2021-0126
Danaei, K. J. (2019). Literature Review of Adjunct Faculty. *Educational Research: Theory and Practice*, *30*(2), 17-33.
Diversi, M. and Mecham, C. (2005), “Latino(a) students and Caucasian mentors in a rural after-school program: Towards empowering adult–youth relationships.” J. Community Psychol., 33: 31-40. https://doi.org/10.1002/jcop.20034
Doran, E. E. (2021). “What does culturally relevant pedagogy mean in the community college context?” New Directions for Community Colleges, 81– 90. https://doi.org/10.1002/cc.20468
Drake, A., Struve, L., Meghani, S.A., & Bukoski, B. (2019). Invisible Labor, Visible Change: Non-Tenure-Track Faculty Agency in a Research University. The Review of Higher Education 42(4), 1635-1664. httpss://doi.org/10.1353/rhe.2019.0078
Edwards, K. A., McCollester, M., Phillips, B., Acheson-Field, H., Leamon, I., Johnson, N., and Lytell, M.C. (2021). “Compensation and Benefits for Science, Technology, Engineering, and Mathematics (STEM) Workers: A Comparison of the Federal Government and the Private Sector.” Santa Monica, CA: RAND Corporation. Retrieved September 12, 2022: https://www.rand.org/pubs/research_reports/RR4267.html.
Eney, P., Davidson, E., and Lau, P. (2008). “Instructor Manuals that Reach Beyond the Basics,” NADE Digest 4(1), 61-70. Retrieved August 10, 2022: https://files.eric.ed.gov/fulltext/EJ1097597.pdf
Flannery, Mary Ellen (2017). “The Homeless Professor Who Lives in Her Car.” National Education Association. Retrieved August 3, 2022: https://www.nea.org/advocating-for-change/new-from-nea/homeless-professor-who-lives-her-car
House Committee on Education and the Workforce, Democratic Staff (2014). “The Just-In-Time Professor: A Staff Report Summarizing eForum Responses on the Working Conditions of Contingent Faculty in Higher Education.” Retrieved October 25, 2022: https://edlabor.house.gov/imo/media/doc/1.24.14-AdjunctEforumReport.pdf
Kezar, A. and Sam, C. (2010), “Understanding the new majority of non-tenure-track faculty in higher education – Demographics, experiences and plans of action.” ASHE Higher Education Report 36(4), 1-133.
Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. Harvard Educational Review, 84(1), 74-135. Retrieved October 27, 2022: https://www.proquest.com/scholarly-journals/culturally-relevant-pedagogy-2-0-k-remix/docview/1541994887/se-2
Misra, J., Kanelee, E.S., and Mickey, E.L. (2021), “Institutional Approaches to Mentoring Faculty Colleagues,” Inside Higher Ed. Retrieved August 10, 2022: https://www.insidehighered.com/advice/2021/03/18/colleges-should-develop-formal-programs-mentoring-not-leave-it-individual-faculty?v2
Misra, J., Kuvaeva, A., O’meara, K., Culpepper, D.K. and Jaeger, A. (2021), “Gendered and Racialized Perceptions of Faculty Workloads.” Gender & Society 35(3), 358–94. https://doi.org/10.1177/08912432211001387.
The Modern Language Association of America. (2011), “Professional Employment Practices for Non-Tenure-Track Faculty Members: Recommendations and Evaluative Questions: Committee on

Contingent Labor in the Profession." Retrieved September 20, 2022: https://www.mla.org/content/download/3368/81826/clip_stmt_final_may11.pdf
Moll, L.C., Amanti, C., Neff, D., Gonzalez, N. (1992). "Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms," *Theory into Practice*, 31(2). https://doi.org/10.1080/00405849209543534
Muñoz, J.A, and Villanueva, I. (2019). "Latino STEM scholars, barriers, and mental health: a review of the literature." Journal of Hispanic Higher Education, 21(1), 3-16.
Ott, M.C. and Dippold, L.K. (2018), "Adjunct employment preference: Who wants to be full-time faculty?" Community College Journal of Research and Practice, 42(3), 190-203.
Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher,* 41(3), 93-97.
Ponjuan, L. (2011), " Recruiting and Retaining Latino Faculty Members: The Missing Piece to Latino Student Success" NEA Higher Education Journal. Retrieved from: https://vtechworks.lib.vt.edu/bitstream/handle/10919/84034/RecruitingLatinoFacultyMembers.pdf?sequence%3D1
Poteat, L.F., Shockley, K.M., and Allen, T.D.. (2009), "Mentor-protégé commitment fit and relationship satisfaction in academic mentoring." Journal of Vocational Behavior, 74(3), 332-337.
RTI International. (2019). First-generation College Students: Demographic Characteristics and Postsecondary Enrollment. Washington, DC: NASPA. Retrieved October 10, 2022: https://firstgen.naspa.org/files/dmfile/FactSheet-01.pdf
Santisteban, L., and Egues, A.L. (2014). "Cultivating adjunct faculty: Strategies beyond orientation." Nursing Forum, 49(3), 152-158.
Singh, I. (2020), "By the Numbers: Women in STEM: What do the statistics reveal about ongoing gender disparities?" Yale Scientific. Retrieved September 12, 2022: https://www.yalescientific.org/2020/11/by-the-numbers-women-in-stem-what-do-the-statistics-reveal-about-ongoing-gender-disparities/
Smith, J.W., Smith, W., and Markham, S. (2000) " Diversity Issues In Mentoring Academic Faculty," Journal of Career Development, 26(4), 251–262. https://doi.org/10.1177/089484530002600402
Sorcinelli, M.D. and Yun, J. (2007) "From Mentor to Mentoring Networks: Mentoring in the New Academy," Change: The Magazine of Higher Learning, 39(6), 58-61, https://doi.org/10.3200/CHNG.39.6.58-C4
Supiano, B. (2022), "Can a Teaching Track Improve Undergraduate Education?" The Chronicle of Higher Education. Retrieved September 12, 2022: https://www.chronicle.com/article/can-a-teaching-track-improve-undergraduate-education
Walton, G.M., and Cohen, G.L. (2007), "A question of belonging: race, social fit, and achievement." Journal of Personality and Social Psychology 92(1).
Yosso, T.J. (2005) "Whose culture has capital? A critical race theory discussion of community cultural wealth." Race Ethnicity and Education, 8(1), 69-91. https://doi.org/10.1080/1361332052000341006

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Waking Up: A Phenomenological Study of First-Year Students on Academic Probation

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Undergraduate college students often experience a number of difficulties when they arrive on college campuses. Students fresh out of high school are forced to grapple with a new environment ripe with opportunities for academic, social, and emotional engagement. Unfortunately, many students mismanage their newly found freedom and time, and this often results in consequences related to their academic status. Institutions use different terms to define a student's academic status, which include academic warning, academic probation, suspension, and disqualification. At the institution studied, the only relevant terms utilized are academic probation and academic disqualification. Academic probation is operationally defined as a student's status when the student's cumulative grade-point average (GPA) drops below a 2.0 on a 4.0 scale. Disqualification is defined as a student's status when they have failed to earn at least a 2.0 semester GPA while they are on academic probation. If a student is academically disqualified, they must sit out of academic courses at the institution studied for a period of time before returning unless they decide to appeal.

During the time this study was conducted, the number of first-year students on academic probation ranged from approximately 450-550 students or about 10% of each first-year cohort. Despite the rising number of students on academic probation each year in the United States, few new initiatives undertaken by colleges and universities have been systematically studied. The institution at the center of this study placed a great deal of importance on innovative programming for this student population and was ripe for further investigation. Elements of the innovative programming included intrusive academic advising, required student success seminars, required student success workshops, and required study sessions for their academic courses. While numerous studies have focused on student departure (e.g., Astin, 1984; Barefoot, 2007; Cuseo, 2003; Pascarella & Terenzini, 2005; Tinto, 1987), little empirical research exists regarding the experiences of students on academic probation (Vander Schee, 2007). We chose to examine the subpopulation of students on academic probation, specifically their lived experiences, through the epistemological lens of constructionism (Crotty, 2010).

Literature Review

Extant literature suggests that students who end up on academic probation after their first semester lack the cultural capital, self-discipline, and academic skills such as studying, time management, and goal setting necessary to succeed (Arcand & LeBlanc, 2012; Humphrey, 2006; Hutson, 2006; Kamphoff et al., 2007; Tovar & Simon, 2006). Personal problems may also play a role in students' underachieving such as lack motivation, procrastination, and disorganization (Dunwoody & Frank, 1995; Lucas, 1991; Trombley, 2001). Much of the literature focuses on

generalizing students on academic probation into one homogeneous group, which Humphrey (2006) argued against. The present study brings texture and nuance to this student group, thereby highlighting its heterogeneity while still noting shared experiences. This literature review contains the following three major sections: academic integration, academic probation, and academic advising each of which is germane to the shared experiences of our participants.

Academic Integration

Tinto (1987) articulated that college students must first separate themselves from past memberships before they can integrate academically and socially in college, which is the first stage of academic integration. It is during this second stage of integration that some college students begin to realize that while they may have been successful in the past, they may not have the social or intellectual skills to succeed in college. Academic integration is best defined as when a student becomes attached to intellectual life in college. Symonds et al. (2011) reported that students tend to drop out of college because they lack preparation for the demanding, rigorous nature of college work, which results in nearly half of all students failing to earn a degree in four years (Barefoot, 2007). When examining the idea of students transitioning to college lacking preparation, scholars often arrive at the idea of learning strategies and the best practices associated with instilling them in incoming freshman. Tuckman and Kennedy (2011) examined this by comparing students who were enrolled in an online learning strategies course and those who were not, and found that students who had taken the learning strategies course reported higher GPAs and more students within this group graduated in four years than the group of students who did not take the course. While these courses are influential in the development of college students, they do not guarantee student success, but they are often used to assist in the social and academic integration of students into college to increase student persistence (Bedford & Durkee, 1989; Cuseo, 1991; Fidler & Moore, 1996; Pascarella & Terenzini, 1991).

Dembo (2004) also examined learning strategies courses and the common reasons that college students fail to engage in learning, and found that students' unwillingness to change, or failure to understand what needed to be change, were the main attributors to their failure to grow. Renzulli (2015) examined students who had recently been placed on academic probation and were asked to voluntarily enroll in a learning strategies course, and found that students who struggled academically were ill-prepared to complete basic tasks such as "attending class regularly, communicating with their professors, completing required reading, and employing minimal study, self-regulation, and time management skills" (p. 34). The risk of dropout is at its peak during the freshman year and is associated with a disconnect between student expectations and the realities of college life (Tinto, 1993). It is because of this risk that when first-year students find themselves on academic probation, practitioners in higher education and students alike must integrate academically to persist.

Academic Probation

Because institutions of higher education are actively increasing measures to improve graduation rates, programming, which may include required academic advising, student success seminars, and student success workshops for students on academic probation has profoundly risen in importance, yet the literature remains sparse. Yet these methods are reactive to students being placed on

academic probation. The institution studied was not utilizing an early alert system or student success platform at the time the study was conducted, which are often used in higher education to identify trends and patterns of students who would wind up on academic probation, so that intervention can occur before the student is placed on academic probation. Institutions of higher education typically place a student on academic probation or academic warning when a student's cumulative GPA falls below a certain standard, often a 2.0 GPA. Yet, it is not as though students expect to struggle in college. In contrast to that, in an annual survey of first-time freshman, 57.4 percent expected to earn at least a "B" average during their college career (Kuh, 2007). With a lack of organizational or legal guidance on program structure, programming for this population differs among institutions in terms of intended outcomes, structure, and intent. And, with state and federal funding at stake, many institutions of higher education look to academic advising as the primary factor to provide programming for this population in order to improve retention and degree completion rates (Cuseo, 2003). And the rising student success models being implemented across most institutions of higher education reaffirm the shared problems experienced by leaders within higher education related to retention and completion rates and the imperative to leverage predictive analytics as a tool (Feathers, 2022; McNair, et. al., 2022; Gkontzis, 2022).

Academic Advising

Academic advising looks different from one individual to another and certainly from one campus to another, and the approaches within it are best conceptualized as a spectrum. On one end, a highly controlled advising approach exists, called prescriptive advising, which assumes that an unmotivated student must be cared for through the responsibility of their academic advisor (Winston & Sandor, 1984). On the other end of the spectrum, resides developmental advising, which seeks to assist students in achieving their educational, personal, and career goals through institutional resources, which promotes the total development of the student (Chickering, 1969). Developmental advising includes agreements between the advisor and the student regarding who takes initiative and who takes responsibility (Crookston, 1972).

Advisors must also be cognizant of the development of their students who are on academic probation, which heavily influences the approach that will be used, and because of this, they might consider another approach on the spectrum--intrusive or high involvement advising. This approach consists of a high level of contact via phone calls and email to ensure student responsibility for the decisions they have made (Earl, 1988). This particular practice is frequently used for assisting students who identify as being on academic probation, and often consists of having them a sign a contract to hold them accountable for their actions (Garnett, 1990), meeting regularly with their advisor (Arndt, 1995), and using academic support services such as tutoring (Kirk-Kuwaye & Nishida, 2001) and establishing goals and plans to achieve them (Vander Schee, 2007). Kirk-Kuwaye and Nishida (2001) emphasized that the number of meetings with an academic advisor has a significant impact on a student's GPA.

This study is anchored by this review of literature and propelled us to select a phenomenological approach to better understanding the phenomenon of first-year students placed on academic probation.

Methods

Using Crotty's (2010) four elements of research design—epistemology, theoretical perspective, methodology, and method—we undertook this study to better understand the experiences of first-year students on academic probation. To provide context for the findings of this study, it is necessary to detail how we applied Crotty's framework. Crotty defined constructionism, our epistemology, as "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction" (p. 42). Thus, we examined the phenomenon of academic probation to determine the nature of the experiences the participants shared and created an interpretation of the essence of those experiences. Other than entering data collection with conversancy with the extant literature on this topic, no specific theoretical perspective was used in an effort to openly explore the lived experiences of first-year students on academic probation.

Utilizing Crotty's (2010) framework, interpretive phenomenological analysis (IPA) was employed because it challenges our prevailing understanding and creates conditions in light of newly derived data from students' lived experiences related to a particular event or process (Smith et al., 2009). In utilizing IPA as a methodology, we sought out to better understand each participant, who was experiencing the phenomenon of academic probation. IPA was also chosen because it works particularly well when using small homogenous sample, and it does not expect the researcher to "bracket" their own experiences (Creswell, 2013; Crotty, 2010; Savin-Baden & Major, 2013). This is a significant departure from the majority of the extant literature regarding students on academic probation because we wanted to understand students' experience during the time when they are on academic probation and how they perceive college rather than focusing why students exit college.

Semi-structured interviews were the sole method used for data collection. Semi-structured interviews were used to strike a balance between structure and flexibility in taking the interview in whatever direction the conversation flows (Yin, 1994; Yow, 1994). The first author developed the interview questions, had an expert panel review and help revise them, and then conducted the IRB-approved semi-structured interviews following methodological advise from Kvale & Brinkman, 2009. The interview protocol consisted of 12 open-ended questions (see Appendix) related to how participants experienced academic probation as a phenomenon. A total of nine separate interviews with traditional aged students on academic probation were conducted to determine how they experienced being on academic probation and what contexts affected how they experienced this phenomenon (Moustakas, 1994). See Table 1 for an overview of the participants.

The institution studied is classified as a predominantly white institution (PWI) as white students make up greater than 50% of the student population and other racial groups such as African American and Asian/Pacific Islander making up 5% each. This study's sample reflects the racial makeup of the larger institution. Upon receiving a Family Educational Rights and Privacy Act (FERPA) release from the university registrar, we requested the contact information of the population in question from the director of the program for students on academic probation. An initial recruitment email was sent to the population in one blind copied mass email. Subsequent recruitment emails were sent one week apart from the initial email for the next three weeks. Participants were asked to engage in a single, semi-structured interview conducted in a mutually

agreeable location (i.e., university library study room) that lasted approximately one hour. Participants were compensated with five dollars for their participation.

Table 1
Participant Demographics by College Major, Sex, and Race

Participant	Major	Gender	Race
1	English Literature	Female	Multiracial
2	Athletic Training	Female	White
3	Photojournalism	Male	White
4	Finance	Female	White
5	Exercise Science	Female	White
6	Urban Planning and Art	Female	White
7	Computer Informatics Systems	Male	White
8	Biology	Male	White
9	Construction Management	Male	White

Data Analysis

Smith's (2007) data analysis techniques for IPA were employed, which follows an iterative and inductive cycle, and involves the following strategies: a line-by-line analysis of each participant, the identification of emergent patterns or themes, a dialogue between the researchers and the coded data, and the development of a structure to illustrate the relationship between themes. Data analysis for this study was composed of five separate yet intertwined processes, which included: (a) transcribing the interviews; (b) listening to the audio recordings, reading and re-reading the transcripts, and engaging in reflective memoing; (c) open coding; (d) generating themes from the codes; and (e) interpreting the lived experiences of the participants and constructing a claim about the essence of the participant's experiences with the phenomenon of being on academic probation. See table two for examples of how raw data were moved to codes, and subsequently to themes.

We also chose to interact with the data at multiple points to conduct a thematic analysis using Braun and Clarke's (2006) model and to also ensure quality and trustworthiness (Creswell, 2013; Hammersley, 2008) in our analysis. The proves of transcribing the interviews included multiple listening session of the recorded audio for each interview, preparing a verbatim transcript for each, reading and re-reading each of the transcriptions of the nine interviews to guide the development of initial meaning units. As Creswell (2013) suggested, we set a count for meaning units prior to data analysis, so when the process of listening to the audio recordings, reading, and re-reading the transcriptions revealed at least three or more passages from three or more different participants related to the same theme, it was determined that saturation had been achieved. Open coding was utilized to allow for the most flexibility in "emergent" meaning unit development (Crabtree & Miller, 1992, p. 151). Specifically, we focused upon core events in participants' lives, which helped

Table 2
Moving from Raw Data to Codes and Themes

Raw Data	Codes	Themes
"Um, I never study for tests, so it's kind of hard, like I'll sit there and try to study for a test, but I don't know how to really study for a test."	Study habits Lack of preparation Effort	Effort levels in transitioning to college
"I think I am on academic probation because I had allowed, allowed myself to really just not do what I supposed to as far as missing class, missing assignments, and things like that. I am on academic probation because I was not leading the level of responsibility expected of me as a college student."	Effort Adjustment Responsibility	The Wake-Up Moment Effort levels in transitioning to college

better illustrate the lived experiences of each participant in the sample. During the process of open coding, words were underlined and phrases were grouped into meaning units, which culminated in the creation of four emergent meaning units, our themes: (a) support and its needs-based nature, (b) effort levels in transitioning to college, (c) academic integration and validation, and (d) the wake-up moment.

Findings

The findings section of this manuscript seeks to better explore the lived-experiences of first-year students on academic probation, which were grouped into four emergent themes outlined here: (a) support and its needs-based nature, (b) effort levels in transitioning to college, (c) academic integration and validation, and (d) the wake-up moment. The primary reason students did not pursue additional resources was because they did not feel a need to do so; this is our first finding. Our second finding centered around participants' responses highlighting their perception that more effort was not necessary to be successful in college. Because most of the participants were successful in high school they continued using the same approaches they used in high school. Our third finding of academic integration and validation is related to students' desire to have opportunities to engage with their instructors during class. When that engagement was absent, students had difficulty integrating academically to college. And, our last theme focused upon a unique period after a participants' first semester where they had a realization that if they did not change their study habits and effort levels, they risked being disqualified from their institution of

higher education, which often resulted in an immediate turnaround of success. Each of these themes are provided in detail below.

Support and Its Needs-Based Nature

Institutions of higher education across the nation have a wide array of resources available to first-year students, yet many choose not to take advantage of these resources. Participants from this study explained why they didn't utilize the resources at the institution studied. A similar phrase was iterated by seven of the participants in the study, but it was put best by participant nine: "I haven't felt the need to go." At some point in each of the interviews, each participant iterated a variation of this phrase with respect to a resource that they could have utilized in their first semester whether it be the institution's tutoring center, the counseling center, the career center, academic advising, faculty office hours, and the writing center. It is intriguing that these students, all of which were on academic probation at the time of the interview, felt these resources were not necessary to be successful. The institution studied requires students on academic probation to participate in multiple required academic advising sessions in addition to student success workshops on a variety of topics such as time management, study strategies, and managing stress. Tutoring is not required for students on academic probation at the institution studied.

It is possible that participants' perception was that those resources were for other students who were worse off than they were. Participant six exemplified this rationale: "I don't really use any resources. The writing center was open. The learning center was open. I still don't use those . . . I just feel like I don't need them." This particularly powerful passage raises many questions about institutional support services and how students perceive them. Participant six continued, "I am just not a big fan of going out of my way to use a resource that won't have any benefit really, when I am already doing all that I can." She explained why she does not see value in campus academic support services because she sees them as exterior to what is necessary to achieve success in college. This belief was also held by participant three when he was asked why he chose not to utilize any campus academic support services, he simply responded,

> pride . . . I like to make-up for my own mistakes make sure that everything's on me. I take a lot of responsibility on myself. It's probably why when I play sports with a goal, I like to be the goalie because everything is on me.

This particular quote is a beautiful representation of how participant three blends responsibility and accountability with respect to his education and his main hobby—sports.

For the remaining participants, they saw other reasons for not seeking out resources. Returning to the catalyst for this theme, participant nine had this to say, "I've been doing a lot better, I haven't felt the need to go." What an academic advisor might view as satisfactory grade, may be viewed as an exemplary grade by a student. Despite professionals' perceptions, the student's own perception influences his or her motivation level. Participant four also felt similarly with respect to instructor's office hours. "I don't think I went to any . . . for the most part, I have had no questions." Participant eight also discussed the needs-based nature of support with respect to office hours when he was asked if he ever felt the need to interact with an instructor if he did not need something: "no, I understand they are busy people too." If students perceive their instructors as a

supplementary resource to succeed in the vacuum of the course, they will be unlikely to forge any lasting relationships that may continue outside of the course.

Effort Levels in Transitioning to College

Like the previous theme, this theme was also refined from our analysis to include more than just the differences between high school and college. Every participant mentioned at some point in their interview that they "didn't try" or they "stopped after a while" as participant nine said, which resulted in the creation of theme regarding effort in transitioning to college. As the literature suggests, one of the most vital factors to attaining success in college is attending class. For participant five, when she began to struggle in class, she just stopped attending. "Maybe, I didn't need to get an FS, but I could have just gone to the final and gotten an F." Students who receive an "FS (Failed-Stopped Attending)" at this particular institution are required to pay back the student aid they received to pay for the class as they failed to attend class after a particular date tracked by the instructor.

Participant four was more strategic: "I went to most of my classes other than psychology. I never went to class just because my teacher never took attendance." If students do not see value in an individual class meeting, and there are no repercussions, some students will simply not attend just as this student did. Participant seven also experienced attendance issues related to effort. When asked how many classes he missed, he responded, "like 10 or 15 because I know alone, I missed geography nine times. Eww, maybe like 20 or more." For this participant, he had several contributing factors that led to this amount of absences, but the question remains, is attendance an expectation?

Effort as a theme was multi-dimensional in that in addition to attendance, it also applied to how participants approached their coursework. Participant six was honest about how she approached her first semester: "I would wait until the very last moment to try and do something . . . I did barely any of my homework. I didn't do any of my projects." Participant three also admitted he had not approached his education in an appropriate manner with respect to effort. "You know, I've accepted that I screwed up . . . it was definitely really frustrating at first." When reduced to such a simplistic notion, effort seems pretty straightforward, but yet, so many students experience this when they transition from high school to college because of disassociation between what was expected in high school and what is expected in college. In participant one's first semester she admitted that this was the missing ingredient: "me just putting more of an effort in and like I wasn't putting one in at the time."

Academic Integration and Validation

The next theme nearly flips the conversation from lack of effort to engagement and the profound impact of validation and interactivity in the classroom. Participant eight who only missed a few classes in his first semester because of an error had this to say about his current engagement when asked if he would ever miss a class on purpose. "If I had to do something that desperately needed my attention, I would, but not on purpose." In this same interview, participant eight returned to the idea of engagement when discussing his English course: "It is kind of fun to really get into a discussion that makes you lose track of time." This level of engagement is what professionals in

higher education dream of when students do not wish to exit their learning environment. It is this level of engagement that Tinto (1993) refers to when discussing academic engagement and detachment from home culture. Having a caring faculty member interested in student-wellbeing has many positive benefits. While it is not true that engaged faculty can prevent all students from arriving on academic probation, it can be an important motivating factor for students who are on academic probation and are deciding what do to next.

Participant nine had a similar experience with one of his construction management professors. "I'll definitely take any class with him I possibly can, because he is definitely my favorite so far . . . always willing to talk to you, and know how you're doing." Once again, this highlights the inverse of the stories detailed under the theme of effort in transitioning to college as this particular student developed a strong relationship with one of his professors, and he felt his professor cared about him. This level of care was shared by participant six: "they would always pull me aside, and be like hey you aren't doing so well. They would have long talks with me, and it would be like a therapy session because they are trying to help." While having instructors that care is not required for students to be successful, it certainly makes developing and fostering relationships easier for students.

Three participants remarked about how they have grown to enjoy discussion courses where they previously enjoyed larger lecture courses where they enjoyed relative anonymity. Participant five at the time of the interview was enrolled in an evening class that met once per week for three hours, which is often difficult for students to maintain engagement through because of the length of each session, she lamented, "my like health science professor. He encourages us, especially in a three-hour long class, if he says something and we want to say something about it, we just raise our hands." Participant five also enjoyed how her exercise science professor used polling to engage the class.

> There are so many of us there for the same reason but from different fields she will be like personal trainers raise your hand, tell us this. Physical therapists tell us, Physician's assistant tell us . . . just stuff that keeps you involved. Feeling like you matter.

Participant two also discussed how she was more engaged during the semester at the time of the interview because of the interactive component of her courses when she noted, "I'm much more involved. They're a lot more interactive than just straight up lectures"

Interactivity is certainly a vital component to maintaining classroom engagement, but participant two likened interactivity to how the professor perceived the students: "they will ask us questions, like, alright, are you guys doing good right now? And last semester, it was kind of like a huge lecture, so I feel like we were just a number, they didn't actually care." This brings up an interesting conversation on lecture classes and their effectiveness and what kind of message it conveys to students. Participant four felt somewhat disparaged by one of their particular instructor's method of lecturing because she felt like she could not ask a question: "I feel like it'll waste too much of the teacher's time." Not only does this confirm the notion of participant two's perception about instructors who care about students, but it also further emphasizes our previous question regarding the purpose and effectiveness of a lecture.

The Wake-Up Moment

Participants tended to have a more positive attitude during their second semester because they believed they had the power to change their situation. It is when an individual student reaches the point where they begin to reflect on their actions and hold themselves accountable for their actions that they have reached the wake-up moment: our last theme. The wake-up moment was iterated by participant eight during his interview where he described his encounter with how he learned he was on academic probation, "last semester to this semester was kind of a wake-up call, especially just a couple of days after Christmas, a few days getting the note saying that I was on academic probation kind of snapped me into it." For participant eight, it was the combination of the shock from the letter and the conversation that followed with his parents. Participant seven had a similar experience when he interacted with his brother.

> My brother, he didn't really say anything until like he came down to visit me, and we hung out. He made a remark about it. You can't afford that, and I was like yeah, I know. He was like, you got to do good, and I was like, yeah, I know. That was the only thing he ever said about it.

For participant seven, this simple conversation with his "role model" inspired him to turn his academics around because he did not want to disappoint someone he has always looked up to. Participant two also wanted to avoid disappointing a family member, which contributed to her own turnaround. When discussing her father's reaction, she explained this, "I hate disappointing people. It scares me, especially, and I definitely just did not want to disappoint him."

Several of the participants also mentioned that while they could not articulate what has changed, or how they have changed the way they approached their academics, something has changed. It was also worth noting that each of these participants expressed various emotions when they discovered that they were on academic probation ranging from disappointment to anger and sadness to confusion, but among these emotions, several participants were able to find their wake-up moment that has allowed them to re-focus their goals and be successful in college. At the institution studied, students are notified when they are placed on academic probation via a physical letter to their home mailing address and an email from the Office of the Registrar.

Discussion and Implications

Our study has brought attention back to the amalgamation of individual experiences of students on academic probation, which is important to the advancement of the field of higher education. While it is important to understand that each student is a unique individual and should be treated as such, there are some shared experiences that can be utilized to improve their college experience (Humphrey, 2006). Our study enhanced the work completed by Arcand and Leblanc (2012), which explored the lived experiences of a single student on academic probation. This study extenuates their findings beyond a single individual's experience and extrapolates it among nine participants. By gathering the perspectives and experiences of a heterogeneous group and finding shared experiences at a single institution of higher education expands the opportunity for larger, more in-depth, studies to take place. Future research has the potential to not only be relevant for academic advisors but also faculty and partners in student affairs as well.

Within the themes, there are several convergence points with the literature. For example, our theme regarding effort levels in transitioning to college exemplifies the literature covered regarding learning styles and best practices to integrate students as they arrive on college campuses via first-year experience courses or learning strategies courses (Bedford & Durkee, 1989; Cuseo, 1991; Fidler & Moore, 1996; Pascarella & Terenzini, 1991; Tuckman and Kennedy 2011). Institutions of higher education should make a concerted effort at making these courses widely available to students transitioning to college because of the intrinsic benefits they exhibit. Despite the notion of the benefits of these courses, this study does support the literature in that many students find themselves ill-equipped to succeed in college because of their shortcomings in study skills, time-management, organization, procrastination, and motivation.

However, there is a lot of data from this study that diverges from the literature. For example, when discussing students' shortcoming in transitioning from high school to college, it is assumed from the literature that institutions of higher education should support students in their development of these skills, but what if, they do think they need support as evidence from our second theme in needs-based support? How will institutions of higher education first determine who needs assistance, and then thereby ensure that they use it? The perception is that professionals in higher education know when students need support, but their perception is that they are doing just fine. What contributes to this disconnect should be the focus of future research in the realm of higher education?

Additionally, while the literature supports the notion that smaller classrooms lead to greater engagement and thereby positive student outcomes (Chingos, 2013), will higher education ever move away from the traditional lecture format and its blatant ineffectiveness in engaging students? Silverthorn et al. (2006) noted that there is a reluctance to move away from this teaching method because of its rootedness in academia. With lectures seemingly here to stay, instructors should engage and encourage their students as supported within the findings. Several perspectives from the participants in this study not only show that they are disengaged, which leads to negative student outcomes, but they also described how they feel like their instructors do not care about them in these courses. This is most likely not the case, but in the current landscape, higher education cannot afford to make any decisions that might cause a reduction in funding.

There are several practical implications resulting from these findings. Professionals in higher education, student affairs partners, and faculty need to be aware of the wake-up moment because what they say, and how they react can make all the difference in whether or not the students succeed academically. More specifically, academic advisors and coaches must remain diligent when working with students on academic probation despite whether students believe they need academic services or not. Faculty must be purposeful in their interactions with students on academic probation to validate their efforts in rebuilding their confidence, academic skills, and abilities. By making agents of higher education aware of these findings, higher education can practice more purposeful and delicate practices to ensure the retention of students on academic probation.

It is worth noting that the intersection between the wake-up moment and students on academic probation in higher education has yet to be explored. Future research should focus upon creating a

conceptual framework specifically for students on academic probation to better understand the experiences and interactions of first-year students with this phenomenon. Additionally, further examination as to why a disconnect exists between perceptions of academic support services among students and higher education professionals is also needed.

Conclusion

Students on academic probation are a fascinating population to interact with, but in some retention circles, this population is considered a permanent fixture of higher education. We believe that while there may always be students who encounter a rough patch and find themselves on academic probation, during the next semester, they should have the tools and support available to them to turn things around. It is along this vein that academic advisors can validate their students on academic probation through encouragement and use the student's excitement as a catalyst for growth and an opportunity for the individual to wake-up. As evidenced by this study, through validation and support students on academic probation can improve their academic standing, but, despite all of the support, it is the wake-up moment that happens within each student that truly makes the difference as to whether or not change will occur.

References

Arcand, I., & LeBlanc, R. (2012). "When you fail, you feel like a failure": One student's experience of academic probation and an academic support program. *Alberta Journal of Educational Research*, *58*, 216-231. http://ajer.journalhosting.ucalgary.ca/index.php/ajer/article/view/1014/874

Arndt, J. R. (1995). Response to "predictors of success for academically dismissed students following readmission." *NACADA Journal*, *15*(1), 51. https://doi.org/10.12930/0271-9517-15.1.48

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, *25*, 297-308.

Astin, A. (1993). *What matters in college? Four critical years revisited*. Jossey-Bass.

Barefoot, B. (2007). Higher education's revolving door: Confronting the problem of student dropout in US colleges and universities. *Open Learning: The Journal of Open, Distance ande-Learning*, *19*, 9–18. https://doi.org/10.1080/0268051042000177818

Bedford, M. H., & Durkee, P. E. (1989). Some more ideas. *NASPA Journal*, *27*, 168-71.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. http://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa

Campbell, T., & Campbell, D. (1997). Faculty/Student Mentor Program: Effects on Academic Performance and Retention. *Research in Higher Education, 38*, 727-742. http://www.jstor.org/stable/40196285

Chickering A. W. (1969). *Education and identity*. Jossey-Bass.

Chingos, M. M. (2013). Class size and student outcomes: Research and policy implications. *Journal of Policy Analysis and Management, 32*, 411–438. https://doi.org/10.1002/pam.21677

Crabtree, B. F., & Miller, W. L. (1992). *Doing qualitative research*. Sage.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.

Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel*, *13*, 12-17.

http://proxy.bsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1972-23737-001&site=ehost-live&scope=site
Crotty, M. (2010). *The foundations of social research: Meaning and perspective in the research process.* Sage.
Cuseo, J. B. (1991). *The freshman orientation seminar: A research-based rationale for its value, delivery, and content* (Monograph No. 4). National Resource Center for the Freshman Year Experience.
Cuseo, J. (2003). Academic advisement and student retention: Empirical connections and systematic interventions. http://cpe.ky.gov/NR/rdonlyres/6781576F-67A6-4DF0-B2D3 2E71AE0D5D97/0/CuseoAcademicAdvisementandStudentRetentionEmpiraclConnectionsandSystemicInterventions.pdf
Dembo, M. H., & Seli, H. P. (2004). Students' resistance to change in learning strategies courses. *Journal of Developmental Education*, *27*(3), 2-4. http://proxy.bsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=12540900&site=ehost-live&scope=site
Dunwoody, P. T., & Frank, M. L. (1995). Why students withdraw from classes. Journal of Psychology, *129*, 553–558. https://doi.org/10.1080/00223980.1995.9914927
Earl, W. R. (1988). Intrusive advising of freshman in academic difficulty. *NACADA Journal*, *8*(2), 27-33. https://doi.org/10.12930/0271-9517-8.2.27
Feathers, T. (2022). Major Universities Are Using Race as a "High Impact Predictor" of Student Success. In *Ethics of Data and Analytics* (pp. 268-273). Auerbach Publications.
Fidler, P. P., & Moore, P. S. (1996). A comparison of the effects of campus residence and freshman seminar attendance on freshman dropout rates. *Journal of the Freshman Year Experience and Students in Transition*, *8*(2), 7-16.
Garnett, D. T. (1990). Retention strategies for high-risk students at a four-year university. *NACADA Journal*, *10*(1), 22-25. https://doi.org/10.12930/0271-9517-10.1.22
Gkontzis, A. F., Kotsiantis, S., Panagiotakopoulos, C. T., & Verykios, V. S. (2022). A predictive analytics framework as a countermeasure for attrition of students. *Interactive Learning Environments*, *30*(6), 1028-1043.
Hammersley, M. (2008). *Questioning qualitative inquiry*. Sage.
Humphrey, E. (2006). Project Success: Helping probationary students achieve academic success. *Journal of College Student Retention: Research, Theory and Practice*, *7*(3-4), 147-163. https://doi.org/10.2190%2FAMQ4-13VE-RBH7-6P1R
Hutson, B. L. (2006). Monitoring for success: Implementing a proactive probation program for diverse, at-risk college students (Doctoral dissertation). ProQuest Information and Learning Company -Dissertations and Theses. (UMI No. 3213369)
Kamphoff, C. S., Hutson, B. I., Amundsen, S. A., & Atwood, J. A. (2007). A motivational/empowerment model applied to students on academic probation. *Journal of College Student Retention: Research, Theory and Practice*, *8*(4), 397-412. https://doi.org/10.2190%2F9652-8543-3428-1J06
Kirk-Kuwaye, M., & Nishida, D. (2001). Effect of low and high advisor involvement on the academic performances of probation students. *NACADA Journal*, *21*(1&2), 40-45. https://doi.org/10.12930/0271-9517-21.1-2.40
Kuh, G. D. & Hu, S. (2001). The effects of student-faculty interaction in the 1990s. *Review of Higher Education*, *24*, 309-332. https://muse.jhu.edu/article/30127#info_wrap

Kuh, G. D. (2007). What student engagement data tell us about college readiness. *Peer Review*, *9*(1). https://www.aacu.org/publications-research/periodicals/what-student-engagement-data-tell-us-about-college-readiness

Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Sage.

Lucas, J. A. (1991). Evaluation of new probation intervention program at Harper College. Palatine, IL: William Rainey Harper College, Office of Planning and Research. (ERIC Document Reproduction Services No. ED348122).

McNair, T. B., Albertine, S., McDonald, N., Major Jr, T., & Cooper, M. A. (2022). *Becoming a student-ready college: A new culture of leadership for student success*. John Wiley & Sons.

Moustakas, C. (1994). *Phenomenological research methods*. Sage.

Nagda, B. A., Gregerman, S. R., Jonides, J., von Hippel, W., & Lerner, J. S. (1998). Undergraduate student-faculty research partnerships affect student retention. *The Review of Higher Education*, *22*, 55-72. http://projects.iq.harvard.edu/files/lernerlab/files/nagda_gregerman_jonides_vonhippel_lerner_1998.pdf

Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology, 41*, 457-479. https://doi.org/10.1111/j.1744-6570.1988.tb00638.x

Pascarella, E. T., & Terenzini, P. T. (1979). Interactive influence in Spady and Tinto's conceptual model of attrition. *Sociology of Education*, *52*, 197-210. https://doi.org/10.2307/2112401

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insight from twenty years of research*. Jossey-Bass.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students* (Vol. 2): *A third decade of research*. Jossey-Bass.

Renzulli, S. J. (2015). Using learning strategies to improve the academic performance of university students on academic probation. *NACADA Journal*, *35*(1), 29-41. https://doi.org/10.12930/NACADA-13-043

Richardson, L. (1994). Writing: A method of inquiry. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 516-529). Sage.

Savin-Baden, M., & Major, C. H. (2013). *Qualitative research: The essential guide to theory and practice*. Routledge.

Seidman, I. (1991). *Interviewing as qualitative research: A guide for researchers in the social sciences*. Teacher's College Press.

Silverthorn, D. U., Thorn, P. M., & Svinicki, M. D. (2006). It's difficult to change the way we teach: Lessons from the integrative themes in physiology curriculum module project. *Advances in Physiology Education*, *30*(4), 204-214. https://doi.org/10.1152/advan.00064.2006

Smith, J. A. (2007). Hermeneutics, human sciences and health: Linking theory and practice. *International Journal of Qualitative Studies on Health and Well-Being*, *2*, 3-11. https://doi.org/10.1080/17482620601016120

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method and research*. Sage.

Stage, F. K. (1989). Motivation, academic and social integration, and the early dropout. *American Educational Research Journal*, *26*, 385-402. https://doi.org/10.3102%2F00028312026003385

Symonds, W. C., Schwartz, R., & Ferguson, R. F. (2011). Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century. Pathways to Prosperity Project, Harvard University Graduate School of Education.

Terenzini, P. and Pascarella, E. T. (1980). Student-faculty informal relationships and freshman year educational outcomes: A further investigation. *Journal of College Student Personnel*, *21*, 521-528. https://doi.org/10.1080/00220671.1978.10885067

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. The University of Chicago Press. (p., 114).

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.

Tovar, E., & Simon, M. A. (2006). Academic probation as a dangerous opportunity: Factors influencing diverse college students' success. *Community College Journal of Research and Practice*, *30*, 547-564. https://doi.org/10.1080/10668920500208237

Trombley, C. M. (2001). Evaluating students on probation and determining intervention strategies: A comparison of probation and good standing students. *Journal of College Student Retention: Research, Theory and Practice*, *2*(3), 239-251. https://doi.org/10.2190%2F4MY9-LB3T-D5Y0-APUQ

Tuckman, B. W., & Kennedy, G. J. (2011). Teaching learning strategies to increase success of first term college students. *Journal of Experimental Education*, *79*, 478–504. https://doi.org/10.1080/00220973.2010.512318

Vander Schee, B. A. (2007). Adding insight to intrusive advising and its effectiveness with students on probation. *NACADA Journal*, *27*(2), 50-59. https://doi.org/10.12930/0271-9517-27.2.50

Yin, R. K. (1994). *Case study research: design and methods* (3rd ed.). Sage.

Yow, V. R. (1994). *Recording oral history: A practical guide for social scientists.* Sage.

Appendix

Interview Protocol for Study-Spring 2016

Hello. My name is [primary researcher], and I would like to thank you for participating in this study. Please have a seat and we will get started with the interview after I have read through the instructions of the study and you have signed the informed consent form as well as the individual FERPA release form.

On Pace: A Phenomenological Study of First-Year Students on Academic Probation aims to explore the perspectives of first-year, college students on academic probation to better understand their experiences. To be eligible for this study, you must be at least 18 years old, be a freshman undergraduate student at [the institution studied], and identify as being on academic probation (Less than a 2.0 Cumulative GPA). Do you meet these criteria?

Your participation in this study is completely voluntary and you are free to withdraw your permission at any time for any reason without penalty or prejudice from the investigator. Please feel free to ask any questions of the investigator before signing this form and at any time during the study.

Do you have any questions prior to reading and signing the informed consent form or the individual FERPA release form?

Great! Thank you for agreeing to participate. I sincerely hope that this study will benefit you by allowing you to share your experiences as a student with me. Let's get started with the interview now. [Audio Recording On.] How did you spend your day today?

Follow Interview Protocol . . .

Tell me about your college experience.

Probe 1: Could you expand on that a little more?

Probe 2: Could you gave me an example or describe a specific incident?

When was the first time you struggled in college?

Probe 1: How did that make you feel?

Probe 2: Did anyone influence how you responded to this?

What was going on in your life during your first semester?

Probe 1: What is happening in your life this semester?

Probe 2: Could you gave me an example or describe a specific incident?

How would you describe how you viewed academics before you were placed on academic probation?

Probe 1: How, if at all, has your view of academics changed?

Probe 2: How would you describe the person you were then?

Could you tell me about your thoughts and feelings when you learned you were on academic probation?

Probe 1: What happened next?

Probe 2: Who, if anyone, was involved? When was that? How were they involved?

How, if at all, have your thoughts and feelings changed about academics since you were placed on academic probation?

Probe 1: What positive changes have occurred in your life since being placed on academic probation?

Probe 2: What negative changes if any, have occurred in your life since being placed on academic probation?

How would you describe the person you are now?

Probe 1: What most contributed to this change [or continuity]?

Probe 2: Could you gave me an example or describe a specific incident?

Could I ask you to describe the most important lessons you learned through experiencing academic probation?

Probe 1: Could you expand on that a little more?

Probe 2: Could you gave me an example or describe a specific incident?

Who has been the most helpful to you during the time you have been on academic probation?

Probe 1: Could you expand on that a little more?

Probe 2: How has he/she been helpful?

How have you grown as a person since being placed on academic probation?

Probe 1: Could you expand on that a little more?

Probe 2: What do you value about yourself?

After having these experiences, what advice would you give to someone who has just discovered that he or she is on academic probation?

Probe 1: Could you expand on that a little more?

Is there something else you think I should know to understand your experiences better?
Lastly, could you please answer the following demographic questions?
What gender do you identify with?

What race do you identify with?

What is your college major?

If you would like to learn of the results of this study, an abstract of the final study will be emailed to you upon completion.

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The Truth About Cats and Dogs: Cultivating Faculty Followership

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In Netflix's documentary, "Inside the Mind of a Cat," celebrity Ukrainian cat trainers Maryna and Svitlana Savitsky assert a proposition we know intuitively. Unlike their canine counterparts, cats do not aim to please. Leading faculty is often compared to herding cats. I have long contended that cats can indeed be herded. All you need to do is shake the treats jar, providing monetary rewards. Shaking the treats jar is indeed a strategy, as increasing faculty engagement and extramural funding pursuits across institutional types attests. However, in an age where faculty salaries lag behind inflation, institutions may be limited in both the number and size of awards they can offer to faculty to induce activities aligned with leadership initiatives. Moreover, cats tend to choose relational rewards over treats. Building faculty relations, and earning faculty respect, may prove more useful in cultivating followership in furtherance of a leadership agenda.

Here further insights from the Svitlana sisters may be useful. To get the best performance out of a cat:

1. You must become friends with the cat;
2. The cat must completely trust you;
3. The cat should not expect surprises from you; and,
4. You should endeavor to ask a cat to perform additional tasks aligned with its area of interest.

First, to become friends with the cat, instead of lording your presence or power over them, you should come alongside them and greet them in a friendly manner. For the cat, "the slow blink," is the marker of a friendly greeting. While being authentic, consider geographic and cultural contexts when attempting friendly engagement with faculty. As a leader, show faculty that either you are one of them in the case of a traditional leader or, in the case of a nontraditional leadership background, show you are empathetic and open to understanding faculty work life from the perspective of faculty. Within the culture wars, faculty have borne the brunt of anti-higher education campaigns, painted as esoteric, overpaid, under-worked, aloof, liberal political indoctrinators. As such it is important to take the time to learn from the faculty member's perspective both the joys and demands of teaching, research, creative activity, and community engagement.

[1] Crystal R. Chambers is a Professor of Educational Leadership and proud companion to two tabbies, Tina and Ruby.

Second, once you have established a friendship, build trust with a cat by providing vantage. Cats like to perch in high places because from up high they can see what is happening. Similarly, through transparency with faculty, clear communication of institutional challenges, and the scope and limitations of options, faculty will engender trust through honest communication.

Reflexively, if you fail to provide a cat a vantage, they will make one, perhaps taking perch on a bookshelf, houseplant, or other space you may prefer they not be. Becoming transparent reduces the opportunity for faculty to make up stories to account for undisclosed information. Of course, there are confidential and sensitive data that should be protected. But to the extent one establishes a reputation for honesty and transparency, faculty will be more likely to trust the information shared and follow proposed initiatives.

Third, cats do not like surprises. Their quick reflexes show their hypersensitivity to stimulation. Overstimulation breeds distrust. Instead, one should approach cats "low and slow" as well as be predictable in the provision of food, treats, and a clean litter box. Thus, when engaging faculty in change processes, be considerate to include faculty early and often in deliberative processes as well as utilize faculty in the creation and communication of solutions. Make sure the regular provisions upon which faculty depend, like start-up and seed packages, sabbaticals, and other supports are indeed regular. Although if changes to those expectations must be made, communicate early, in a calm tone, the expectations for the present and near future.

Fourth and finally, cats follow best when being lead within their areas of interest. Cats begin displaying their dispositions and interests within the first three days of birth. Similarly, faculty have a wide array of interests and expertise. Joan V. Gallos and Lee G. Bollman in Reframing Academic Leadership (2021) make note of Herbert Simon's observation that "universities are places run by amateurs to train professionals." Faculty have expertise, areas in which they have deep scholarly and perhaps experiential knowledge. They also participate in an array of organizational service activities, some of which are found by John S. Levin to be meaningful work. However, faculty find work that is clerical or managerial, or otherwise far from their interest or expertise to be irritants. Sometimes, work of that variety must be done. But as a matter of trust, that work should be rotated, and shared broadly, so that it is not disproportionately borne to the detriment of some, benefit of others. Faculty, like cats, will perform best when tasks and interest align.

Just as is the case with differences in the scope and depth of scholarship between our canine and feline friends, the scholarship of followership is comparatively shallow as compared to leadership volumes. Yet, followership is essential for leadership. As the saying goes, without followership, the act of leading is merely taking a walk.

Thus, to successfully lead faculty, leaders should understand faculty motivations. Bellyaching over the slowness of Faculty Senate deliberative processes or dismissing local AAUP resolutions will not engender faculty loyalty or followership. Faculty are rational actors, who are often asked to teach more to support enrollment growth and provide more institutional service while simultaneously being excluded from institutional planning, budgeting, and implementation discussions. Amid the onset of the Covid-19 pandemic, many institutions curtailed shared governance activities in the name of crisis response. But those institutions that intensified shared governance and communications improved faculty–leadership relations.

We know a lot about the social relations among dogs and between dogs and humans. And yet we spend less time understanding the behavior of cats, and regard cat behavior as mysterious. When we treat cats as aloof or disengaged, their behavior reflects the sentiment we project. Instead, as leaders, let's take the time to learn our faculty, their hopes, dreams, and motivations and realize that just like cats, they are social beings capable of receiving and giving something that looks like love.

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Contemporary Employee Engagement Issues in Higher Education: An Integrative Review of the Literature

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Building and sustaining a workforce climate that is positive and allows employees to thrive is a pressing issue for human resource management scholars and practitioners (Kim, Kolb, & Kim, 2013). This issue has gathered momentum in the face of emergent research that suggested that when employees have positive perceptions of their work environment, it drives them to be more productive and subsequently leads to better overall organizational performance (Osam, Shuck, & Immekus, 2019; Shuck & Reio, 2014). This idea that positive feelings associated with the workplace can yield better levels of performance stems from a management approach that is focused on magnifying the positive aspects of the work environment with the specific intention of maximizing performance (Watkins & Stavros, 2010). Indeed, this management approach is considered to be a more positive viewpoint that is suited for today's workforce and contrasts the deficit-based approach to organizational performance that only addressed negative aspects of the workplace such as burnout and exhaustion (Altunel, Kocak, & Cancir, 2015; Kim et al., 2013). One of the outcomes of the adoption of the 'positive management approach' is that researchers have developed several theories that support this position. Employee engagement is one such theory and has emerged in the past decade as one of the more popular approaches that focus on the developing a positive work environment (Kim et al., 2013). It is defined as a positive psychological state that is tied to the workplace that yields positive behavioral outcomes that facilitate organizational success (Shuck & Wollard, 2010; Shuck, Osam, Zigarmi, & Nimon, 2017; Kim et al., 2012). Examples of the positive behavioral outcomes associated with employee engagement include increased job commitment (Shuck & Reio, 2014), better performance (Kim et al., 2013), and lower turnover (Halbesleben, 2010).

More recent engagement research has even suggested that the positive effects of an engaged workforce extend beyond behavior to include positive impact on employee wellbeing (Fairlie, 2017). For example, studies have shown that higher levels of engagement are associated with improved levels of wellbeing including fewer headaches and stomachaches (Schaufeli et al., 2008), more positive levels of psychological wellbeing (Osam et al., 2019; Shuck & Reio, 2014) as well as better dietary choices (Shuck et al., 2017). Additionally, research shows that when properly harnessed, employee engagement can lead to shared positive feelings about the workplace across different employee identity groups (e.g. race, gender, age; see Dillard & Osam, 2021; Osam, Dillard, & Palmer, 2021). In sum, engagement related research has increased significantly since the adoption of the positive management approach. This includes research that focuses on what engagement is (Macey & Schneider, 2008), how it can be measured (Schaufeli & Bakker, 2010; Shuck, Adelson, & Reio, 2017; Rich, Lepine, & Crawford 2010), theoretical opining (Shuck & Wollard, 2010; Shuck et al., 2017), and literature reviews (Shuck & Wollard, 2010; Kim et al., 2012). Early

literature reviews on employee engagement were mostly focused on reviewing empirical studies on engagement to document the relationship between engagement and workplace performance (Kim et al., 2012). However, the growth of the engagement field has seen a shift in the type of literature reviews conducted to focus more on understanding engagement within specific industries such as in healthcare (Garcia-Sierra, Fernandez-Castro, & Martinez Zaragoza, 2015; Keyko, Cummings, Yonge, & Wong, 2016; Pfaff, Baxter, Jack, & Ploeg, 2013) and retail (James, McKechnie, & Swanberg, 2011). Results from these industry-specific reviews are important because it widens our understanding of what engagement is and how it may differ by industry (Garcia-Sierra et al, 2015). While literature reviews on engagement exist in contexts such as nursing and retail, there is nothing specifically focused on a higher education gap that this paper seeks to fill.

Background Context

Recently, research connected to higher education has been of interest to management and human resource scholars due to the evolving approach to management in colleges and universities (Shin & Jung, 2014; Silman, 2014). The slow diminishing of financial resources and more austere budgets have resulted in a shift in the operational management with an emphasis on cost effectiveness and efficiency (Shin & Jung, 2014; Parker, 2011). To this end, colleges and universities are adopting a performance based approach that increases expectation of faculty and staff. For example, Deans are assessed on their ability to generate external funds to support university operations while developing and implementing strict models of leadership and accountability in an environment that is increasingly become more corporate-like (Giroux, 2009). Faculty are now expected to teach larger, more diverse classes in multiple formats (Osam, Bergman, & Cumberland, 2017) all while generating external funds and publishing novel research in high quality academic journals (Kinman, 2014). The cumulative effect of these changes is that the higher education environment is becoming an increasingly more stressful place to work and has led educational researchers to begin researching how elements of stressful academic environments (e.g. emotional labor) affect teaching efficacy and student learning (see Yin, Huang, & Chen, 2019; Yin, Huan, & Lee, 2017). However, in spite of the popularity of engagement and the changing nature of higher education across the world there is limited empirical work on engagement that is context specific to colleges and universities (Nazir & Islam, 2017).

The shifting of scholarly focus on understanding engagement in different professional contexts and the emergent link between stressful academic environments and teaching efficacy and student provides justification for this paper (cf. Sierra et al., 2015; Yin et al., 2017; Yin et al., 2019). By scrutinizing the extant literature examining engagement in higher education, this paper builds knowledge that can contribute to educational research practice. Thus, the purpose of this paper is twofold: a) to analyze empirical engagement research contextualized in higher education, and b) propose recommendations for future engagement research situated in higher education. This paper is timely given that educational research is beginning to focus on the relationship between engagement, burnout, and reduced teaching satisfaction (Yin et al., 2019) as well as increased emotional job demands (e.g. caring for students) that require proper emotional expressions in the workplace to foster student success (Bakker & Demerouti, 2007; Isenbarger & Zembylas, 2006). In what follows next, we present the method, review of the literature, as well as summary and recommendations. In the method section, we describe the framework that undergirds this study- i.e. selection of relevant literature and the criteria for curating and analyzing the information

obtained from the literature. In the remaining sections, we synthesize findings from our review that includes recommendations for engagement researchers.

Method

The integrative literature review approach was selected for this paper because it is the most ideal for synthesizing information and simultaneously creating new knowledge about a specific phenomenon (Torraco, 2005). When properly executed, an integrative literature review explains why a literature review is a suitable approach to examine a topic, analyzes and critiques relevant literature, and finally, generates some new understanding of the topic that hitherto had not been uncovered in previous research (Torraco, 2005). For these reasons, the integrative literature review framework proposed by Torracco (2005) was adopted for this study.

Description of Selection Process

Using Torraco's (2005) guiding framework, the first step was selecting the most relevant literature. As with any study, a clearly defined method is important, and thus we made every effort to obtain literature for this study in a well-defined, logical, manner. In selecting the articles for this study, we used the following criteria a) location of the articles b) time period studies were conducted c) number of articles found, and final list of articles used d) justification for using the final list of articles. For this study, we searched multiple online scholarly databases to identify studies relevant to the topic. These included: ABI/INFORM Complete, ERIC, Google Scholar, ProQuest Education Journals, PsycINFO, and PsycARTICLES. The initial search for articles was conducted during the spring of 2019. To ensure that articles used for the study were relevant, we utilized several search terms. Because the focus of this article is engagement in higher education, the main terms used were "engagement" and "higher education". The term engagement has different meanings within the context of higher education (Shuck, Osam, Zigarmi, & Nimon, 2017), some that are completely different from the focus of this study. Thus, to ensure that search results were relevant to the topic, keyword combinations used for engagement included: "work engagement," "employee engagement," "job engagement," "role engagement," or "personal engagement". The search term "higher education" was also varied to capture all employees, not just faculty. Thus, keyword combinations that were used included: "higher education employees", "higher education faculty and staff", "academic employees", "academic faculty", "academic staff". To be sure that the articles were examining engagement as described in the field of HRD and management, the articles we selected were limited to those that included the exact search terms for engagement in the title or abstract of the papers. Additionally, selected articles had to have utilized empirical methodology (i.e. either quantitative or qualitative) to examine engagement. Only peer-reviewed articles published in English were considered during the selection process. Articles published from 2002 were considered for inclusion because Schaufeli, Salanova, Gonzalez-Roma, & Bakker (2002) developed a measure of engagement that has dominated engagement research since the turn of the century (Shuck et al., 2017).

The initial search using the parameters identified above resulted in 1,178 articles via the databases mentioned. This number was further reduced after applying the parameters described above to ensure that operational definition of engagement aligned with the HRD and management field. After this, we followed Torraco's (2005) guiding framework, we conducted a staged review. The

staged review is a two-step process that consists of a) reviewing abstracts and b) completing in depth review of articles. In the first step, we reviewed abstracts to determine if the study empirically examined engagement in higher education. If this was not clear, the next step was to review the article in depth to determine if it merited inclusion. Taking this two-step approach also helped eliminate any duplicate articles resulting in a total of 18 articles (see Table 1 below).

Table 1
Final list of studies included in review

Study	Location
Blatny et al. (2018)	Czech Republic
Bezuidenhout & Cilliers (2010)	South Africa
Ramalu & Subramaniam (2019)	Malaysia
Barkhuizen et al.(2014)	South Africa
Altunel et al. (2015)	Turkey
Manias et al. (2008)	South Africa
Chen (2017)	Taiwan
Barkhuizen et al. (2014)	South Africa
Rothmann & Jordaan (2006)	South Africa
Adil & Kamal (2016)	Pakistan
Ong & Yaqiong (2018)	China
Zahoor (2018)	India
Mandernach et al. (2015)	U.S.
Takawira et al. (2014)	South Africa
Field & Buitendach (2011)	South Africa
Ferrer & Morris (2013)	Australia
Nazir & Islam (2017)	India
Pujol-Cols & Lazzaro- Salazar (2018)	Argentina

Review of the Literature

Definitions and Clarifications

Before discussing the synthesized literature, we want to reduce the amount of redundancy in our analyses. All of studies we reviewed used a version of the Utrecht Work Engagement Scale (UWES) that was originally developed by Schaufeli et al. (2002). The UWES measures a typology of engagement called work engagement, which is defined as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication and absorption" (Schaufeli et al., 2002, p. 74). We

believe it is important to make this distinction because there are a number of engagement typologies that are appear similar but have unique definitions and measurement that are often incorrectly used interchangeably (see Shuck et al., 2017). Work engagement is theoretically grounded in the burnout approach of Maslach and Leiter (2006) that assumes that engagement and burnout are two opposite ends of a continuum of employee wellbeing, where burnout represents the negative end, and engagement represents the positive end of the continuum (Schaufeli & Bakker, 2003). In work engagement typology therefore, the presence of engagement suggests the absence of burnout/exhaustion and vice versa (see Shuck et al., 2017) There are several versions of the UWES that have been developed that are differentiated by the number of items for each of the three dimensions: vigor, dedication, and absorption. In our description of the studies, we state the version used but do not repeat the citations associated with the versions. In the section that follows, the empirical studies reviewed are used to establish a comprehensive conceptualization of the literature investigating the antecedents and outcomes of engagement in higher education. Relevant statistics are provided (See Appendix A) so that the reader can make informed determinations about the practical significance of results. Next, we synthesized issues noted from the 18 empirical studies into new ideas that offer new insights for future engagement research in higher education.

Antecedents of Engagement in Higher Education

In our review of the selected articles, we identified that there are antecedents to employee engagement. In other words, a common theme reflected in the extant literature suggested that certain factors need to be in place in order to create and maintain high levels of engagement in higher education. These antecedents were specifically described as being constructs or strategies and are necessary if the benefits of engagement are to be realized (Wollard & Shuck, 2011). Of these antecedents to engagement, we further identified two categories; individual-focused and institution-focused antecedents. Individual antecedents were person specific characteristics or attributes that needed to be applied by the employee to foster higher engagement. Institution-focused antecedents on the other hand were strategies that are applied across the institution, initiated by the employer to facilitate higher engagement. In the next section, we present individual-focused antecedents first, followed by institution-focused antecedents.

Individual-focused. Engagement is described as an individual level variable that is often measured at the organizational level (Wollard & Shuck, 2011). The central idea behind this is that employees' have a role to play in order to help create and maintain high levels of engagement in the workplace (Rich et al., 2010). The individual-focused antecedents to engagement are linked to the role of personality traits in organizational success (Macey & Schneider, 2008). For example, in the Blatny et al. (2018) study, engagement is positioned as a determinant of personality traits. They utilized a sample of 2229 academics in Czech public universities to determine what specific Big Five traits (extraversion, neuroticism, conscientiousness) are linked with higher engagement. Extraversion and conscientiousness were found to be significant predictors of engagement. Blatny et al. (2018) concluded that academic workers who display traits of extraversion and conscientiousness would demonstrate higher enthusiasm and connection to their work. In another study, Bezuidenhout & Cilliers (2010) suggested that in order to succeed in the higher education work environment, employees needed to demonstrate high levels of Sense of Coherence (SoC), another type of personality trait. SOC was described as the ability of individuals to appraise their environment,

make meaning of complex relationships and situations, and develop appropriate coping mechanisms to succeed (Redelinghuys & Rothmann, 2004; Bezuidenhout & Cilliers, 2010). They used a sample of 187 female faculty in South African Universities and found that higher levels of SOC were associated with higher levels of engagement. Additionally, they also found that female faculty who had lower levels of SOC were more likely to suffer from exhaustion and burnout-opposites of engagement (Schaufeli et al., 2002). These two studies highlight the role of individual traits in creating an engaging environment in higher education. The Big 5 trait approach (Blatny et al., 2018) and Sense of Coherence (Bezuidenhout & Cilliers, 2010) are based on well-known theories on trait personalities. In our examination, we found connection a between engagement and emergent theories associated with trait personality. For example, Ramalu and Subramaniam (2019) in their study examined the relationship between engagement and cultural intelligence (CO). Cultural intelligence is a personality trait defined as the ability of an individual to perform effectively in different cultural contexts (Ang & Van Dyne, 2015). A total of 152 expatriate academics comprising of both PhD and Master's degree holders were asked to participate in the study. Findings showed that cultural intelligence was a predictor of engagement, and further, that the relationship between the two variables is mediated by a third variable: psychological needs satisfaction. The findings from Ramalu & Subramaniam (2019) suggested traits such as cultural intelligence are capable of predicting attitudinal behaviors in the workplace.

In summary, the studies described in this section highlight the individual's role in engagement via personal characteristics including personality traits. These findings add support to a broader conversation in the extant literature that defined engagement as a trait related construct, where the level of engagement in a workplace is determined by the ability of employees to be engaged (Rich, 2006; Macey & Schneider, 2008). This form of engagement is known as trait engagement and implies that that engagement is an inherent quality that remains stable across time (Shuck et al., 2017). Furthermore, the trait approach to engagement suggested that personal characteristics such as extraversion, conscientiousness, and cultural intelligence (Blatny et al., 2010; Ramalu & Subramaniam, 2019) predispose some employees to have more positive experiences in the workplace (Shuck et al., 2017; Wildermuth & Mello, 2010). Others, however, argued that engagement is not determined by traits alone but is more a function of the presence of factors that are external to the employee (Shuck et al., 2017). Connected, is the idea that engagement is a psychological experience that is flexible, i.e. that it builds up and erodes over time based on an employee's interactions and experiences in the workplace (Shuck, Adelson, & Reio, 2017; Shuck et al., 2017). Thus, in this approach, engagement is defined as a state-related construct, not determined by personal characteristics or traits (Shuck et al., 2017; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2012). The state approach to engagement is embodied by the institution-focused antecedent theme we identified in our review and is presented next.

Institution-focused. The institution -focused antecedents to engagement are grounded in the idea that organizations are complex environments that contain triggers affecting the level of engagement among employees (Shuck et al., 2017). According to Shuck and Wollard (2011), institution -focused antecedents to engagement revolve around basic human needs such as job satisfaction and motivation. While these concepts appear to be straight forward, the abundance of literature investigating how to increase and/or maintain high levels of these needs suggests that in reality it is a complicated goal to achieve (Shuck, 2011). In our review, nearly half of the studies examined engagement using organization-focused antecedents. Further, of these studies, five

(Altunel, Kocak, Cancir, 2015; Barkhuizen, Rothmann, & van de Vijver, 2014; Chen, 2017; Rothmann & Jordaan; 2006; Manias, van den Berg, & Burger, 2008) identified job demands and resources as critical to achieving higher levels of engagement in the workforces. Job demands and resources is a conceptual approach to engagement that describes the work environment as containing two sets of working conditions (i.e. job demands and resources) that determine an individual's decision to be engaged at work (Crawford, Lepine, & Rich, 2010). Job demands are the physical, psychological, social, or organizational aspects of the job that require an individual to exert large amounts of physical and psychological effort (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job resources on the other hand, are the physical, psychological, social, or organizational aspects of the job that facilitate the attainment of organizational goals and act as a buffer to the negative effects of job demands such as burnout and stress (Schaufeli & Bakker, 2004). Hence, the presence of job resources reduces the effects of job demands, which are detrimental to engagement (Chen, 2017). The main conclusion from the five studies that examine engagement using the Job Demands-Resources approach was that job resources predict the level of engagement. In other words, the more the job resources, the higher the level of engagement. Several examples of job resources were used in these studies, however the most frequently mentioned resource was related to job support: Support from staff (Chen, 2017), organizational support (Rothman & Jordaan, 2006), collegial support (Altunel et al., 2015). The next common job resource we noted was advancement and opportunities for growth (Rothman & Jordaan, 2006; van den Berg & Burger, 2008). While we found job resources to be the most common organization-focused antecedent, we noted four other antecedents as well in our review: work satisfaction, leadership, job crafting, and instructional mode. Each of these are presented next.

Leadership. Research has suggested that leadership can be used as a tool to help improve engagement in the workforce (Carasco-Saul, Kim, & Kim, 2015). For example, (Schaufeli & Salanova, 2010) noted that great leaders go above and beyond the 'employee centered' leadership approach to creating a work environment that fosters a sense of purpose among employees. These leaders optimize the emotional climate in the workplace that triggers higher levels of engagement. In our review, we found two studies (Adil & Kamal, 2016; Ong & Yaqiong, 2018) that found leadership to be a contributing factor to engagement. Both studies utilized lesser-prevalent leadership theories (performance maintenance leadership and authentic leadership) to examine the impact of leadership on faculty and staff engagement. Adil and Kamal surveyed 500 Pakistani faculty and found authentic leadership to be a significant predictor of engagement. Likewise, in their survey of 116 faculty in China, Ong and Yaqiong found performance maintenance engagement to significantly predict engagement. Specifically, they measured faculty perception of the effect of middle manager leader behaviors that were broken down into three groups: character, performance, and maintenance. Character and performance were shown to have a positive effect on engagement, while maintenance was found to marginally affect engagement.

Job crafting. In a recently conducted study, Zahoor (2018) examined higher education from a customer service related standpoint, and explored whether allowing employees, rather than management, to align the boundaries of their job to their preferences, passion, and, qualification (incomplete.). This approach, termed job crafting, gives employees significant power to make modifications to their job including how to approach their tasks. Zahoor proposed that employees who craft their jobs are likely to display higher levels of engagement, and subsequently perform their jobs in a manner that leads to higher customer satisfaction. A sample of 159 dyads of faculty

from Indian Universities and 608 students were utilized for this study. Study findings showed that job crafting significantly predicted work engagement of faculty, and further, that work engagement mediated the influence of job crafting on student satisfaction. Thus, allowing faculty to do job crafting resulted in higher engagement, which resulted in better student satisfaction. While this study provides useful information regarding the relationship between job crafting and engagement, we found the sample to be limiting. Traditionally, faculty members have more autonomy over their work than university staff. Therefore, making self-initiated modifications to their roles may not be as novel as it would be for a member of staff (e.g. a grounds man, cafeteria cook, librarian etc.). Therefore, it is possible that the findings may differ when a sample of university staff are used. Nonetheless, this study provides evidence demonstrating that job crafting is an organization focused antecedent of engagement.

Instructional mode. In a similar study, Mandernach et al. (2015) examined the relationship between a function of a faculty's role i.e. instructional mode and engagement. They conducted this study because of the lack of engagement research on academic faculty, but also sought to include adjunct faculty as they are a growing presence in colleges and universities that need to be included in research involving academic staff. As with Zahoor's (2018) study, Mandernach et al. (2015) recognized the role of the student as a customer in higher education and therefore determined that it was important to understand the effectiveness of different instructional modes in relation to student satisfaction in addition to faculty engagement. They surveyed 777 faculty (671 adjuncts, 107 full time). Using descriptive statistics only, their findings suggested that faculty (both adjunct and full time) who taught both face to face and online settings were more engaged than faculty who taught online only. Again, given the relative dearth of information on faculty engagement in higher education, this study does provide some useful information, However, this information is limited to the descriptive data only, and it would be interesting to determine with further analysis whether any significant differences exists between full time faculty and adjuncts based on instruction mode.

Summary of Antecedents of Engagement. In this section, two types of antecedents were examined: individual-focused, and organization focused antecedents. Each of the antecedents described help usher in higher levels of engagement in institutions of higher education when present. What is clear from the review of literature is that there is no one way of fostering higher levels of engagement. More specifically, getting or maintaining higher levels of engagement among academic employees may not be the sole responsibility of college administrators or managers. Given the trait vs state debate on engagement described earlier (cf. Blatny et al., 2010; Ramalu & Subramaniam, 2019; Shuck et al., 2017), we concluded that at best, engagement is a shared responsibility between the individual faculty and staff employee and university administrators. We are mindful of the fact higher education systems differ based on geographical location (see Dobbins, Knill, & Vogtle, 2011; Lepori, Barberio, Seeber, & Aguillo, 2013) and therefore institutional based antecedents may not be applicable across board. However, what is abundantly clear from these studies is that within higher education that there are conditions that have to be in place in order to establish high levels of engagement (c.f. Shuck & Wollard, 2010).

Outcomes of Engagement

In the preceding sections, we discussed the factors that need to be in place for engagement to occur within a higher educational intuitional setting. Now, we turn our attention to the outcomes or effects of engagement in higher education. Out of the final number of articles that were selected for this study, three discussed the effects of engagement. In other words, what happens in colleges and universities when high levels of engagement exist? Chen (2017) examined the relationship between engagement and intention to teach synchronous distance education courses. Chen explained that distance education courses are more commonplace in academia because it reduces operational costs. However, education literature suggests that the online classroom is limiting because it does not allow for the development of student-teacher relations that are as strong as in the face to face classroom (Song, Kim, & Luo, 2016). The increase of distance education courses, according to Chen, could impact the faculty engagement as it adds a new dimension to the work environment. Using Hierarchical linear modeling (n= 40), Chen found that higher levels of engagement led to an increase in the likelihood of faculty's intention to continue to teach distance education courses in spite of the challenges associated with developing strong student-teacher relationships. In another study conducted by Takawira, Coetzee, and Schreuder (2014), the effect of engagement on retention was examined. Using a sample of 153 faculty and staff in South Africa, the authors found that faculty and staff who exhibited higher levels of engagement were less likely to want to quit their jobs. In the final study, Field and Buitendach (2011) specifically focused on staff engagement. Using a sample of 123 participants, the authors found that the effect of higher levels of engagement among staff was higher organizational commitment. Findings from these three studies suggest that there are positive outcomes that can be obtained from having a more engaged workforce- a view that is widely shared in other professional contexts as well (Shuck et al., 2017).

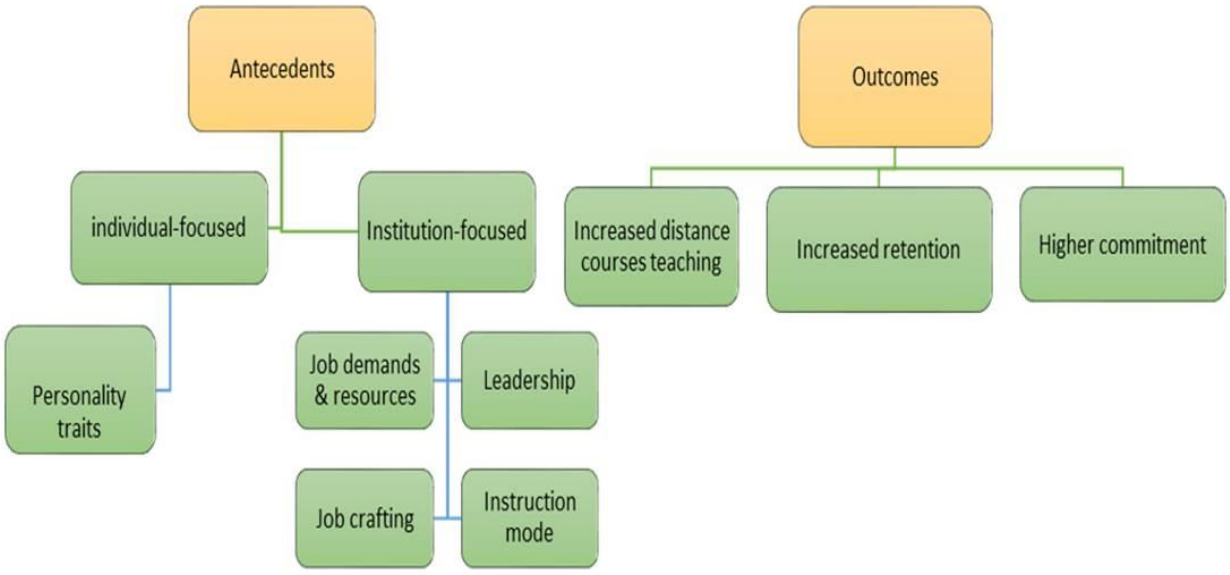

Figure 1. **Antecedents and outcomes of engagement in higher education settings**

Summary and Recommendations

Important issues from the articles we analyzed are summarized in this section. This includes methodological approaches to engagement study in higher education, ceiling effects, practical recommendations, and conceptualization and measurement. We start first with methodological approaches to engagement research in higher education.

Methodological Approaches

In our review of the literature, we came across 18 studies that were determined to be relevant to this study. However, all these studies were quantitative, leaving a noticeable absence regarding qualitative research on engagement in higher education. We believe that there is a need for qualitative research because the engagement construct is focused on how people experience and make meaning of the workplaces; lending itself nicely to qualitative research as it is a tool to gather in depth data beyond what quantitative data might usually provide (Lincoln, & Lynham, 2011). The narrative behind engagement research is that it is based on quantitative surveying which usually results in an elevated focus on the numbers generated from these surveys leaving out the stories behind these numbers (Osam & Shuck, 2020). By employing more qualitative research approaches to engagement, education researchers can expound inquiry on engagement beyond numerical data that captures the nuances of the characteristics and meaning of the human experience of engagement that may vary across demographics, in a way that counts and measure cannot. For example, future education research might consider probing around the areas of identity and its relation to engagement. Identity, as a qualitative research theme explores the idea that a person's experiences are determined by their collective identity e.g. their race, gender, age, marital status etc. (Sanchez-Hucles & Davis, 2010). Thus, in this instance, it might be possible that an employees' experience or definition of what it means to be engaged might be based on their identity- an angle to our collective understanding of engagement that quantitative research alone may not be able to provide. Ultimately, we anticipate that an increase in qualitative research on engagement will at the very least spark further conversation on what it means to be engaged for different employees in higher education.

Conceptualization and Measurement

Connected with the methodological concern noted above, is the lack of variance in quantitative measures used in engagement research within the context of higher education. Every study that was included in this review used Schaufeli et al. (2002) definition and subsequent measure of engagement, i.e. work engagement. We take no issue with research that defines and measures engagement as work engagement, however we would like to encourage future researchers (ourselves included) to consider utilizing other definitions and measures of engagement when studying higher education population. This is because there are several engagement typologies that exist (e.g. employee engagement, job engagement, intellectual social engagement) that have unique interpretations of what engagement is and different ways to measure engagement (Shuck, et al., 2017). It is possible that we can uncover more knowledge about engagement among higher education employees if different types of engagement are incorporated in future research. As engagement research in higher education begins to include other engagement typologies, we would like to reecho the call by Shuck et al. (2017) for researchers to use the operational definitions

and measures associated with each typology to avoid the adding to the confusion and conflation of the engagement construct.

Indirect Effects of Engagement

As we reviewed the selected studies, we noted with interest the level of statistical analyses associated with engagement studies is becoming more advanced. In many of the studies that we found, the findings that stemmed from statistical analyses were mostly inferential, limited to regressions, correlations, and descriptive statistics. However, we noted that some of the studies used more advanced statistical analyses such as mediation analyses, hierarchical linear modeling, and structural equation modeling (e.g. Ferrer & Morris, 2013; Nazir & Islam, 2017; Pujol-Cols & Lazzaro- Salazar, 2018). We believe that the increase in the complexity of analyses associated with the construct is evidence of the evolution of researchers' understanding of the engagement construct. In the past decade there has been an exponential amount of research conducted on engagement that has led to the development of several theoretical models (Shuck et al., 2017) and consequently the testing of the models using more complex statistical analyses further aids our understanding of engagement. Within higher education, we now know that through mediation engagement *causes* (see Hayes & Rockwood, 2017) to exist, the relationship between job characteristics and intention to quit, the relationship between psychological climate and psychological wellbeing (Osam et al., 2019), relationship between job demands and job resources and lecturers' intention to continue to teach synchronous distance education courses (Chen, 2017). These findings further highlight the importance of engagement, as a construct because it serves as a conduit through which latent variables of interest within higher education settings are connected.

Ceiling Effects

In nearly all of the studies that we reviewed, we found that mean engagement scores were more likely to be above average (see Appendix A). Our realization prompted some thoughts: if the mean scores on engagement are higher than average (for e.g. above 3 on a 5 point Likert scale), then is there truly an issue of low engagement in higher education that needs to be resolved? Or is there another issue at play (e.g. ceiling effects) that might be artificially inflating these scores? If the former is the case, then there may not need to be further research on engagement in higher education because on average, everyone appears to be engaged. On the other hand (and this is our position) it could speak to a limitation in the data collection approach-an issue that was addressed in the preceding paragraphs. Clearly, moving forward, we need to address the issue of measuring engagement to ensure that we are not losing valuable data because of a preference of one methodological approach over another. Ultimately, it is our hope that as more qualitative research is done on engagement there will be development of additional qualitative measures of engagement that can be used in tandem with existing quantitative measures to better capture the engagement construct.

Practical Recommendations

A final issue that we noted in our review was the lack of specificity in recommendations given regarding engagement measures in higher education. Many of studies that we reviewed failed to provide specific actionable measures that university and college administrators could implement.

What we noticed was that recommendations tended to be general in nature or vague such that a university or college administrator would not be able to identify what measures to implement even though these articles supposedly addressed this. An example of a general/vague recommendation would be “psychological capital should be cultivated among faculty members of universities” or “higher educational institutions should attend to the work of engagement”. These recommendations are not specific enough and provide little value to leaders in colleges and universities who are looking for solutions to improving employee engagement on their campuses. As education researchers, we must strive to connect the bridge between research and practice, and one way we can achieve this goal is by providing clear and specific recommendations that college and university administrators can easily identify and implement. We therefore call on all current and future researchers to be more intentional about crafting recommendations that can be adopted by leaders in higher education.

While it is important to highlight the lack of clarity on specific and focused recommendations, there are a number of practical implications that show promise in developing and sustaining employee engagement in the higher education context. Colleges and universities seeking improved campus climate for their employees should incorporate intentional language into university policy and practice that address work satisfaction, leadership, job crafting, and instructional mode. Specifically, university administrators should incorporate formal job supports such as; support from staff (Chen, 2017), organizational support (Rothman & Jordaan, 2006), collegial support (Altunel et al., 2015). We believe that such language in personnel, policy, and procedure documentation would establish governance, by which, departments could infuse sustainable cultural practices that would positively impact employee engagement. Furthermore, higher education administrators would facilitate greater engagement through clear and transparent advancement and opportunities for growth in both faculty and staff roles across the campus community (Rothman & Jordaan, 2006; van den Berg & Burger, 2008).

Limitations and Conclusions

As with any study, this study had certain limitations with respect to the methodological approach that needs to be mentioned. Because the purpose of this study was to review empirical studies on engagement in higher education, it precluded conceptual pieces on this area that could have enhanced the study. Additionally, while we took detailed steps to include empirical studies that are relevant to this study, it is possible that our procedure might have led to the omission of some relevant articles. In conclusion, the purpose of this literature review was to analyze empirical engagement research contextualized in higher education, identify important issues and synthesize this information to stimulate further conversation about engagement research using higher education employees. Throughout this process, we identified information about engagement, specifically that there are antecedents and outcomes of engagement. Further, we identified that antecedents of engagement can be broken down into two categories: person specific and organization specific antecedents. We also sought to present thematic issues that we noted in our review. These issues centered on the methodological approaches used, lack of specific and practical recommendations, and ceiling effects. We hope that this paper will serve as a point of reflection for the education research field as connections between psychological processes (such as engagement) and teaching and learning efficacy continue to emerge in general and special education research (Yin et al., 2019).

References

Adil, A., & Kamal, A. (2016). Impact of psychological capital and authentic leadership on work engagement and job related affective well-being. *Pakistan Journal of Psychological Research*, *31*(1). 1-21.

Altunel, M. C., Kocak, O. E., & Cankir, B. (2015). The effect of job resources on work engagement: A study on academicians in Turkey. *Educational Sciences: Theory and Practice, 15*(2), 409–417.

Ang, S., & Van Dyne, L. (2015). *Handbook of cultural intelligence: Theory, measurement, and applications*. Routledge.

Barkhuizen, N., Rothmann, S., & Van de Vijver, F. J. (2014). Burnout and work engagement of academics in higher education institutions: Effects of dispositional optimism. *Stress and Health*, *30*(4), 322-332.

Bezuidenhout, A., & Cilliers, F. V. (2010). Burnout, work engagement and sense of coherence in female academics in higher-education institutions in South Africa. *SA Journal of Industrial Psychology*, *36*(1), 1-10.

Blatný, M., Květon, P., Jelínek, M., Šolcová, I., Zábrodská, K., Mudrák, J., & Machovcová, K. (2018). The Influence of Personality Traits on Life Satisfaction Through Work Engagement and Job Satisfaction among Academic Faculty Members. *Studia Psychologica*, *60*(4), 274-286.

Carasco-Saul, M., Kim, W., & Kim, T. (2015). Leadership and employee engagement: Proposing research agendas through a review of literature. *Human Resource Development Review*, *14*(1), 38-63.

Chen, I. S. (2017). Work engagement and its antecedents and consequences: A case of lecturers teaching synchronous distance education courses. *Computers in Human Behavior*, *72*, 655-663.

Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, *95*(5), 834-848.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, *86*(3), 499-512.

Dillard, N., & Osam, K. (2021). Deconstructing the meaning of engagement: an intersectional qualitative study. *Human Resource Development International*, *24*(5), 511-532.

Fairlie, P. (2017). Work engagement and employee well-being. In B. Ronald & P. Kathleen (Eds.), *Research handbook on work and well-being* (pp. 292–313). Cheltenham, England: Edward Elgar.

Ferrer, J. L., & Morris, L. (2013). Engaging élitism: The mediating effect of work engagement on affective commitment and quit intentions in two Australian university groups. *Higher Education Quarterly*, *67*(4), 340-357.

Field, L. K., & Buitendach, J. H. (2011). Happiness, work engagement and organisational commitment of support staff at a tertiary education institution in South Africa. *SA Journal of Industrial Psychology*, *37*(1), 01-10.

García-Sierra, R., Fernández-Castro, J., & Martínez-Zaragoza, F. (2016). Work engagement in nursing: An integrative review of the literature. *Journal of Nursing Management, 24*(2), E101–E111.

Giroux, H. A. (2009). Democracy's nemesis: The rise of the corporate university. Cultural Studies? *Critical Methodologies, 9*(5), 669–695. https://doi.org/10.1177/1532708609341169

Halbesleben, J. R. (2010). *A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. Work engagement: A handbook of essential theory and research*. (Vol. 8, pp. 102–117). New York, NY: Psychology Press.

Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation and moderation analysis in clinical research: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, *98*, 39-57.

James, J. B., McKechnie, S., & Swanberg, J. (2011). Predicting employee engagement in an age-diverse retail workforce. *Journal of Organizational Behavior, 32*(2), 173–196.

Keyko, K., Cummings, G. G., Yonge, O., & Wong, C. A. (2016). Work engagement in professional nursing practice: A systematic review. *International Journal of Nursing Studies, 61*, 142–164

Kim, W., Kolb, J. A., & Kim, T. (2013). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review, 12*(3), 248–276.

Kinman, G. (2014). Doing more with less? Work and wellbeing in academics. *Somatechnics, 4*(2), 219–235. https://doi.org/ 10.3366/soma.2014.0129

Lincoln, Y. S., & Lynham, S. A. (2011). Criteria for assessing theory in human resource development from an interpretive perspective. *Human Resource Development International*, *14*(1), 3-22.

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and organizational Psychology*, *1*(1), 3-30.

Mandernach, B. J., Barclay, J., Huslig, S., & Jackson, C. (2015). Faculty engagement as a function of instructional mode and employment status. *Journal of Instructional Research*, *4*, 159-167.

Manias, D., Van den Berg, H., & Burger, S. (2008). The influence of job-related factors on work engagement of staff at the University of the Free State. *Acta Academica*, *40*(3), 85-114.

Maslach, C., & Leiter, M. P. (2006). Burnout. *Stress and Quality of Working Life: Current Perspectives in Occupational Health*, *37*, 42-49.

Nazir, O., & Islam, J. U. (2017). Enhancing organizational commitment and employee performance through employee engagement: An empirical check. *South Asian Journal of Business Studies, 6*(1), 98–114.

National Center for Educational Statistics (NCES) (n.d.) Trend Generator: How many people are employed by post-secondary institutions? Retrieved from https://nces.ed.gov/ipeds/TrendGenerator/app/answer/5/30

Ong, Y. S., & Yaqiong, J. (2018). The relationship between leadership behaviors of university middle-level managers and faculty engagement. *Journal of Management and Training for Industries*, *5*(2), 1-13.

Osam, E. K., Bergman, M., & Cumberland, D. M. (2017). An integrative literature review on the barriers impacting adult learners' return to college. *Adult Learning, 28*(2), 54–60. https://doi.org/10.1177/1045159516658013

Osam, E. K., Dillard, N., & Palmer, D. Engagement Under Pressure: The Impact of Identity on Engagement During Times of Crisis. *Online Journal for Workforce Education and Development*, *11*(1), 1.

Osam, K., Shuck, B., & Immekus, J. (2019). Happiness and healthiness: A replication study. *Human Resource Development Quarterly*, 1-15.

Parker, L. (2011). University corporatisation: Driving redefinition. *Critical Perspectives on Accounting, 22*(4), 434–450. https://doi.org/10.1016/j.cpa.2010.11.002

Pfaff, K., Baxter, P., Jack, S., & Ploeg, J. (2014). An integrative review of the factors influencing new graduate nurse engagement in interprofessional collaboration. *Journal of Advanced Nursing, 70*(1), 4–20.

Pujol-Cols, L., & Lazzaro-Salazar, M. (2018). Psychosocial risks and job satisfaction in Argentinian scholars: Exploring the moderating role of work engagement. *Revista de Psicología del Trabajo y de las Organizaciones*, *34*(3), 145-156.

Ramalu, S. S., & Subramaniam, C. (2019). Cultural intelligence and work engagement of expatriate academics: The role of psychological needs satisfaction. *International Journal of Cross Cultural Management*, *19*(1), 7-26.

Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*(3), 617–635.

Redelinghuys, K., Rothmann, S., & Botha, E. (2019). Flourishing-at-Work: The role of positive organizational practices. *Psychological Reports*, *122*(2), 609-631.

Rothmann, S., & Jordaan, G. M. E. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *SA Journal of Industrial Psychology*, *32*(4), 87-96.

Sanchez-Hucles, J. V., & Davis, D. D. (2010). Women and women of color in leadership: Complexity, identity, and intersectionality. *American Psychologist*, *65*(3), 171-181.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *25*(3), 293-315.

Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). New York, NY: Psychology Press.

Schaufeli, W., & Salanova, M. (2010). How to improve work engagement? In S. Albrecht (Ed.), *The handbook of employee engagement: Perspectives, issues, research and practice* (pp. 399–415). Northampton, MA: Edwin Elgar. https://doi.org/ 10.4337/9781849806374.00044

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71-92.

Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology, 57*, 173–203. https://doi.org/10.1111/j.1464-0597. 2007.00285.x

Shin, J. C., & Jung, J. (2014). Academics job satisfaction and job stress across countries in the changing academic environments. *Higher Education, 67*(5), 603–620.

Shuck, B., Adelson, J. L., & Reio, T. G., Jr. (2017). The Employee Engagement Scale: Initial evidence for construct validity and implications for theory and practice. *Human Resource Management, 56*(6), 953–977. https://doi.org/10.1002/hrm.21811

Shuck, B., Alagaraja, M., Rose, K., Owens, J., Osam, K., & Bergman, M. (2017). The health-related upside of employee engagement: *Exploratory evidence and implications for theory and practice. Performance Improvement Quarterly, 30*(3), 165–178. https://doi.org/10.1002/piq.21246

Shuck, B., Osam, K., Zigarmi, D., & Nimon, K. (2017). Definitional and conceptual muddling: Identifying the positionality of employee engagement and defining the construct. *Human Resource Development Review, 16*(3), 263–293.

Shuck, B., & Reio, T. G., Jr. (2014). Employee engagement and well-being: A moderation model and implications for practice. *Journal of Leadership & Organizational Studies, 21*(1), 43–58. https://doi.org/10.1177/1548051813494240

Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review, 9*(1), 89–110.
Silman, F. (2014). Work-related basic need satisfaction as a predictor of work engagement among academic staff in Turkey. *South African Journal of Education, 34*(3), 1–5.
Takawira, N., Coetzee, M., & Schreuder, D. (2014). Job embeddedness, work engagement and turnover intention of staff in a higher education institution: An exploratory study. *SA Journal of Human Resource Management*, *12*(1), 1-10.
Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, *4*(3), 356-367.
Van den Berg, B. A. M., Bakker, A. B., & Ten Cate, T. J. (2013). Key factors in work engagement and job motivation of teaching faculty at a university medical centre. *Perspectives on Medical Education, 2*(5–6), 264–275.
Watkins, J. M., & Stavros, J. M. (2010). Appreciative inquiry: OD in the post-modern age. In W. J. Rothwell, J. M. Stavros, R. L. Sullivan, & A. Sullivan (Eds.), *Practicing organization development: A guide for leading change* (3rd ed., pp. 158–181). San Francisco, CA: Pfeiffer.
Wollard, K. K., & Shuck, B. (2011). Antecedents to employee engagement: A structured review of the literature. *Advances in Developing Human Resources*, *13*(4), 429-446.
Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. Journal of Occupational and Organizational Psychology, 82, 183–200. https://doi.org/10.1348/096317908X285633
Zahoor, A. (2018). Teacher proactivity influencing student satisfaction and loyalty role of job crafting and work engagement. *Vikalpa*, *43*(3), 125-138.

Appendix

Study	Mean Engagement Score	Sample Significant Correlation estimates (r)
Blatny et al., (2018)	n/a	extraversion (.15), neuroticism (-.24), conscientiousness (.23), job satisfaction (.39)
Bezuidenhout & Cilliers (2010)	4.11 (7 point Likert Scale)	sense of coherence (.52)
Ramalu & Subramaniam (2019)	4.33 (7 point Likert Scale)	cultural intelligence (.85), psychological needs satisfaction (.67)
Barkhuizen, Rothmann, & van de Vijver (2014)	4.37 (7 point Likert Scale)	role clarity (.39) supervisor support (.35) task characteristics (.50) organizational commitment (.54)
Altunel, Kocak, Can cir (2015)	n/a	autonomy (.44) social support (.36) Coaching (.514) opportunities for personal development (.68) task significance (.68)

Manias, van den Berg, & Burger (2008)		Vigor and attitude towards organization (.53) dedication and attitude towards organization (.54) absorption and attitude towards organization (.37)
Chen (2017)	3.15 (5 point Likert Scale)	job demands (.49) job resources (.43)
Barkhuizen, Rothmann, & van de Vijver (2014)	4.37 (7 point Likert Scale)	Organizational committment (.54) psychological ill health (-.44)
Rothmann & Jordaan (2006)	n/a for summative scale	Vigor and growth opportunities (.74) Dedication and growth opportunities (.74)
Adil & Kamal (2016)	n/a	Psychological capital (.48) authentic leadership (.29)
Ong & Yaqiong (2018)	n/a	Vigor and performance (.50) dedication and performance (.46) absorption and performance (.49)
Zahoor (2018)	3.59 (5 point Likert Scale)	39) increasing social job resources (.33)
Mandernach et al. (2015)	5.1-5.72 (7 point Likert Scale)	n/a
Takawira et al., (2014)	4.37 (7 point Likert Scale)	Vigor and turnover intention (-.29) dedication and turnover intention(-.37) absorption and turnover intention (-.25)
Field & Buitendach (2011)	n/a for summative scale	wellbeing (.27) satisfaction with life (.22)
Ferrer & Morris (2013)	4.88 (7 point Likert Scale)	job characteristics (.45-.51) affective commitment (.37-.42) intention to quit (-.32 to -.25)
Nazir & Islam (2017)		
Pujol-Cols & Lazzaro-Salazar (2018)	5.48 (7 point Likert Scale)	job satisfaction (.76) job insecurity (-.20)

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The Great Disruption, Earn While You Learn and the Future of Higher Education

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Background

The skills the workforce needs to fulfill labor market demand are changing faster than traditional higher education structures (Wingard & Farrugia, 2021, La Prade, et. al., 2019). Shifts in labor market needs and demographic change are partly to blame, as are rapidly changing technological and market conditions (LaPrade et. al., 2019). Employers are stepping in to explore alternative pathways to equip workers. This so-called demand-side (or employer) workforce development approach shifts the burden and cost of training away from individuals to companies sometimes circumventing traditional higher education all together (Wingard & Farrugia, 2021). Instead of relying on higher education and workforce development systems to catch up, many large and influential companies, especially in the technology sector, are leveraging their technology expertise and taking the problem on themselves. The trend towards demand-side workforce development had gained momentum and accelerated with the disruptions of the Covid-19 pandemic. The demand side approaches move towards decoupling qualification for employment and traditional academic credentials. Many of the approaches are so called "earn as you learn" models that allow potential workers to start at a lower wage, gain skills and progress into higher paid and higher skilled roles.

The landscape of higher education is dramatically changing. The declines are partly demographic but also represent cultural and societal shifts accelerated during the pandemic. According to the National Student Clearing House [NSCH] (2022), enrollment in higher education has dropped by 1.3 million students since the Spring of 2020. A smaller percentage of high school graduates enrolled in college directly after high school in 2020 compared with 2010 (National Center for Educational Statistics [NCES], 2022). The declines reflect an "opting out" from many at the margins with black and brown students and students with lower socio-economic status opting out at higher rates. Parker (2019) found that 59% of those identifying as "republican or leaning republican" think the institutions of higher learning are negatively impacting the nation. Across the political spectrum, concerns about student debt and the value of higher education are hot topics. A Harvard Kennedy School (n.d.) found that 57% of millennials think that student debt for young people is a "major problem". Moreover, 70% of respondents said that financial circumstances played an important role in their decision to pursue a college education. 87% of students in two-year colleges said the same. In the 2022 Youth Poll, 85% of youth surveyed support some sort of action for student loan relief (Harvard Kennedy School, 2022).

Corporations such as Microsoft and Amazon have leaned into demand side training. According to the official company blog, in 2020, Microsoft launched an initiative to help 25 million people worldwide gain the digital and technology skills they need to be successful in the post Covid-19

economy with a unified network of training opportunities that would create a “truly inclusive recovery”. This strategy includes online training, skill gap assessment and the awarding of digital badges to demonstrate competence. According to their official blog, the rapidly growing Amazon Web Services launched a program in 2022, that includes a 12 week, paid, on the job training for technical roles within its data centers. Amazon is not requiring any prior work experience or education but prefers STEM or vocational course curriculum (Amazon Web Services [AWS], 2022).

The training spearheaded by large corporations is data driven, nimble and adaptive. It takes advantage of the sectors expertise in artificial intelligence to build smart, efficient, and adaptive training solutions (La Prade et al, 2019). The solutions leapfrog the innovations that have happened in higher education and have the financial backing to upend traditional structures.

Many “earn as you learn” approaches blend work-based instruction and formal training with community-based organizations, community or technical colleges and universities. “Earn as you learn models” are attractive in they have the potential to decrease debt load, increase equity and reduce the time to full employability (Elliott, et.al, 2022). Taylor-Smith et al. (2019) demonstrate the effectiveness of apprenticeships in equipping transitioning workers for career in information technology. The apprenticeships were effective in helping students develop both the hard and the soft skills they needed for success in employment. In addition, the researchers found apprenticeships helped address some of the racial, ethnic and gender representation by attracting a diverse group of participants. Between 2015 and 2021 registered apprenticeship in technology has grown eightfold and is still an underutilized tool (Elliott, et al, 2022).

Significant corporate, institutional, and governmental funds are accelerating the transition to alternative credentials and “earn as you learn” models. Alternative credentials can help fulfill the goals of creating more economic opportunity and social mobility for those that have been left out of the legacy system. One such example is the national policy advocacy organization Jobs for the Future [JFF]. JFF’s mission is to “drive transformation of the American workforce and education systems to achieve equitable economic advancement for all” (2022). According to their website, they have significant corporate support from big tech including Microsoft and Salesforce.com, foundation support from the Bill and Melinda Gates Foundation and grant support to initiate alternative credentialing programs, thirteen million dollars in funding to support building more equitable apprenticeship models from the Department of Labor in 2021.

Discussion

Undoubtedly, the bachelor’s degree and subsequent professional degree are and will likely continue to be, a very good investment for students. The Bureau of Labor Statistics (BLS) 2021 data set correlates degree attainment with weekly and lifetime earnings. Individuals with a bachelor’s degree make on average 28% more on than those with an associate degree and wages increase even further for those with a master’s or professional degree. In 2021, workers with only a high school diploma had an unemployment rate nearly twice as high as those with a bachelor’s degree.

Even so, to maintain relevance, higher education will need to embrace the disruptive innovations happening outside of academia. The innovations will be an attractive model for many students who are leery of taking out student loans and are concerned about their financial future. As

opportunities expand, the ability to earn a paycheck while growing in skill development an attractive path. As the paths increase, the opportunities for students to pursue work-based learning first prior to or in lieu of higher education will also increase.

Three potential strategies for mitigating loss and creating value in traditional higher education are: to create accelerated pathways to degree completion, partner with local companies and workforce development agencies, and lean into the power of the liberal arts to develop critical thinking and communication skills.

1. ***Develop a system for a radically accelerated bachelor's degree that integrates work-based learning.*** Credit for prior learning and block transfer of degrees or certificates into courses or groups of courses are two strategies for creating accelerate pathways. While credit for prior learning is nothing new, colleges and universities that adapt early, utilize technology, and develop systems will have an advantage. Simple, streamlined processes will be attractive to students. Institutions who have tackled mapping military transcripts to an efficient evaluation of student learning will be a step ahead as will institutions who have policies and procedures for "block transfer" of entire degrees.

2. ***Create robust and meaningful partnerships to help shape and inform work-based learning*.** In addition, institutions or higher education systems should find every way possible to be part of the conversation with company's as they develop their demand-based approaches. A few strategies are to become official education partners with the large technology companies that have such programs, to build robust advisory boards, partner with the regional Department of Labor apprenticeship partner in your region and have deep and meaningful conversations with the large companies in their region. Institutions can explore credit and non-credit avenues for delivering the didactic content for apprenticeships.

3. ***Lean into the strength of a liberal arts education*.** According to a 2019 American Association of College and University [AACU] Study, nearly half of employers said a traditional liberal arts education provided a good foundation for the development of the "soft" skills they need. One strategy for differentiation, would be to lean into the skills developed in a rigorous, liberal arts education: creativity, critical thinking, communication, open-mindedness, and meta-cognition. These "soft" skills will differentiate graduates and prepare students for leadership roles across sectors.

References

Amazon Web Services. (2022). *AWS work-based learning program 2022.* https://aws-wblp-2022copy.splashthat.com/

Bureau of Labor Statistics. (2021). *Earnings and Unemployment Rate by Educational Attainment.* https://www.bls.gov/emp/chart-unemployment-earnings-education.htm

Carey, K. L., & Stefaniak, J. E. (2018). *An exploration of the utility of digital badging in higher education settings*. Educational Technology Research and Development, 66(5), 1211-1229.
Craig, R. (2019) *America's skills gap: Why it's real, and why it matters*. Progressive Policy Institute.
Elliott, D., Marotta, J., Hernandez, F., & Rayfield, J. (2022). *What works in tech apprenticeship.*
Finley, A. (2021). *How college contributes to workforce success, Employer views on what matters most.* American association of colleges and universities. https://dgmg81phhvh63.cloudfront.net/content/userphotos/Research/PDFs/AACUEmployerReport2021.pdf
Harvard Kennedy School, Institute of Politics. (2022, Spring). *Harvard Youth Poll.* https://iop.harvard.edu/youth-poll/spring-2022-harvard-youth-poll
Harvard Kennedy School, Institute of Politics. (n.d.). *Student debt viewed as a major problem; financial considerations important factor for most millennials when considering whether to pursue college. https://iop.harvard.edu/student-debt-viewed-major-problem-financial-considerations-important-factor-most-millennials-when*
Hora, M. T. (2019). *Beyond the skills gap: Preparing college students for life and work*. Harvard Education Press.
Jobs for the Future. (2022). *What we do.* https://www.jff.org/what-we-do/impact-stories/center-for-apprenticeship-and-work-based-learning/
Klein-Collins, R., & Framularo, C. (2022). Attracting Adult Learners with Credit for Prior Learning. A CAEL/Strada Research Brief. Council for Adult and Experiential Learning.
LaPrade, A., Mertens, J., Moore, T., & Wright, A. (2019) *The enterprise guide to closing the skills gap: Strategies for building and maintaining a skilled workforce*. IBM Institute for Business Value.
McGreal, R., & Olcott, D. (2022). *A strategic reset: micro-credentials for higher education leaders.* Smart Learning Environments, 9(1), 1-23.
Microsoft. (2020, June 30) *Microsoft launches initiative to help 25 million people worldwide acquire the digital skills needed in a covid 19 economy.* https://blogs.microsoft.com/blog/2020/06/30/microsoft-launches-initiative-to-help-25-million-people-worldwide-acquire-the-digital-skills-needed-in-a-covid-19-economy/
National Center for Education Statistics. (2022, May). *Immediate College Enrollmen*t. https://nces.ed.gov/programs/coe/indicator/cpa/immediate-college-enrollment-rate
National Student Clearing House. (2022). Term Enrollment Estimates Spring 2022. https://nscresearchcenter.org/wp-content/uploads/CTEE_Report_Spring_2022.pdf
Parker, K. (2019, August, 19) *The growing partisan divide in views of higher education.* https://www.pewresearch.org/social-trends/2019/08/19/the-growing-partisan-divide-in-views-of-higher-education-2/
Parker, K. (2021, November 8) *What's behind the growing gap between men and women in college completion.* https://www.pewresearch.org/fact-tank/2021/11/08/whats-behind-the-growing-gap-between-men-and-women-in-college-completion/
Schaeffer, K. (2022, April 12*) 10 Facts about today's college graduates.* https://www.pewresearch.org/fact-tank/2022/04/12/10-facts-about-todays-college-graduates/
Shaw, S., Gordon, H. R., Xing, X., & Carroll, M. C. (2019). *Why apprenticeship programs matter to 21st century postsecondary education*. CTE Journal, 7(2), 1-10.
Tan, L. M., Laswad, F., & Chua, F. (2021). *Bridging the employability skills gap: going beyond classroom walls.* Pacific Accounting Review.

Taylor-Smith, E., Smith, S., Fabian, K., Berg, T., Meharg, D., & Varey, A. (2019, July). *Bridging the Digital Skills Gap: Are computing degree apprenticeships the answer?* In Proceedings of the 2019 ACM Conference on Innovation and Technology in Computer Science Education (pp. 126-132).

Wingard, J., & Farrugia, C. (Eds.). (2021). The Great Skills Gap: Optimizing Talent for the Future of Work. Stanford University Press.

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Marketing Higher Education Distance Learning Programs

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Prospective students use college websites to gather information to choose a degree and program (Kittle and Ciba, 1997). As prospective students interact with the college, they move through five relationship stages: basic, reactive, accountable, proactive, and partnership. At each stage, prospective students interact with the college on the website (requesting or completing applications, checking application status, reviewing faculty and course lists, etc.).

Stefko, Fedorko, & Bacik (2014) found that design of the website, clarity of information, information about courses of study, information about faculty, and social media components influences student perception of the institution's faculty. Also, approximately 75% of students felt that internet marketing tools are essential for a higher education institution to build a positive image. Content, navigation, usability, customization, download speed, and security are important components of college and university websites (Astani and Ethindi, 2008).

Kisiolek, Karyy, and Halkiv (2021) argued that higher education institutions use websites to promote an image, recruit students, increase the size of their audience, and provide calls to action (newsletter subscription, request more information, etc.). Many higher education institutions offer online degree programs. However, institutions also struggle to make prospective students aware of their programs and communicate the value of the institution and its programs.

Having the right keywords on college websites can make them rank higher on search engines, making the sites easier for prospective students to find (Shroeder, 2007). First, colleges should designate someone to develop the recruitment website. Second, this person should use current standards for content and website design. Third, this person should also communicate regularly with other people who manage websites for the institution of higher education. Fourth, this person should uphold college, departmental, and program standards in publishing or promoting the recruitment website.

Lorenzetti (2005) also recommended including information prospective students want to know on college recruitment websites. First, colleges should find out where their target audience spends time online. Second, colleges should update the design of their websites. Third, colleges should make sure their website is optimized for search engines used by their target audience. Fourth, colleges should list their online programs on various education portal websites. Finally, colleges should try other approaches advertising on relevant professional organization websites, using Google Ads, asking students what sites they visit online, clarify marketing goals, and use strategies that line up with their marketing goals.

Colleges can use recruitment websites to communicate brand values, showcase programs offered, and reach a target audience (van Rooij, 2010). Pharr (2019) recommended that higher education

institutions use a content marketing strategy that operates with clear success metrics, provides customer-oriented information, alternates between unbranded and branded content, and presents information visually to engage their audience.

Rashid and Raj (2006) presented a model of online relationship marketing for higher education institutions. The degree to which prospective and current students perceive the higher education institution as customer-oriented influences the perception of the quality of the service the institution provides. The perception of service quality influences the current or prospective student's level of satisfaction. Organizational communication, the student's satisfaction level, and perception of shared values between the person and institution influence the degree of trust the person places in the institution. The trust level of the current or prospective student influences the person's commitment to the institution. People who are committed to the organization will be more loyal to the institution and remain enrolled. This study sought to identify similarities and differences in terms of programs offered as well as keywords as strategies used to promote the institution and its online programs.

Perspective(s) or Theoretical Framework

This study relied on Lewin's (1947) Change Model as a theoretical framework. In this framework, unfreezing involves being motivated to change. Unfreezing is followed by changing. To institutionalize the change, changing is followed by refreezing. Higher education websites are generally frozen until institutions decide to make updates (changing). Once updates are made, the sites are published (refreezing). In order to create websites that motivate people to complete an inquiry form, apply, and enroll, higher education institutions need to be able to unfreeze, make website changes intended to get prospective students and applicants to take action, and then refreeze their sites.

Methods and Procedures

The sample includes colleges in the Western Athletic Conference (WAC) during the Fall 2021 semester. This group was chosen because it includes institutions of varying enrollments and nine states. Member institutions include Abilene Christian University, California Baptist University, California State - Bakersfield, Chicago State University, Dixie State University, Grand Canyon University, Lamar University, New Mexico State University, Sam Houston State University, Seattle University, Southern Utah University, Stephen F. Austin University, Tarleton State University, University of Missouri-Kansas City, the University of Texas Rio Grande Valley, and Utah Valley University. The method of analysis was content analysis of each institution's website for online programs. The following three research questions were posed:

RQ1: Do WAC colleges give their online programs a brand name?

RQ2: Do WAC colleges differ in programs offered online?

RQ3: Do WAC colleges differ in brand values communicated on their websites?

Results and Conclusions

RQ1: Do WAC colleges give their online programs a brand name? Eleven of the 16 WAC member colleges use a brand name for their online programs. Ten of the 11 use the institution's name or abbreviation followed by "Online," as shown in Table 1.

Table 1
Brand Names for Online Programs, By Institution

Institution	Brand Name
Abilene Christian University	none
California Baptist University	CBU Online
California State University, Bakersfield	CSU Fully Online
Chicago State University	None
Dixie State University	DSU Online
Grand Canyon University	None
Lamar University	LU Online
New Mexico State University	NMSU Online
Sam Houston State University	SHSU Online
Seattle University	none
Southern Utah University	SUU Online
Stephen F. Austin State University	SFA Online
Tarleton State University	Tarleton Online
University of Missouri-Kansas City	UMKC Online
University of Texas Rio Grande Valley	None
Utah Valley University	UVU Online
Brand Name = 11 (68.75%)	
No Brand Name = 5 (31.25%)	

RQ2: Do WAC colleges differ in programs offered online? Themes discovered by studying institution websites included hybrid programs, online certificates, online associate's degrees, online minors, fully online bachelor's degree programs, bachelor's degree completion programs, online graduate certificates, online master's degrees, and online doctoral degrees (Tables 2, 3, and 4). Five institutions mentioned online certificates. Four institutions mentioned online associate's degrees. Two institutions mentioned online minors. Twelve institutions mentioned fully online bachelor's degree programs. Six institutions mentioned online bachelor's degree completion programs. Seven institutions mentioned online graduate certificate programs. Fourteen institutions mentioned online master's degree programs. Six institutions mentioned online doctoral programs.

Table 2

Programs Offered - Hybrid Programs, Online Certificates, and Online Associate's Degrees

Institution	Hybrid Programs	Online Certificates	Online Associate's Degrees
Abilene Christian University	0	1	0
California Baptist University	0	0	0
California State University, Bakersfield	0	0	0
Chicago State University	0	0	0
Dixie State University	0	1	1
Grand Canyon University	0	0	0
Lamar University	0	0	0
New Mexico State University	1	1	1
Sam Houston State University	0	1	0
Seattle University	0	0	0
Southern Utah University	0	0	1
Stephen F. Austin State University	0	0	0
Tarleton State University	0	0	0
University of Missouri-Kansas City	0	0	0
University of Texas Rio Grande Valley	0	0	0
Utah Valley University	0	1	1
Number	1	5	4
Percent	6.25%	31.25%	25%

Table 3

Programs Offered – Online Minors, Online Bachelor's Degree Completion Programs, and Fully Online Bachelor's Degree Programs

Institution	Online Minors	Fully Online Bachelor's Degree Completion	Online Bachelor's Degrees
Abilene Christian University	0	1	1
California Baptist University	0	1	0
California State University, Bakersfield	0	0	0
Chicago State University	0	0	0
Dixie State University	0	1	1
Grand Canyon University	0	1	0
Lamar University	0	1	0
New Mexico State University	0	1	1
Sam Houston State University	1	1	0
Seattle University	0	0	0
Southern Utah University	0	1	0
Stephen F. Austin State University	1	1	0
Tarleton State University	0	0	1
University of Missouri-Kansas City	0	1	1
University of Texas Rio Grande Valley	0	1	1
Utah Valley University	0	1	0
Number	2	12	6
Percent	12.5%	75%	37.5%

Table 4

Programs Offered – Online Graduate Certificate Programs, Online Master's Degree Programs, and Online Doctoral Degree Programs

Institution	Online Graduate Certificates	Online Master's Degrees	Online Doctoral Degrees
Abilene Christian University	0	1	1
California Baptist University	0	1	1
California State University, Bakersfield	0	0	0
Chicago State University	0	1	0
Dixie State University	0	0	0
Grand Canyon University	1	1	1
Lamar University	1	1	0
New Mexico State University	1	1	0
Sam Houston State University	1	1	1
Seattle University	1	1	0
Southern Utah University	0	1	0
Stephen F. Austin State University	0	1	1
Tarleton State University	0	1	0
University of Missouri-Kansas City	1	1	1
University of Texas Rio Grande Valley	1	1	0
Utah Valley University	0	1	0
Number	7	14	6
Percent	43.75%	87.5%	37.5%

RQ3: Do WAC Colleges differ in brand values communicated on their website? Themes discovered by studying institution websites included flexibility of online classes, online program rankings, affordability of tuition and fees, financial aid & scholarships, student services for online students, accreditation, student testimonials, and faculty profiles or faculty professional development in online teaching (Tables 5, 6, and 7). Four out of 16 institutions mentioned flexibility on their website. Two institutions mentioned online program rankings, Two institutions mentioned affordability. Four institutions mentioned financial aid and scholarships. Four institutions mentioned student services. Six institutions mentioned accreditation. Four institutions included student testimonials. Five institutions mentioned faculty profiles or faculty professional development in online teaching.

Table 5

Brand Values – Flexibility, Online Program Rankings, and Affordability

Institution	Flexibility	Online Program Rankings	Affordability
Abilene Christian University	0	0	0
California Baptist University	1	1	1
California State University, Bakersfield	0	0	0
Chicago State University	0	0	0
Dixie State University	0	0	0
Grand Canyon University	1	0	1
Lamar University	0	0	0
New Mexico State University	1	0	0
Sam Houston State University	1	1	0
Seattle University	0	0	0
Southern Utah University	1	1	1
Stephen F. Austin State University	0	0	0
Tarleton State University	0	0	0
University of Missouri-Kansas City	0	0	0
University of Texas Rio Grande Valley	0	0	0
Utah Valley University	0	0	0
Number	4	2	2
Percent	25%	12.5%	12.5%

Table 6

Brand Values – Financial Aid & Scholarships, Student Services, and Accreditation

Institution	Financial Aid and Scholarships	Student Services	Accreditation
Abilene Christian University	1	0	0
California Baptist University	0	1	1
California State University, Bakersfield	0	0	0
Chicago State University	1	0	1
Dixie State University	0	0	0
Grand Canyon University	0	0	0
Lamar University	0	0	0
New Mexico State University	0	1	1
Sam Houston State University	1	0	1
Seattle University	0	0	0
Southern Utah University	0	0	0
Stephen F. Austin State University	0	0	1
Tarleton State University	1	1	0
University of Missouri-Kansas City	0	0	1
University of Texas Rio Grande Valley	0	1	0
Utah Valley University	1	0	1
Number	4	4	6
Percent	25%	25%	37.5%

Table 7

Brand Values – Student Testimonials and Faculty

Institution	Student Testimonials	Faculty
Abilene Christian University	0	1
California Baptist University	0	1
California State University, Bakersfield	0	0
Chicago State University	1	0
Dixie State University	0	0
Grand Canyon University	1	0
Lamar University	0	0
New Mexico State University	0	0
Sam Houston State University	1	1
Seattle University	0	0
Southern Utah University	0	1
Stephen F. Austin State University	0	1
Tarleton State University	1	0
University of Missouri-Kansas City	0	1
University of Texas Rio Grande Valley	0	0
Utah Valley University	0	1
Number	4	7
Percent	25%	43.75%

Surprisingly, some expected themes were not commonly mentioned on online program websites. One institution included hybrid programs on their website (Table 8). One institution mentioned accelerated classes or programs. One institution mentioned military or veteran friendliness. These are themes that might improve an institution's effectiveness in recruiting prospective online students.

Table 8

Brand Values – Accelerated Courses or Programs and Military Friendliness

Institution	Accelerated	Military
Abilene Christian University	0	0
California Baptist University	0	0
California State University, Bakersfield	0	0
Chicago State University	0	0
Dixie State University	0	0
Grand Canyon University	0	0
Lamar University	0	0
New Mexico State University	0	0
Sam Houston State University	0	0
Seattle University	0	0
Southern Utah University	0	0
Stephen F. Austin State University	0	0
Tarleton State University	0	0
University of Missouri-Kansas City	0	0
University of Texas Rio Grande Valley	1	0
Utah Valley University	0	1
Number	1	1
Percent	6.25%	6.25%

Conclusion

This study addressed a gap in the literature regarding digital communication in higher education marketing. Most of the WAC member colleges use a brand name for their online programs. Almost all institutions use the institution's name or abbreviation followed by "Online." WAC member colleges mention the following degree programs on their websites: hybrid programs, online certificates, online associate's degrees, online minors, fully online bachelor's degree programs, bachelor's degree completion programs, online graduate certificates, online master's degrees, and online doctoral degrees. WAC member colleges mention the following brand values on their websites: flexibility of online classes, online program rankings, affordability of tuition and fees, financial aid & scholarships, student services for online students, accreditation, student testimonials, and faculty profiles or faculty professional development in online teaching.

Understanding how colleges promote online programs increases knowledge of higher education marketing and enrollment management practice. The strategies mentioned above can help colleges increase enrollment through more effective higher education marketing. While colleges certainly have internal review processes for academic programs, understanding how peer institutions deliver and market online programs may help academic departments in proposing changes. Since many of the member colleges are in different states, institutions may be willing to share best practices without fear of losing their competitive advantage.

References

Astani, M., & Elhindi, M. (2008). An empirical study of university websites. *Issues in Information Systems, 9*(2), 460-465.

Kisiołek, A., Karyy, O. and Halkiv, L. (2021), "The utilization of Internet marketing communication tools by higher education institutions (on the example of Poland and Ukraine)", International Journal of Educational Management, Vol. 35 No. 4, pp. 754-767. https://doi-org.zeus.tarleton.edu/10.1108/IJEM-07-2020-0345

Kittle, B., & Ciba, D (1997), "Relationship Marketing in Higher Education via the World Wide: An Analysis of Home Pages Examining Student Recruitment Strategies," 1997 Symposium for the Marketing of Higher Education Proceedings, Chicago: American Marketing Association, 166-75.

Lewin, K. (1947). Frontiers in group dynamics. Human Relations, 1, 5-41.

Lorenzetti, J. P. (2005). A New Approach to Marketing Strategies for Distance Education. *Distance Education Report, 9*(8), 1–5.

Pharr, Julie M., "Best Practices in Digital Content Marketing for Building University Brands" (2019). *Association of Marketing Theory and Practice Proceedings 2019. 8.* https://digitalcommons.georgiasouthern.edu/amtp-proceedings_2019/8

Rashid, T., & Raj, R. (2006). Customer satisfaction: Relationship marketing in higher education E-learning. *Innovative Marketing, 2*(3), 24-34.

Schroeder, B. A. (2007). Publicizing Your Program: Website Evaluation, Design, and Marketing Strategies. *AACE Journal, 15(*4), 437–471.

Stefko, R., Fedorko, R., and Bacik, R. (2015). The Role of E-marketing Tools in Constructing the Image of a Higher Education Institution. *Procedia - Social and Behavioral Sciences, 175*, 431-438.

van Rooij, S., & Lemp, L. (2010). Positioning e-Learning Graduate Certificate Programs: Niche Marketing in Higher Education. *Services Marketing Quarterly, 31*(3), 296–319. https://doi-org.zeus.tarleton.edu/10.1080/15332969.2010.486691

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A Systems Approach to Personnel Allocation Modeling in Higher Education

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Faculty and administrators appear to lack public access to data-informed, system-level tools for facilitating coherent, substantive discussions around resource distribution for personnel allocations—all while understanding some of the more important interconnections among multiple units. The absence of such tools encumbers leadership's ability to advance a culture of equity, transparency, trust, and stability among stakeholders as they engage the shared governance process around resources for personnel allocations; this is a problem. The purpose of this article is to introduce a solution to this problem in the forms of both a general-purpose and specific-purpose mathematical model. Although the scope of this work may, in principle, extend to analysis for staff, it is restricted to that for faculty in this article. The name of the model is Personnel Allocation Model - Contribution Margin Assessment Model (PAM-CAM).

Service Units

For this investigation, a service unit (hereafter referred to as "unit") may be defined as an organization of people serving under a common set of guidelines. For higher education, the service units associated with the Division of Academic Affairs may be listed as follows ("School" may be exchanged for "Dept", and "Section" may be exchanged for "Instructor"):

System → University → Division → College → Dept. → Program →
Degree → Major → Course → Instructor → Student

The investigators are interested in understanding more fully the efficacy of focusing the general-purpose model on any given unit level. On one hand, this would enable one to center their personnel allocation analysis around, for example, a smaller academic major. On the other hand, one would be enabled to do the same at a larger unit level such as a college.

Literature Review

Hopkins (2019) introduced a useful approach for graphically assessing academic program performance which includes references to relative profit margins and proportion of total institutional investment. (Hopkins' reference to "program" is interpreted as "major".) Through the use of Hopkin's graphical presentations, it is argued that tolerance of low profit margin majors is

often appropriate, especially if its proportion of institutional investment is relatively low. Hopkin's model appears to lack features that give faculty and administrators the ability to determine efficiently the needed changes in faculty personnel to effectively respond to changes in enrollment. Moreover, it does not seem to lend itself well to the context in which most academic unit leads make decisions. For example, its lack of explicit reference to permissible student-to-faculty ratios and minimum number of fulltime equivalent faculty may possibly make it less accessible to most administrators and faculty. Lastly, it lacked features explicitly connecting changes in one unit to changes to peer units. That is to say, it lacked system-level, analysis features.

Various commercially available software packages such as Academic Performance Solutions (2022) are widely used throughout academia for the purpose of informing decision-making in the areas of hiring, as they relate to academic departments and colleges. At least to date, APS does not feature efficient, comprehensive analysis tools for informing decision-making for various unit levels. It too lacks system-level interconnectivity as well as a provision for connecting enrollment changes to needed changes in faculty personnel.

Dillon (2000), through the use of a systems approach, explores the connectivity between the student and the educational system. Dillon's approach seems to hold promise not only for documenting key outcomes, but also for providing guidance for concrete steps to improve the educational system as well. The scope of Dillon's approach does not, however, encompass financial considerations which may be useful for guiding resource allocation decisions.

Various professional development opportunities continue to be offered to college administrators to help them understand the basics of how to analyze the cost of academic programs (interpreted as a major). Academic Impressions (2017) offered a nicely organized multi-day workshop that helped participants understand how better to calculate, for example, contribution margins connected to majors. Although useful in many ways, Academic Impression's workshops did not present a sufficiently comprehensive framework that explicitly captures academic considerations such as student-to-faculty ratio. In general, while publicly accessible literature does provide models for assessing the financial health of various units, it does not appear to provide more strategic and surgical guidance for assessing financial performance of those units within the context of commonly understood academic considerations made by faculty and administrators in higher education. As is the case for the other analyses mentioned, Academic Impressions workshops do not appear to feature a thorough treatment of a quantitative framework for modeling needed changes to personnel within the context of a system-level analysis.

Methodology and Research Approach

The investigators inquire into the efficacy of treating the infrastructure most closely connected to a unit (ie. course, major, department, college, etc) as if it were one of many independent profit centers within a larger non-profit enterprise. To this end, four considerations are introduced. The first is based upon the contribution margin of a unit, with the understanding that each unit should, at least, break even financially; some exceptions, of course, may prevail. This first consideration is connected to the financial aspect of a unit. The second is based upon the student-to-faculty ratio (SFR), with the understanding that each unit's SFR should remain low enough to maintain an acceptable quality of education for its students. This second consideration is connected to the

quality aspect of a unit's product or service. The third is based upon functional limitations for a unit, with the understanding that there exists a minimum level of faculty support below which the unit cannot be sustained. Finally, the fourth is based upon a target number of faculty serving students in a unit. The third and fourth considerations are connected to logistical and aspirational aspects, respectively, of a given unit.

Boyer (1990) in his seminal article, *Scholarship Reconsidered: Priorities of the Professoriate*, presents four scholarship categories: Discovering Knowledge, Integrating Knowledge, Applying Knowledge, and Scholarship of Teaching. Rather than that of discovery, the novelty of the work presented herein leans toward both integration and application. PAM-CAM lends itself well to 1) scalability across multiple unit levels, 2) transferability to staff and other personnel categories, and 3) connectability to a network of universities for the development of a broad platform by which scholarly collaborations may take place using commonly understood terms.

Definitions and Notation

The following list provides definitions for the variables included in the proposed model. For a summary of these terms as well as a re-statement of key equations, see Appendix A.

n	An annualized measure of a number of students enrolled in a unit. Later in this article, *n* is defined as the number of "Fulltime Student Equivalents". For baccalaureate students, 15 SCH corresponds to 1 FTSE. For master's students, 12 SCH corresponds to 1 FTSE. For doctorate students, 9 SCH corresponds to 1 FTSE.
p	An annualized measure of a number of faculty assigned to a given unit. Later in this article, *p* is defined as the number of "Fulltime Faculty Equivalents". Usually 24 and 30 annual teaching units correspond to one FTFE for tenure-track faculty and lecturers/adjunct faculty, respectively.
R	The student-to-faculty ratio (SFR) expressed as $R = \frac{n}{p}$.
a	The number of annual SCH. It is 30, 24, or 18 for baccalaureate, masters, or doctorate level, respectively. (SCH: Semester Credit Hours.)
r	The dollar value for the annual revenue contribution for a unit.
e	The dollar value for the annual expense contribution for a unit.
t	The dollar value for the annual tuition per student after accounting for scholarships and discounts.
f	The dollar value for the base state (formula) funding revenue per SCH per FTSE, accounting for degree level only. (This may be ignored for private institutions.)
f_r	The dollar value for additional state (formula) funding revenue per SCH per FTSE accounting for all unique aspects of an academic discipline.
f_e	The dollar value for additional expenses per SCH per FTSE accounting for all unique aspects of an academic discipline.
∑	The dollar value of the sum of annual salaries attributed to a given unit.
s	The average annual instructor salary for a given unit.

Flexibility on How Terms May be Interpreted

Presented in Figure 1 is a design space defined in terms of students and faculty. The general-purpose framework of the proposed model allows for customizable prescriptions of the terms associated with the axes. The variables, *n* and *p*, are defined in terms of FTSE and FTFE, respectively, for the example results provided in this article; *it is not necessary, however, to do so,* as long as terms in the model are defined consistently. For example, the axes may correspond to 1) Faculty Headcount and Student Headcount, 2) Assistant Professor Headcount and Graduate Student Headcount, 3) *FTFE* for Adjunct Faculty and *FTSE* for First-Year Students, or 4) Tenured Faculty in a college and Upper Division Undergraduate students in the same college.

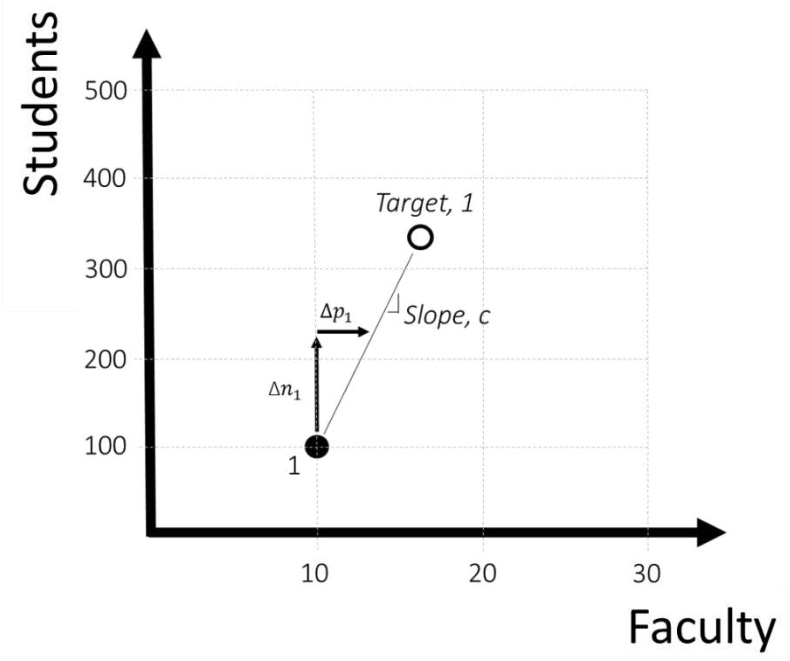

Figure 1. Location of Unit 1 and its trajectory toward its target.

It should be pointed out that the student-to-faculty ratio, as defined as the ratio of FTSE to FTFE, is not necessarily viewed as the best parameter to include in one's analysis. As Borden (2011) asserts, other alternative approaches may be better. Again, the general-purpose model allows for the user to prescribe their own meaning to *n* and *p* (and, therefore, *R*), based upon their desired way of studying the data. In the Results and Discussion section, *n* and *p* correspond to *FTSE* and *FTFE* respectively*,* in connection to a unit. Therefore, the upper and lower boundaries of the design envelope shown in Figure 2 correspond to a student-to-faculty ratio, *R*, as defined in the previous *Definitions and Notation* section.

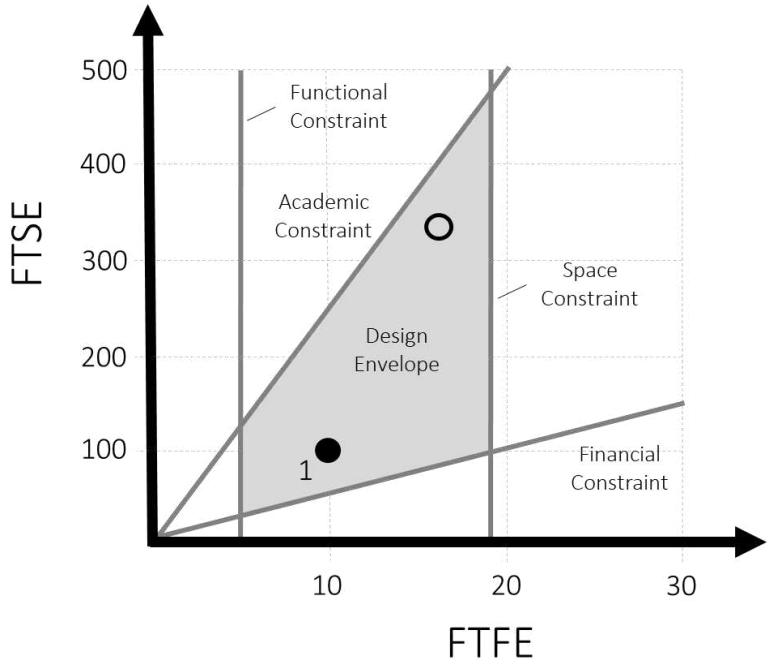

Figure 2. Location of Unit 1 within a design envelope in FTFE-FTSE space.

PAM-CAM: General-Purpose Model

Single-Unit Analysis

PAM-CAM is introduced gradually, beginning with the simplest framework and ending with the most general. Figure 1 depicts the state of Unit 1 in space for which the horizontal axis corresponds to the number of faculty assigned to Unit 1, and the vertical axis corresponds to the number of students enrolled in Unit 1. The solid black point represents the current state of Unit 1, and the clear point represents the target state for Unit 1. In a later section of this article, justification for the location of the target is provided. Several key assumptions are made for this analysis; they are:

1. All professors devote 100% of their teaching effort toward Unit 1.
2. All students are affiliated with the Unit 1.
3. All students' courses are affiliated with Unit 1.
4. All students are carrying a full course load.

The coordinates for both the current unit and target unit are:
Current: n_c = 100, and p_c = 10 Target: n_t = 340, and p_t = 16
The most direct trajectory toward the target would follow the line having a slope of 40, as calculated below.

$$c = \frac{340-100}{16-10} = 40 \quad (1)$$

The corresponding equation shown below would then represent a single-unit model for determining the number of additional faculty needed, Δp, based upon the number of additional students projected, Δn.

$\Delta p = c \cdot \Delta n$, where c is a constant coefficient (2)

or, for the illustrative example given,

$$\Delta p = \left(\frac{1}{40}\right)\Delta n \quad (3)$$

A first step toward the target may be established by considering the projected enrollment growth, which is most often available from the campus office of institutional research. For the purpose of illustration, a 10% enrollment growth in Unit 1 is assumed for the upcoming year; this translates to an additional 10 students (10% of 100) for the next year. From (3), the number of needed additional professors for the next year is 0.25, as shown below.

$$\Delta p = \left(\frac{1}{40}\right)10 = 0.25 \quad (4)$$

The foregoing analysis is for one year into the future. It is often more practical to consider analysis based upon, say, three years into the future. For a three-year analysis, the enrollment growth over a three-year period would be about 30%, depending upon how it is calculated. This translates to thirty additional students over the next three years. To prepare for this increase, it may be appropriate to initiate processes to hire one additional faculty, as calculated below:

$$\Delta p = \left(\frac{1}{40}\right)30 = 0.75 \approx 1 \quad (5)$$

Three-Unit Analysis

As is probably obvious to the reader, the single unit model is entirely inadequate for many reasons. For example:

1. Not all Unit 1 students will necessarily take Unit 1 courses.
2. Students taking courses affiliated with Unit 1 may include students from several different units; this is especially the case for so-called service-heavy courses like Algebra, English Composition, Spanish, and American History.
3. Part of the course load for students associated with Unit 1 may include courses associated with other units.
4. Not all students are fulltime students.
5. Professors do not necessarily restrict all of their teaching effort to courses affiliated with any given unit.
6. Professors have course reductions due to course buy-outs or service duties.
7. Course enrollment is typically a mix of various students from different units.
8. Some professors teach overload courses.
9. In general, courses are taught by tenure-track faculty, adjunct faculty, instructors, visiting professors, and graduate students – each possibly having a distinct definition of “fulltime”.
10. Student enrollment includes those at the baccalaureate, masters, and doctoral level – each possibly having a distinct definition of “fulltime”.

It quickly gets complicated when accounting for these effects. To help capture these effects, additional units should be integrated into the analysis.

Returning back to a discussion centered around the unit term, as an additional step toward a more general model, three units are now considered: Unit 1, Unit 2, and Unit 3. The equation shown in (2) is expanded to account for effects on Unit 1 due to changes in Unit 2 and Unit 3.

$$\Delta p_1 = c_{11} \cdot \Delta n_1 + c_{12} \cdot \Delta n_2 + c_{13} \cdot \Delta n_3 \quad (6)$$

where "11" refers to the effect of Δn_1 on Δp_1,"12" refers to the effect of Δn_2 on Δp_1, and "13" refers to the effect of Δn_3 on Δp_1

A description for how to specify the appropriate values for the service coefficients is postponed for a subsequent section. For the analysis in this section, the following values for the service coefficients are introduced without justification for all three units:

$$\Delta p_1 = 0.02500 \cdot \Delta n_1 + 0.00500 \cdot \Delta n_2 + 0.00125 \cdot \Delta n_3 \quad (7a)$$

$$\Delta p_2 = 0.00500 \cdot \Delta n_1 + 0.05000 \cdot \Delta n_2 + 0.00050 \cdot \Delta n_3 \quad (7b)$$

$$\Delta p_3 = 0.00320 \cdot \Delta n_1 + 0.02000 \cdot \Delta n_2 + 0.08000 \cdot \Delta n_3 \quad (7c)$$

Equations (7a) – (7c) may be used to determine the needed additional number of faculty for each unit, if the projected number of additional students for each unit is known. For illustrative purposes, the following values are assumed for the projected number of additional students for the following year:

$$\Delta n_1 = 10\,, \quad \Delta n_2 = 35, \quad \Delta n_3 = -12 \quad (8)$$

Application of (8) to (7a) – (7c) leads to the following result.

$$\Delta p_1 = 0.02500 \cdot 10 + 0.00500 \cdot 35 + 0.00125 \cdot (-12) = 0.41 \quad (9a)$$

$$\Delta p_2 = 0.00500 \cdot 10 + 0.05000 \cdot 35 + 0.00050 \cdot (-12) = 1.79 \quad (9b)$$

$$\Delta p_3 = 0.00320 \cdot 10 + 0.02000 \cdot 35 + 0.08000 \cdot (-12) = -0.23 \quad (9c)$$

Returning to (6) and expanding it to accommodate all three service units, leads to

$$\Delta p_1 = c_{11} \cdot \Delta n_1 + c_{12} \cdot \Delta n_2 + c_{13} \cdot \Delta n_3 \quad (10a)$$

$$\Delta p_2 = c_{21} \cdot \Delta n_1 + c_{22} \cdot \Delta n_2 + c_{23} \cdot \Delta n_3 \quad (10b)$$

$$\Delta p_3 = c_{31} \cdot \Delta n_1 + c_{32} \cdot \Delta n_2 + c_{33} \cdot \Delta n_3 \quad (10c)$$

Equations (10a) – (10c) may be expressed in matrix format, as

$$\begin{bmatrix} \Delta p_1 \\ \Delta p_2 \\ \Delta p_3 \end{bmatrix} = \begin{bmatrix} c_{11} & c_{12} & c_{13} \\ c_{21} & c_{22} & c_{23} \\ c_{31} & c_{32} & c_{33} \end{bmatrix} \begin{bmatrix} \Delta n_1 \\ \Delta n_2 \\ \Delta n_3 \end{bmatrix} \quad (11)$$

Multi-Unit Analysis

With its conceptual framework introduced in the previous sections, the most general framework is now introduced. For an arbitrary number of *k* units, the relationship between the required change in number of faculty and the projected change in number of students is expressed as

$$\begin{bmatrix} \Delta p_1 \\ \vdots \\ \Delta p_k \end{bmatrix} = \begin{bmatrix} c_{11} & \cdots & c_{1k} \\ \vdots & \ddots & \vdots \\ c_{k1} & \cdots & c_{kk} \end{bmatrix} \begin{bmatrix} \Delta n_1 \\ \vdots \\ \Delta n_k \end{bmatrix} \quad (12a)$$

or, in its most compact form, the i[th] unit's Δp is connected to the j[th] unit's Δn as

$$\Delta p_i = C_{ij} \cdot \Delta n_j \quad \text{where both i and j span from 1 to k} \quad 12b)$$

PAM-CAM: Specific-Purpose Model

Interpretation of the C_{ij} Coefficients

As discussed in the previous *Three Unit Analysis* section, the extent to which a unit serves other units should be captured in the analysis. Lower-level English composition courses and mathematics courses are examples of service-heavy courses. The department housing the faculty who teach these courses serve, not only their home students with instruction and general support, but many others as well. A unit will feature a combination of an outflux of a portion of their students to be served by other units as well as an influx of other students to be served by their unit. There exists a myriad of ways to capture these service dynamics; an entire separate article could be written on this topic alone. For this article, less attention is given to details for how best to prescribe C_{ij}. Rather, for this article, a blunt constant, α, is introduced to capture the service effect, as described in the next section.

A More Accessible Model

The formulation provided in (12), as it is written, requires knowledge of potentially dozens of terms in C_{ij}. Because efficient access to all of the information needed to prescribe values in C_{ij} may not be available to faculty and administrators, there exists a potential gap between the theoretical model for Δp and its useful solutions. To bridge this gap, a variation of the formulation shown in (12) is offered as an alternative model as shown below for Unit X and Units A, where "X" denotes the unit being evaluated, and "A" denotes all other peer (similar) units, collectively.

$$\Delta p_x = \left(\frac{1}{C_X}\right)(\Delta n_x + \alpha \cdot \Delta n_A) + \Delta p_o \quad (13)$$

where:

Δn_x denotes the projected change in Unit X Students
Δn_A denotes the projected change in Unit A Students
Δp_o denotes an administrator's adjustment to the faculty, independent of Δn_x and/or Δn_A
α denotes the percent of Unit A students served by Unit X.

In the *Results and Discussion* section, analysis will be carried out for both university and department levels, illustrating the breadth of applicability of the proposed model.

Design Space

Lower Boundary of the Design Envelope

As stated in the previous section, the state of the unit is the location (set of coordinates) in FTSE-FTFE space as illustrated in Figure 2. Unit 1 shown in Figure 2 has coordinates of (10, 100), where *p* = 10, and *n* = 100. A design envelope is the space within which the unit is deemed to be in an acceptable state. In this section, the mathematics behind the construction of the lower boundary of the design envelope is presented.

At its most simplistic level, the income for a unit, in nearly all cases, should be equal to or greater than its expenses; this is the foundational principle for the lower boundary. The annual revenue

contribution for an individual unit, r, and the annual expense contribution for an individual unit, e, are defined in (14) and (15). Refer to *Definitions and Notation* for interpretation of symbols.

$$r \triangleq t \cdot n + \ a \cdot f \cdot n + \ a \cdot f_r \cdot n \quad (14)$$

$$e \triangleq \frac{s \cdot n}{R} \ + \ a \cdot f_e \cdot n \quad (15)$$

The unit contribution margin, m, is expressed as

$$m = r - e \quad (16)$$

Application of (14) and (15) to (16), leads to

$$m = t \cdot n + \ a \cdot f \cdot n \ + a \cdot f_r \cdot n \ - \frac{s}{R} \cdot n - \ a \cdot f_e \cdot n \quad (17)$$

It should be noted that the terms, f_r and f_e, are introduced only for the purpose of documenting the fact that they have not been overlooked. The reason for such treatment of these two terms is because of the difficulty in reliably estimating the values for unit-specific expenses such as those related to custodial support, parking, copy machine usage, consumable materials, police security, HVAC, IT support, marketing, and insurance – all of which factor into the estimation of f_e. For the analysis carried out herein, not only is f_r assumed to be equal to f_e, but both are assumed to be zero. Therefore, the contribution margin for a becomes

$$m = \ \left(t + a \cdot f - \frac{s}{R}\right) \cdot n \quad (18)$$

Parenthetically, it may be of interest to the reader to note that, whereas the term, ROI (return-on-investment) is used in financial analysis, the term ROS (return-on-student) may be used within the context of this work. ROS is simply *m/n*. Ideally, the unit contribution margin should be equal to or greater than zero. It follows, therefore, that, from (18), the following must hold for all units:

$$R \geq \frac{s}{t + a \cdot f} \quad (19)$$

Solving for $(t + \ a \cdot f)$ in (14), assuming $f_r = 0$, then applying it to (19), leads to the following financial constraint.

$$R \geq \ \frac{s \cdot n}{r} \quad (20a)$$

Alternatively, this constraint may be expressed as follows by recalling the definitions for R and ∑, then rearranging terms.

$$r \ \geq \ \sum \quad (20b)$$

The form shown in (20b) indicates, perhaps more clearly than (20a) does, that the annual revenue contribution from a unit should exceed the sum of its salaries. This financial constraint (either 20a or 20b) may be interpreted as a financial constraint that should be satisfied for all academic units, with the understanding that some exceptions are justifiable. The fraction, $(s \cdot n)/r$, shown in (20a), is the slope of the line forming the lower boundary of the design envelope, as written below.

$$Slope\ of\ line\ of\ lower\ boundary\ of\ design\ envelope = \ \frac{s \cdot n}{r} \quad (21)$$

Upper Boundary of the Design Envelope

Based upon academic reasons, it is often essential to prescribe a maximum allowable *R*, denoted as R_a, which is the maximum student-to-faculty ratio allowable for a given unit, as deemed by the faculty, in consultation with administration. R_a is the slope of the line forming the upper boundary of the design envelope, as written below.

$$Slope\ of\ line\ of\ upper\ boundary\ of\ design\ envelope = \ R_a \quad (22)$$

Left and Right Boundaries for the Design Envelope

Considerations for space limitations and aspirational targets for the number of professors can also be integrated into the analysis by prescribing a maximum number of FTFE, which would be a vertical line representing the right-hand boundary of the design envelope. Also, for the purpose of maintaining functional stability, a minimum number of FTFE may be prescribed. There exist many ways to determine the appropriate values for the left-hand and right-hand boundaries. Details for how best to determine these values are left for future work.

The Change in Contribution Margin

From (18), the differential form of the contribution margin, *dm*, may be written as follows:

$$dm = \left[s \cdot \frac{n}{R^2}\right] \cdot dR + \left[t + a \cdot f - \frac{s}{R}\right] \cdot dn \quad (23)$$

where: *dR* is the differential of *R* and *dn* is the differential of *n*

and: $dR = \frac{1}{p} dn - \frac{n}{p^2} dp$

The differential form of the contribution margin is introduced for future mathematical analysis related to forecasting and optimization. It should also be noted that it can be useful in highlighting the individual impact *dR* and *dn* have on *dm*. While *dm* captures a change over infinitesimally small changes in *n* and/or *p*, Δn does so over relatively large changes, as expressed below.

$$\Delta m = m_{final} - m_{initial} \quad (24a)$$

or from (18)

$$\Delta m = \left(t + a \cdot f - \frac{s}{R_{final}}\right) \cdot n_{final} - \left(t + a \cdot f - \frac{s}{R_{initial}}\right) \cdot n_{initial} \quad (24b)$$

For the results shown herein, the change in contribution margin reflects application of (24b).

Results and Discussion

Preliminary Comments

The mathematical representations provided herein were coded into an EXCEL spreadsheet, then expanded, creating a projected pathway within the design space, to account for fiscal years extending from FY23 to FY29. In Figures 3 – 5, the solid thick-black lines represent a design envelope, based upon assumed input. Solid thin-black lines, which represent constant contribution margin scenarios, are added only to help the user more quickly understand how the contribution margin will change along the projected pathway. The thin dotted lines, which represent constant SFR, are also added for a similar reason. For all of the results shown, various input assumptions were made for the design envelope boundaries, enrollment trends, and service levels. In practice, the input must be prescribed in close consultation with faculty, department heads, and deans. The results and comments shown below, therefore, are provided for illustrative purposes only. They do not represent recommendations.

University-Level Analysis

Figure 3 depicts example results for a university (ie. all colleges collectively) with a projected annual enrollment change of 3.36% year-over-year for a six-year period. The pathway from FY23 to FY29

exhibits an SFR change from 16.1 in FY23 to 17.8 in FY29. For all years, the Δp_o term included in (16), is zero. As previously mentioned, units are envisioned as profit centers within the university enterprise. Collectively, the colleges provide to the university a profit (contribution margin) of $91M in FY23. As both FTSE and FTFE increase over time, the profit for the university grows to $116M in FY29. To support the FTSE growth, the number of FTFE should increase by 244 over the six-year period. These FTFE, of course, may comprise various combinations of adjunct faculty, lecturers, and tenure-track faculty.

Figure 4 depicts example results, also for a university, but the projected annual enrollment change is -3.36% (minus 3.36%) year-over-year for a six-year period. In FY23, the SFR is 16.1. If Δp_o were to remain zero for all years, the SFR would decrease over time. For this example, it is assumed that there is a desire for the SFR to be gently restored to 16.1. To this end, the Δp_o values over the six-year period are set to 0, -2, -8, -11, -14, and -18. This is one of many possible sets to restore the SFR. Collectively, the colleges provide to the university a profit of $91M in FY23. As both FTSE and FTFE decrease over time, the profit for the university decreases to $74M in FY29. To support the FTSE decrease, the number of FTFE should decrease by 104 over the six-year period. Similar to the previous example, these FTFE may comprise various combinations of adjunct faculty, lecturers, and tenure-track faculty.

Department-Level Analysis

Figure 5 depicts example results for a department with a projected annual enrollment change of (plus) 2.50% year-over-year for a six-year period, but within a university projected enrollment change of -3.36% (minus 3.36%). The factor, α, in (13) is set to 0.0495; this corresponds to about 58% of the students in the typical department classroom being "outside" students with majors not offered from within the department. For this analysis these outside students are included in the FTSE. With Δp_o at zero for all time periods, the pathway features a trajectory that is uncomfortably close to the top of the design envelope. As a corrective intervention, the department head introduces a Δp_o of one through whatever combination of adjunct faculty, lecturers and tenure-track faculty changes is deemed best for FY23. One more Δp_o will be added in both FY25 and FY28. Such an intervention will move the state of the department further from the top boundary. It is projected, however, that the number of FTFE in FY29 will exceed the maximum number of FTFE allowable. To this end, the department head proactively engages in conversations with stakeholders around capital investments for several new faculty offices and laboratory spaces; this would eventually move the right-hand boundary of the design envelope to the right. The department provides to the entire university a profit of $3.5M in FY23. As both FTSE and FTFE increase over time, the profit for the university grows to $3.9M in FY29. To support the FTSE growth, the number of FTFE should increase by about four over the six-year period.

Key Take-Aways

PAM-CAM's internal mechanics may not be easy to understand for some people in academia, without significant investment of time to study it carefully. With some patience, however, all/most administrators and faculty in higher education should be able to understand the basic principles of PAM-CAM. Key take-aways from this study include:

1. **Shows Promise:** Through the use of commonly understood terms in academia, the mathematical representation of PAM-CAM shows significant promise, for system-level, transparent analysis for forecasting needed changes in faculty personnel subject to prescribed financial and academic constraints. When PAM is expressed graphically, its promise may be even greater.

2. **Features Limiting Assumptions:** As is the case for all models, PAM-CAM features numerous simplifying assumptions and limitations which require of the user a judicious eye.

3. **Applies to Various Levels:** PAM-CAM features applicability at different unit levels, and flexibility with respect to how the axes for the design space are defined.

4. **Lacks Temporal Effects:** The current form of PAM-CAM lacks explicit features capturing the effect of time on many of the input variables. For example, salaries, overhead expense rates, and state funding rates are all held constant. Unless temporal effects are captured in PAM's coefficients, it is only capable of accommodating such effects through the introduction of uncertainty terms.

5. **Is Vulnerable to National Sea Changes**: The impact of COVID is an excellent example of how outside disturbances can render historical data sets nearly useless. The 2020's will continue to be unpredictable, in many ways. Whether someone is extrapolating from past data or forecasting based upon anticipated effects, there will continue to be significant uncertainty in enrollment trends. Therefore, some form of uncertainty analysis should be integrated into the assessment of the PAM-CAM results, especially with respect to enrollment predictions.

6. **Relies on Teamwork:** Campuses with a culture of teamwork and trust, in spite of differences in opinions, have the best chance of making the best use of PAM-CAM. Deans and chairs, especially those presiding over service-heavy majors, will need to work trustingly with their counterparts across the campus. PAM-CAM is only for those stakeholders who collectively choose to work together, in spite of their differences**.**

7. **Is Scalable**: PAM-CAM is applicable to many scales within a university system. This flexibility renders PAM-CAM a powerful instrument for studying how best to allocation resources for hiring lines.

Conclusion

This article represents the first formal dissemination of the basic framework of PAM-CAM. Its full consummation can only be realized through 1) future case studies ideally carried out by investigators on different campuses, 2) analysis of combining different units' effects, 3) more complete consultation with stakeholders on the investigators' campus, and 4) future studies with a specific emphasis on how best to integrate PAM's quantitative results into qualitative assessments.

PAM-CAM, a model for informing decision-making with respect to needed changes to faculty personnel lines in higher education, has been introduced. Its mix of commonly understood terms

renders it a reasonably accessible model for most in higher education. If coupled with very close consultation with faculty who, in particular, are most able to integrate qualitative analysis into the quantitative analysis, PAM-CAM may be effective in modeling needed changes to faculty personnel. With additional refinement, PAM-CAM appears to have promise for empowering decision-makers to direct resources more surgically and strategically across their array of academic units – all with a system-level, team-centered perspective. In spite of PAM-CAM's limitations, it potentially represents a new paradigm in faculty personnel management leading to improved transparency, shared governance, and productivity in higher education.

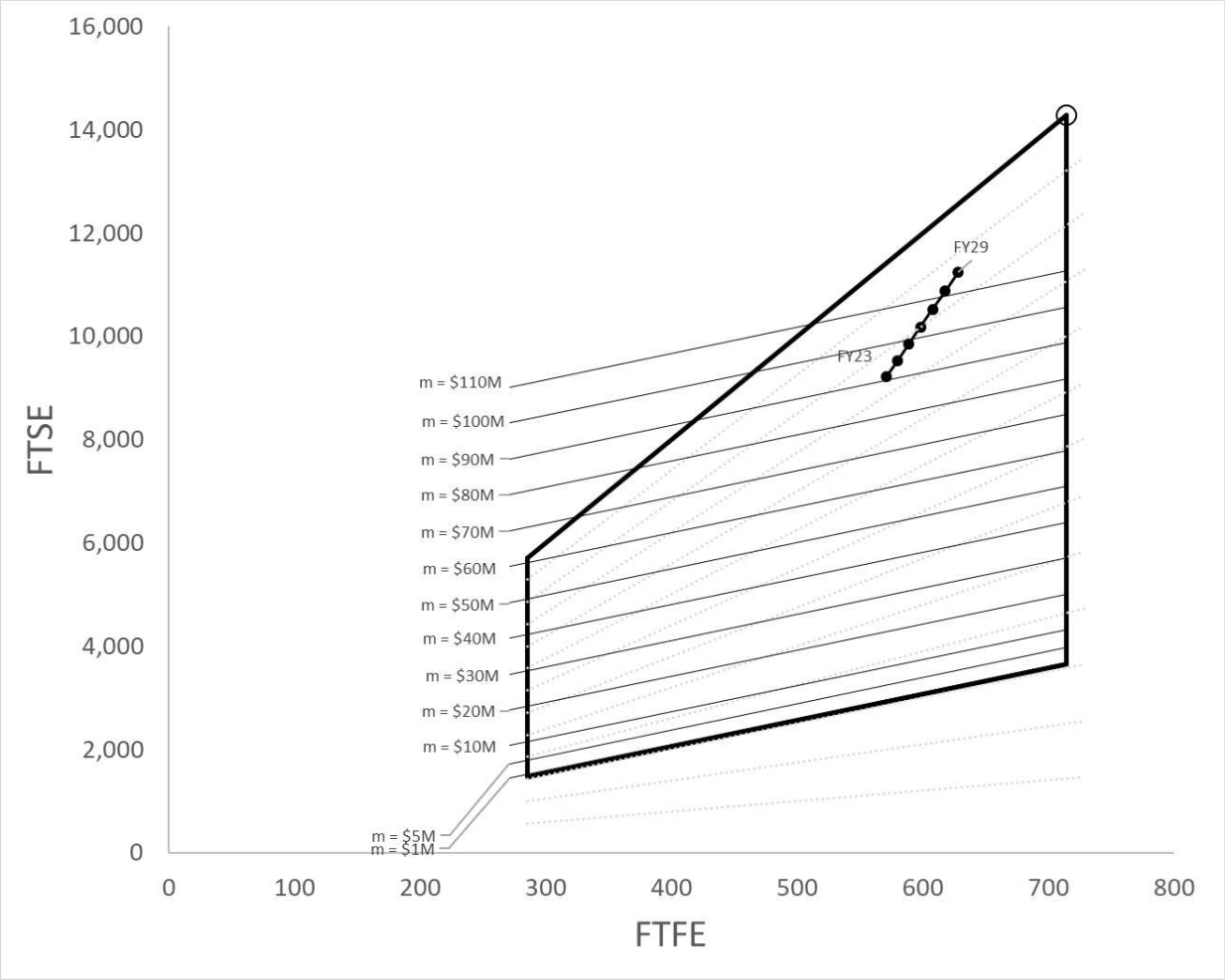

Figure 3: Example results for a university with a projected annual enrollment change of 3.36% year-over-year for a six year period.

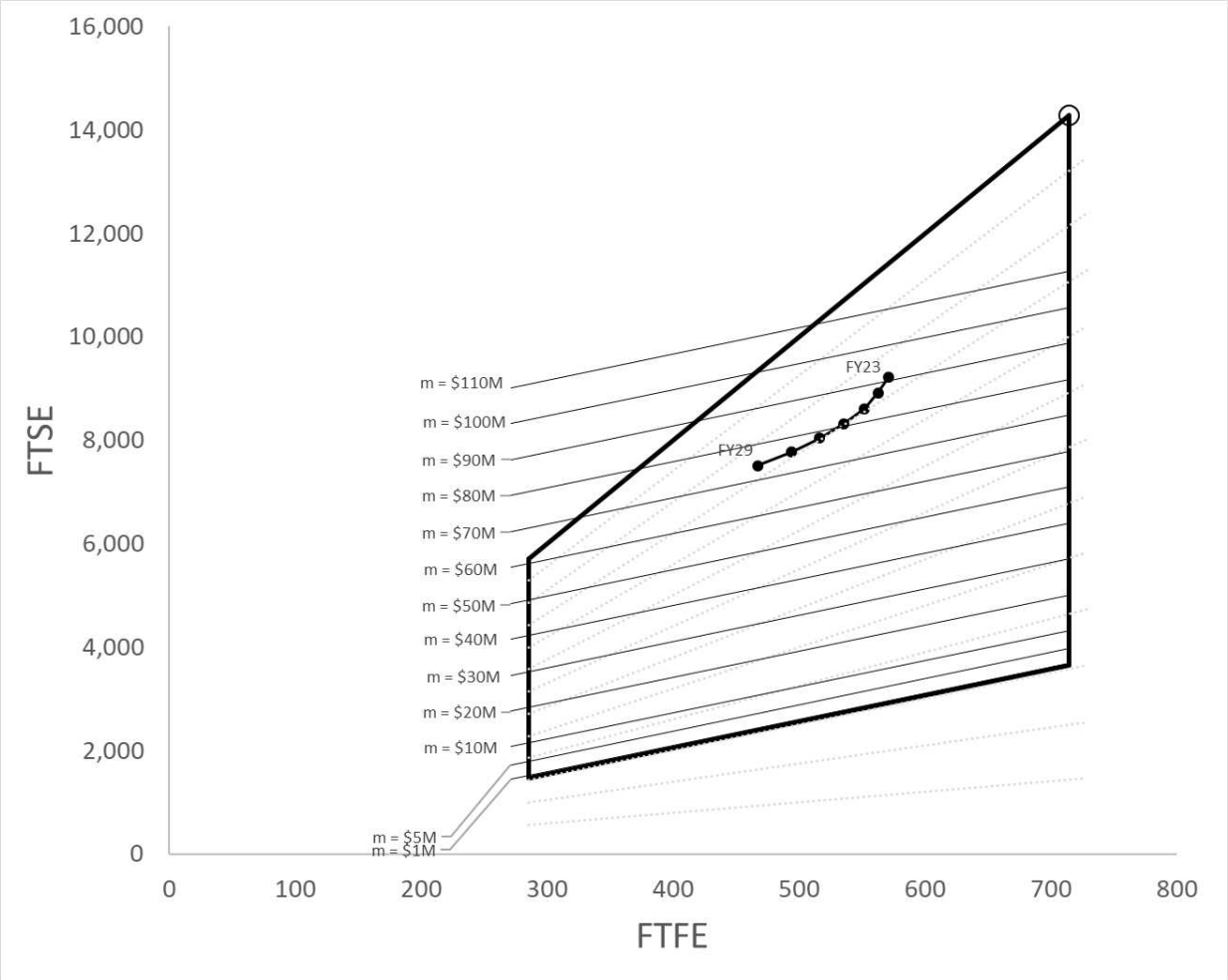

Figure 4: Example results for a university with a projected annual enrollment change of -3.36% (minus 3.36%) year-over-year for a six year period, with corrective FTFE adjustments to restore student-to-faculty ratio back to FY23 value.

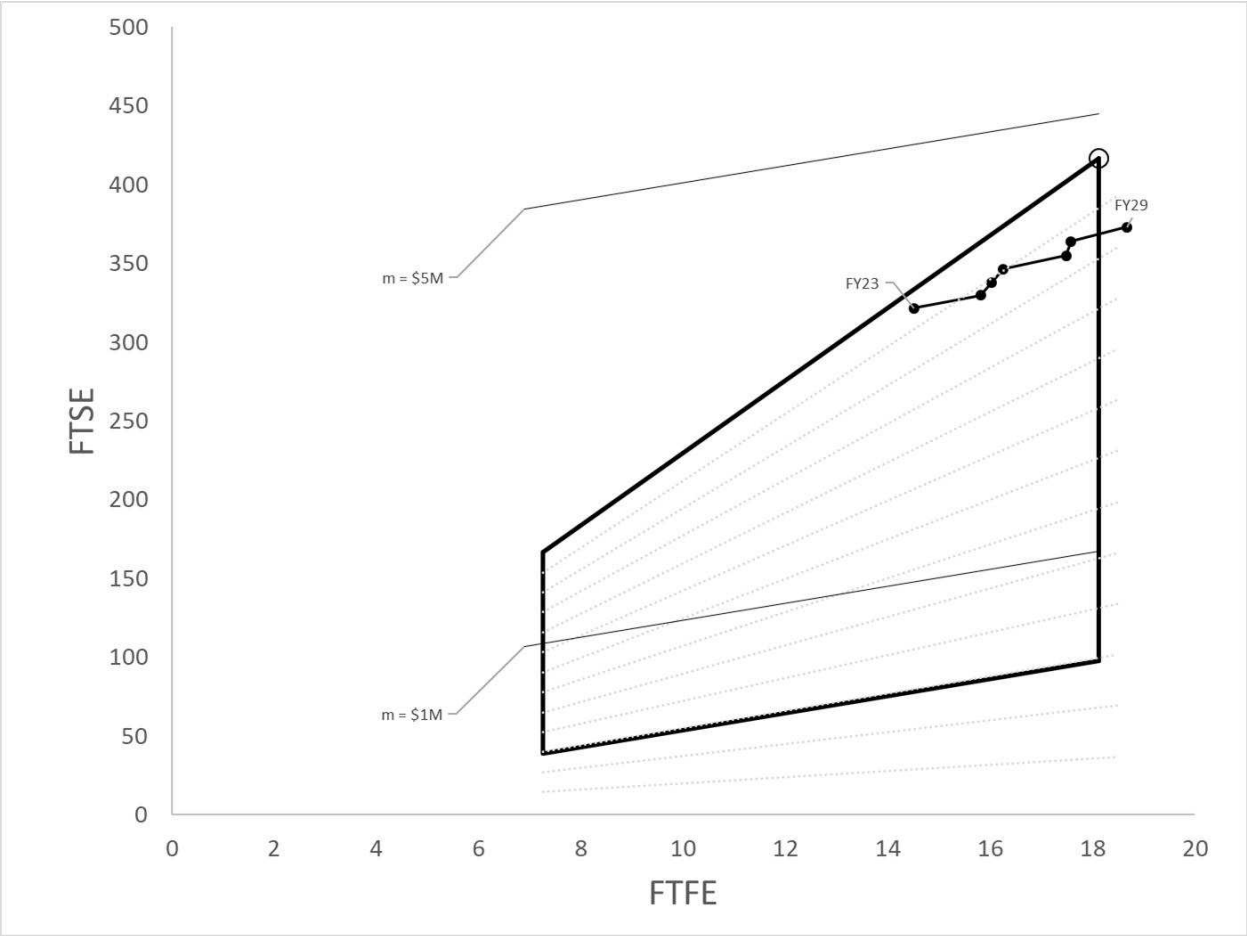

Figure 5: Example results for a department with a projected annual enrollment change of 2.5% year-over-year for a six year period, with corrective FTFE adjustments avoid too close proximity to upper boundary of the design envelope. (The university enrollment change year-over-year for a six year period is -3.36% (minus 3.36%).

References

Analyzing Academic Program Fiscal Performance. Default. (n.d.). Retrieved April 17, 2022, from https://www.airweb.org/article/18

Academic Performance Solutions (APS). Bowling Green State University. (n.d.). Retrieved April 17, 2022, from https://www.bgsu.edu/institutional-effectiveness/institutional-effectiveness/academic-performance-solutions--aps-.html

Dillon, W. E., Kondraske, G. V., Everett, L. J., & Volz, R. A. (2000). Performance theory based outcome measurement in engineering education and training. *IEEE Transactions on Education*, *43*(2), 92–99. https://doi.org/10.1109/13.848059

Scholarship reconsidered: Reconsidered. (n.d.). Retrieved April 17, 2022, from https://files.eric.ed.gov/fulltext/EJ854937.pdf

"Measuring Academic Program Cost and Demand for Improved Resource Allocation." *Academic Impressions*, 2017, Orlando, FL, https://www.academicimproessions.com

Borden, Victor. (2011). Suggestion for the Improvement of the Student-to-Faculty Ratio in IPEDS. National Postsecondary Education Cooperative, funded by the Department of Education under Coffey Consulting, LLC contract No ED-04-CO-0044-0001.

Appendix

Quick-Look Summary of Selected Terms (See body of the article for details.)

n	Number of Fulltime Student Equivalents (FTSE)
p	Number of Fulltime Faculty Equivalents (FTFE)
R	The student-to-faculty ratio (SFR) expressed as $R = n/p$.
a	The Semester Credit hours (SCH)
t	Tuition per FTSE
f	Base state funding revenue per SCH per FTSE
s	Average salary per FTFE
α_x	Coefficient that captures the service load carried by Unit X
Δp_o	Planned change in the # of faculty, independent of change in the # of students.

Financial State

How much money does Unit X contribute annually?

$$m = \left(t + a \cdot f - \frac{s}{R}\right) \cdot n \tag{26a}$$

Change in Financial State

How much more money would Unit X contribute annually with forecasted/prescribed changes?

$$dm = \left[s \cdot \frac{n}{R^2}\right] \cdot dR + \left[t + a \cdot f - \frac{s}{R}\right] \cdot dn \tag{23}$$

$$\Delta m = \left(t + a \cdot f - \frac{s}{R_{final}}\right) \cdot n_{final} - \left(t + a \cdot f - \frac{s}{R_{initial}}\right) \cdot n_{initial} \quad (24b)$$

Personnel Need

What is the appropriate change in Unit X faculty due to forecasted/prescribed changes in enrollment?

$$\Delta p_x = \left(\frac{p_t - p_x}{n_t - n_x}\right)(\Delta n_x + \alpha \cdot \Delta n_A) + \Delta p_o \quad (14)$$

where:

Δn_x denotes the projected change in Unit X Students
Δn_A denotes the projected change in Unit A Students
Δp_o denotes a planned change in the number of faculty, independent of Δn_x and/or Δn_A
α denotes the percent of Unit A students served by Unit X.

and: subscript *x* denotes a target state

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Examination of the Influence of Identify Dimensions, Education Level, and Occupational Positioning Dynamics Within Higher Education Faculty and Staff Workplace Relationships

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Literature Review

Working Relationships and Mattering. The positional power dynamic between faculty and staff creates a complex working relationship that has potential to distribute the value and worth of a position disproportionately (Young et at., 2015). This has been displayed by the widely accepted terminology, actions, and benefits surrounding faculty and staff positions (Young et al., 2015). Role valuing has immense influence on the workplace environment and often creates a ranking system that relates to campus climate. These types of messages create value for 'higher up' positions, which, in turn, devalues positions located lower on the hierarchy (Young et al., 2015). According to Lee (2019), supervisees (i.e., front-line staff, pre-tenured faculty, non-tenure track or adjunct faculty, and graduate students) are subjected to microaggressions and the victims' supervisors (i.e., tenured faculty, department chairs, and program directors) act as perpetrators due to their ability to abuse policies using their positional power. Florenthal and Tolstikov-Mast (2012) supported this idea by identifying tension between faculty and staff as a negative organizational culture influence. Young et al. (2015) indicated some variables related to role valuing, which include tenure status, educational bias, and the notion that faculty tend to be more educated than staff. According to Young et al., this creates important distinctions and perpetuates an additional hierarchy between faculty and staff.

Although there is a plethora of information regarding faculty, staff, and students' relationships, significant limitations exist within the current research on faculty and staff in relation to each other and their working relationships within higher education. The most recent study was a dissertation by Skaggs (2014) that included public two-year community colleges. Most of Skaggs' references were published in the 1990s, which indicates the need for current research in this area. In addition, there is insufficient current research on how faculty and staff work together despite the knowledge that both faculty and staff exist on the institution's organization chart and on American college campuses. It is becoming increasingly common that institutional models integrate faculty and staff within the same offices or functional areas, despite the need for separate supporting structures (Manning, et al., 2006). Additional research in these areas will aid in a better understanding of the working relationship between faculty and staff and offer strategies for establishing and strengthening the elements of a healthy working environment (e.g., communication, respect, collegiality, and trust).

By the end of the 20th century and into the beginning of the 21st century, greater societal pressure and expanding demographics increased the need for higher education institutions to become a safer and more inclusive space for all identities (Byron, 2017). Identity, occupational position, and educational attainment have the potential to influence an individual's working relationships, which, subsequently, correlates to their sense of mattering (Schlossberg, 1989).

Identity – Sex. Despite holding a greater or equal number of degrees, women held only 32% of full professor positions in 2015. Men holding these professor positions were more likely to receive tenure, higher pay, and leadership opportunities (Johnson, 2017). Frye and Fulton (2020) found that women are overrepresented in staff and contingent faculty roles and are underrepresented in tenured faculty and high-level leadership positions. Due to the historical underrepresentation, it becomes difficult for women to change the culture of leadership positions. Where tenure-positions hold a greater longevity in positions of power to incite change, non-tenured positions have more barriers that make it difficult to create a lasting change in the culture of higher education. These statistics have potential to communicate to women that they are not worth as much academically as men and that they do not possess the same professional ability. Men and women do not face the same barriers as they advance within higher education (e.g., the pipeline myth, glass ceiling, pay gap etc.); likewise, there is a differentiation in the leadership culture and opportunities based on biological sex (Smith, 2017). Johnson (2019) used the phrase, "the higher the fewer'' (p. 6) to display the juxtaposition between women holding higher education attainment levels than men, yet holding fewer positions within high faculty rank, having a lower salary, or experiencing a lower level of prestige associated with them. The statistical evidence indicates that women in higher education are facing limitations such as sexism, leadership opportunities, and cultural barriers. These limitations create an environment that can influence the working relationships between sex and position in higher education.

Identity – Age. In his research, Lambert (2019) discussed the oddity of how higher education staff participants faced ageist comments, including "Millennials have always had this" and "from the cradle to the grave". These statements display a sense of animosity between the generational experiences and place increased focus on age in the workplace. Lambert's participants experienced both subtle and explicit condescending comments, made by both faculty and staff, about their own generations. Age discrimination is not exclusive to a single generation and has the ability to influence any professional (Kleissner & Jahn, 2020). Although young professionals struggle to attain experience and respect, older professionals contend with the perception that they are incompetent, untrainable, devalued, and useless (Nelson, 2016).

Whereas there is an abundance of research regarding the benefits of older professionals in the workforce, there is a lack of research dedicated to the experience of older individuals in higher education. For example, Marchiondo et al., (2015) discussed how workforces, worldwide, are graying due to the social and psychological benefits of working longer, but there is little to no information with regard to the realm of higher education. Age is one of many social identity dimensions that has the ability to both positively and negatively influence any relationship, and thus, is a reason for the inclusion of age as a variable in our research.

Identity – Sexual Orientation. Attention to sexual orientation, in higher education settings, has remained on the student population with less devotion to its dynamic within faculty and staff

(Pryor, 2020). Faculty and staff can face conflict when deciding how to navigate sexual orientation microaggressions. Hughes (2019) exhibited this conflict, by citing a first-year faculty member:

> She could be perceived as oversensitive on issues of gender identity and sexual orientation, especially as she is open about being bisexual with her classes. Yet if she does not address these comments, students may perceive her silence as tacit approval of students' microaggressive behaviors. (pp. 24-25)

This type of behavior is not limited to students; faculty and staff are just as likely to participate in microaggressive behavior (Hughes, 2019). Pryor (2020) acknowledged that LGBTQ+ equity among faculty and staff has been uncharted in higher education, and Pryor discussed how power dynamics create conflict when proposing agency for sexual orientation leadership and support. For an effort to provide awareness and strategies for LGBTQ+ advocacy and inclusion, Pryor stated buy-in from campus leaders is necessary in navigating resistant individuals. Buy-in will allow for a strategic approach to work through resistant individuals or power struggles. Once institutions have buy-in (i.e., creating opportunities, providing resources, and developing implementation plans) and are prepared to participate in LGBTQ+ leadership and support, practice might include a policy for name and pronoun changes, as well as training programs for faculty and staff (Pryor, 2020). The leadership and support of LGBTQ+ has the ability to shift the actions and perceptions of the institution. Microaggressions tied to sexual orientation can have a marginalizing effect on the working relationships of faculty and staff and can lead to a negative impact on an individual's sense of mattering in their workplace (Schlossberg, 1989).

Occupational Positioning. The hierarchy of positions in higher education function on a deeper level than presented in a university organization chart (Young et al., 2015). This hierarchy has the ability to influence the working relationships between faculty and staff. Faculty and staff positions come with a level of value that displays itself through terminology, actions, and benefits, and this often leads to issues, such as an individual's sense of mattering and marginalization and can influence the work environment. According to Young et al. (2015), staff tend to be viewed as less educated than faculty members, which has the ability to influence their treatment within the institution.

The advantages of a position's value correlates to its location in the institution's organization chart and what power that position holds. More times than not, the hierarchy creates a strong power dynamic that influences the working relationships of those positions (Young et al., 2015). Most positions come with influence and power, which others might interpret as superiority. The same interactions could look different depending on what positions are involved.

Educational Attainment. More often than not, faculty and staff in higher education institutions are required to have a degree. The type of degree needed depends on the level of the position within the hierarchical structure. For example, in most cases, professors who teach undergraduate courses are required to have a master's degree, and professors who teach graduate courses are required to have a doctorate. On the other hand, an administrative staff position might require a high school diploma or a bachelor's degree, and department leaders might be required to have a master's degree. There is no consistent research displaying the educational attainment needed for specific positions within higher education because of the discretion higher education institutions and/or state governments have at setting educational requirements.

Summary. Existing research provides clear indicators of how various dimensions of identity, occupational positioning, and educational attainment is infused into work spaces. Little research exists, however, to provide a clear understanding of how these factors influence the working relationship of faculty and staff. Working relationships are often shaped by a variety of factors such as positional power, educational certification, and personal beliefs related to identities (i.e. age, sexual orientation, gender, etc.). These factors create a complex and unparalleled experience when navigating either a healthy or unhealthy working relationship between employees, as well as the relationship between the employee and organization. Individuals who encounter an unhealthy working environment might experience an influence in their sense of mattering and worth within their institution (Schlossberg, 1989).

Method

Participants. This study originated from a midsize public four-year institution located in the Southern United States. We solicited participants through two means. The first was through a social media group comprised of alumni from the higher education/student affairs program at the originating institution. All alumni work in the higher education/student affairs profession, primarily as staff members. We posted an announcement regarding the study and provided a link to the research survey. The second means for soliciting participants was through a listserv comprised mostly of faculty teaching in higher education/student affairs master's and doctoral programs. We sent an email to the listserv and provided a link to the research survey. Table 1 provides participant demographic results.

Data Collection. This was a quantitative exploratory study that was designed to examine the working relationships between faculty and staff in higher education. We designed a survey that measured the participants' perceptions of the influence their identity has in their working relationships. Questions assessing identity dimensions, occupational positioning, and educational attainment were developed using some of the prompts from Clark et al.'s (2016) *Healthy Work Environment Inventory*, and we collected responses using a Likert-scale. We used SPSS to create three scales for measuring each section (i.e., identity, position, and educational attainment) and their sense of mattering in the workplace (Schlossberg 1989). To create our mattering scale (alpha .831), we combined the responses to *I believe I matter in my workplace* and *I believe that my voice is heard in my workplace*. To create our occupational position scale (alpha .813), we combined responses to six questions related to communication, shared governance, employee satisfaction, fair manner, conflict resolution, and free expression. The fair manner items concerned consistent and fair treatment of employees. The last scale created was the influence of educational attainment (alpha .748), which included questions related to how educational attainment influences workplace experiences, whether individuals believed their education level directly influenced their sense of mattering in the workplace, and whether they believed their education level influenced how their institution perceived their worth.

In addition to these scales, we conducted t-tests on other survey items, such as perceived difference on how faculty and staff were treated, extent of negative working relationships, and extent of positive working relationships. Finally, participants provided demographic information related to sex, sexual orientation, and age. Our original survey asked for racial identity; however,

Table 1

Sociodemographic Characteristics of Survey Participants

Characteristic	*n*	*%*
Institution Type		
Public	108	76.6
Private	33	23.4
Occupational Position		
Faculty	53	37.6
Staff	88	62.4
Tenure Status		
Tenure Track	23	43.4
Non-Tenure Track	19	35.8
I am not Tenure Track	11	20.8
Tenure Track		
Tenured	39	73.6
Non-Tenured	14	26.4
Age		
23-29	26	18.4
30-34	24	17
35-39	18	12.8
40-44	26	18.4
45-49	14	9.9
50-54	16	11.3
55-59	9	6.4
60-69	8	5.7
Gender		
Woman	58	69
Man	22	26.2
Cisgender	3	3.6
Transgender	1	1.3
Sexual Orientation		
Heterosexual	93	66
Lesbian	8	5.7
Gay	13	9.2
Bisexual	9	6.4
Queer	9	6.4
Questioning	3	2.1
Asexual	2	1.4
Pansexual/Fluid	1	.7
Other	3	2.1
Education Level		
Bachelor's Degree	6	4.3
Master's Degree	68	48.2
Doctoral Degree	67	47.5

we realized after data collection that a glitch had occurred in the survey platform that knocked that question out of the survey. Thus, we were unable to use race as an identity dimension and how race influenced working relationships, which was our original intent.

Data Analysis. We closed the survey with 207 responses. Following data cleaning, we had 141 completed responses. We should note that, during survey completion, participants were limited to an indication on the Likert scale of (1) *strongly agree*, (2) *somewhat agree*, (3) *somewhat disagree*, and (4) *strongly disagree*. Hence, results with the greater mean score indicated disagreeing to a greater extent than results with the lesser mean score. To explore the difference between the faculty and staff responses, we conducted t-tests and calculated effect size (*d*). Effect size reports were informed by Sriram (2017), who discussed the three categories: small (0.2 and below), medium (0.5 to 0.7) and high (0.8 and above).

Results

Identity. The identity dimensions of age and sexual orientation yielded no statistically relevant evidence that would either positively or negatively imply those dimensions have influence on the working relationships between faculty and staff. Due to sample inferential statistics not being fit to run, we chose not to collapse the identities into two groups. Creating two identity groups would assume shared experience across all sexual orientation participants, besides heterosexual. Refer to Table 2 for sexual orientation and mattering scale descriptive data. We performed t-tests on the

Table 2
Sexual Orientation & Mattering Scale Descriptives

Sexual Orientation	*n*	*Mean*	*Std. Deviation*
Heterosexual	93	1.9032	.78109
Lesbian	8	2	.59761
Gay	13	1.6154	.68172
Bisexual	9	1.8333	.66144
Queer	9	2	.79057
Questioning	3	1.6667	.57735
Asexual	2	2.7500	1.06066
Pansexual/Fluid	1	2	
Other	3	1.6667	.57735

gender variables of men and women only and found that men (*M* = 1.59, *SD* = .59) reported that they perceived they mattered to the organization more, *t*(78) = 2.5, *p* = .015, *d* = .65, than women (*M* = 2.02, *SD* = .71) reported. This difference represented a medium effect size.

There was a statistically significant difference between the perceptions of faculty and staff related to the influence their identity had on their work experience, *t*(139) = 3.51, *p* = .001, *d* = .63. Staff responded close to the neutral position (*M* = 2.95, *SD* = .921), and faculty were more likely to report in disagreement (*M* = 3.49, *SD* = .800), which represented a medium effect size. Although results indicated faculty experience a greater influence on workplace relationships, based on identity, we were unable to deduce which identity dimension (i.e., age; sexual orientation) created the increased influence.

Occupational Position. For most of the questions regarding occupational positioning, staff were more likely to express a greater measure of positive organizational experiences than faculty. To this extent, staff indicated stronger scores in employee satisfaction, *t*(139) = 2.68, *p* = .008, *d* = .45, with staff having a score of *M* = 2.60, *SD* = .917 and faculty having a score of *M* = 2.98, *SD* = .747, fair manner, *t*(139) = 1.98, *p* = .05, *d* = .34, with staff having a score of *M* = 2.14, *SD* = .805 and faculty having a score of *M* = 2.42, *SD* = .819 , and conflict resolution, *t*(139 = 2.15, *p* = .034, *d* = .37, with staff having a score of *M* = 2.23, *SD* = .881 and faculty having a score of *M* = 2.57, *SD* = .951. These results indicate a medium effect size for all of the above.

In response to questions as to whether participants believed there was a difference between how faculty and staff were treated by their institution, whether employees had mostly positive or negative working relationships, or whether employees had no working relationship with faculty or staff, results were varied. Staff (*M* = 1.33, *SD* = .062) reported at a greater level than faculty (*M* = 1.57, *SD* = .665) that there was a difference between how faculty and staff are treated at their institution, *t*(139) = 2.257, p = .026, d = .40, indicating a medium effect size. Faculty (*M* = 1.87, *SD* = .652) reported they experienced a greater extent of negative working relationships, *t*(139) = -2.345, *p* = .02, *d* = .41 than staff (*M* = 2.17, *SD* = .791) reported, and faculty (*M* = 2.02, *SD* = .571) reported a greater extent of positive working relationships, *t*(139) = - 2.477, *p* = .015, *d* = .42, than staff (*M* = 2.30, *SD* = .745) reported. Staff (*M* = 2.56, *SD* = .756) indicated that their institution does not have mostly positive nor mostly negative working relationships between faculty and staff, *t*(139) = 3.82, *p* > .001, *d* = .67, and faculty indicated that they experienced either a positive or negative majority (*M* = 3.06, *SD* = .745). Similar to past results, there is a medium effect size that we used to explore the differences between faculty and staff responses.

Educational Attainment and Organizational Worth. Faculty and staff both indicated that education attainment affected their working relationships, *t*(139) = -5.702, *p* > .001, *d* = .91, which indicates a high effect size. Faculty reported a greater mean level of agreeance (*M* = 1.17, *SD* = .379) compared to staff who were more likely to report a level of agreeance closer to *agree* rather than *strongly agree* (*M* = 1.75, *SD* = .820). We found similar results for experiencing praise based on educational attainment, *t*(139) = -3.08, *p* = .002, *d* = .53 (i.e., medium effect size), with faculty reporting *M* = 2.08, *SD* = 1.089, and staff reporting *M* = 2.63, *SD* = .986. Faculty and staff also differed when asked if participants believed their education level directly influences how their institution perceives their worth, *t*(139) = -3.491, *p* = .002, *d* = .63 (i.e., medium effect size); faculty reported *M* = 1.45, *SD* = .637, and staff reported *M* = 1.95, *SD* = .921. This indicates that faculty believe education has more

of an influence on their institutional worth than staff. Although staff indicated lower levels of agreeance in relation to experiences of praise based on educational attainment and education having no influence on their working relationships, staff indicated a greater experience of marginalization based on their educational attainment, $t(139) = 3.15$, $p = .002$, $d = .52$, which indicated a medium effect size, with staff reporting ($M = 3.13$, $SD = .992$) and faculty reporting ($M = 3.60$, $SD = .793$). The sample size of participants was limited to higher level educational degrees with only 6 (4.3%) bachelor's degrees, 68 (48.2%) master's, 67 (47.5%) doctorates, and no high school diplomas or trade school certificates. Individuals with a master's degree ($M = 2.07$, $SD = .75934$) were more likely to disagree that education level influenced their organizational worth, $t(133) = 5.28$, $p > .001$, $d = .91$, which indicated a high effect size, than individuals with doctoral degrees ($M = 1.47$, $SD = .54966$). An interesting fact to note is that as age increased, the perception of educational importance increased, $r(130) = -.42$, $p > .001$.

Discussion

The majority of results on questions regarding identity were not statistically significant. The relevant research on identity dimensions influencing working relationships indicate that men perceived that they mattered to their organization more than women, which supports existing research (Smith, 2017). Faculty also indicated that identity does not have an influence on their work experience and staff indicated a neutral position. However, there were a plethora of results regarding the working relationship between faculty and staff members. Staff indicated higher satisfaction in conflict resolution, fair manner, and employee satisfaction. Despite this, staff indicated that they experience marginalization based on their educational attainment more than faculty, and also reported that there is a difference between how faculty and staff are treated at their institution, both points that are supported by the existing research on faculty and staff (Florenthal, 2012). In regard to the relationship between faculty and staff, staff reported a neutral position indicating that there are neither a majority of positive or negative working relationships within their institution. Faculty reported more varied experiences, in that they reported more experience of both positive and negative working relationships. One possible explanation for faculty indicating both spectrums could be institution type (i.e., public or private, 2 year or 4 year) or institutional structure. Differing institutional structures create varied levels of interactions between faculty and staff; additionally, there are differing levels of support offered to the faculty and staff working relationship. Where a 2-year private institution might have a smaller population of faculty and staff, those faculty and staff members might need a higher level of collaboration in order to support their students, whereas a 4-year public institution with more faculty and staff positions would not need as much collaboration and have a more independent structure. Our research regarding educational attainment and working relationships was lucrative. Faculty participants reported that education had no effect on their working relationships while also reporting having received more praise based on education level than staff. When asked about organizational worth, individuals with a master's degree indicated that education did not influence their organizational worth, and those with a doctorate indicated their educational attainment did influence organizational worth.

The implications of these results are that institutions have an imbalance of support toward faculty and staff. These imbalances could be addressed using training, programming, restructuring, focus groups, and national resources. A focus group between faculty and staff could aid in developing an understanding as to why staff indicated higher scores in conflict resolution, fair manner, and

employee satisfaction. Targeted training and programming would be valuable in addressing why women feel that they matter less to their institution than men. Examining national institution structures might assist in understanding which structures work best for faculty and which structures work best for staff. Due to the differing needs of faculty and staff, separate structures might be helpful in creating a supportive environment for both parties. Faculty and staff are often compared to each other while holding different types of work. Both require institutional and individual support, though what supports staff best might not support faculty best, and vice versa.

According to Schlossberg's (1989) marginalization and mattering theory, our findings indicate, that to create a healthy and supportive institution that values high organizational worth and employee satisfaction, institutions would benefit from addressing the tension between faculty and staff experiences. To create and maintain a positive working relationship between faculty and staff, each division needs to be completely itself. Academic and student services are rarely compared due to the contrasting nature of their work, meaning that faculty and staff should receive the type of support and structure that fits that nature of their work best within the institution. This will aid in the comparison of faculty and staff, which will, in turn, allow institutions to gain an understanding of which variables directly impact an individual's organizational worth and mattering.

Limitations and Recommendations

As with any research, this study has limitations. One limitation includes an uneven sample size with 53 faculty participants and 88 staff participants. Uneven sample sizes can lead to a general loss of statistical power when calculating the results. Due to a lower number of faculty participants, our study was less likely to receive quality research on the differences between tenure and non-tenure track status and tenured and non-tenured faculty.

Another limitation was the lack of gender diversity. The majority of our participants were cisgender, with only one individual who reported as transgender. Due to this, we were unable to examine the influence that a diverse gender pool would provide on working relationships. Experiences of individuals who do not self identify as cisgender are vastly different from those who do.

A major and obvious limitation was the absence of data regarding race. This demographic variable plays a considerable role in the working relationships of those who work in higher education (Jones & Squire, 2019). Having data related to race would have allowed us to gain greater understanding as to the influence of that demographic among our participants, which might have informed us in generalizing our data.

All but six participants (4.3%) were in possession of either a master’s or a doctoral degree. Having more participants with a wider range of educational attainments might have provided deeper insight into whether this variable supports the hierarchy between lower levels of education and higher levels of educational attainment.

Further research related to working relationships within higher education might include the identity dimension of race, for the reasons mentioned above. Similarly, comparing the gender of faculty and staff participants could provide research that speaks to the experiences of diverse genders within higher education. Additionally, a qualitative study would provide thick descriptions of experience

that might benefit research for individuals who do not identity as cisgender. Extended research with a more diverse pool of participants would be beneficial to identify the influence of gender and educational attainment across organizational positioning in higher education.

Other interesting research might center around the distinction between working relationships in institutional types (e.g., 2-year institution vs. a 4-year institution, public vs. private). Institutional support and atmospheres look different depending on institutional type. Another recommendation might be research that includes a greater focus on the influence educational attainment has on the working relationships of tenure track vs. non-tenure track faculty or pre-tenured vs. tenured faculty. Results from our study indicated there is no significance; however, research (Alleman & Haviland, 2017) indicates possible tension between those groups of tenure-track faculty. Finally, research on faculty and staff, with the addition of academic staff, might yield new results and clarify the plethora of roles staff occupy within higher education.

Conclusion

To create and maintain a prosperous and professional higher education institution, a variety of occupational positions are required. These positions include, but are not limited to, faculty, staff, students, and administrators. Higher education tends to have a distinct hierarchical system that creates the opportunity for complex power dynamics. Identity dimensions, educational attainment, and occupational positioning influence an individual's work experience, and their relationships with coworkers, supervisors, and anyone with whom they need to collaborate. An individual's identity is cemented in their being and cannot simply cease to exist once they have clocked into work. Experiences within an individual's workplace (Schlossberg, 1989) set the tone for either an unhealthy working environment or one which supports a sense of belonging and worth.

References

Alleman, N. F., & Haviland, D. (2017). “I expect to be engaged as an equal”: Collegiality expectations of full-time, non-tenure-track faculty members. Higher Education, 74(3), 527-542.

Byron, K. (2017). From infantilizing to world making: Safe spaces and trigger warnings on campus. Family Relations, 66(1), 116–125. https://doi.org/10.1111/fare.12233

Clark, C. M., Sattler, V. P., & Barbosa-Leiker, C. (2016). Development and testing of the healthy work environment inventory: A reliable tool for assessing work environment health and satisfaction. Journal of Nursing Education, 55(10), 555- 562.

Florenthal, B., & Tolstikov-Mast,, Y. (2012). Organizational culture: Comparing faculty and Staff Perspectives. Journal of Higher Education, Theory, and Practice, 12(6), 81–90.

Hughes, B. E. (2019). You’re not like everyone else: Sexual orientation microaggressions at a catholic university. Journal of Catholic Education, 22 (3). http://dx.doi.org/10.15365/joce.2203022019

Johnson, H. L. (2017). Pipelines, pathways, and institutional leadership: An update on the status of women in higher education. American Council on Education. https://www.acenet.edu/news-room/Documents/HES-Pipelines-Pathways-and-Institutional-Leadership-2017.pdf

Jones, V. A., & Squire, D. (2018). Disengaging whiteness and examining power in campus activism: Reuniting communities of color through a critical race analysis of tempered radicalism. Jcscore, 4(1), 36–65. https://doi.org/10.15763/issn.2642-2387.2018.4.1.36-65

Kleissner, V., & Jahn, G. (2020). Dimensions of work-related age stereotypes and in-group favoritism. Research on Aging, 42(3/4), 126–136. https://doi-org.ucark.idm.oclc.org/10.1177/0164027519896189

Lambert, S. (2019). Ageism amongst higher education professional staff: understanding attitudinal and professional consequences (Document No. 27670771) [Doctoral dissertation, St. Peter's University]. ProQuest Dissertations Publishing.

Lee, A. (2019). Hierarchical microaggressions in higher education settings: Anyone can be a victim, perpetrator, or bystander. Currents, 1(1), Article 3. http://dx.doi.org/10.3998/currents.17387731.0001.103

Manning, K., Kinzie, J., & Schuh, J. H. (2006). One size does not fit all: Traditional and innovative models of student affairs practice. Routledge.

Marchiondo, L. A., Gonzales, E., & Ran, S. (2016). Development and validation of the workplace age discrimination scale. Journal of Business and Psychology, 31(4), 493-513. https://doi.org/10.1007/s10869-015-9425-6

Nelson, T. D. (2016). The age of ageism. Journal of Social Issues, 72(1), 191–198. https://doi.org/10.1111/josi.12162

Pryor, J. T. (2020). Queer activist leadership: An exploration of queer leadership in higher education. Journal of Diversity in Higher Education. https://doi-org.ucark.idm.oclc.org/10.1037/dhe0000160

Salili, F. (2020). Political inequality, secular democracy, religion, gender, and the "isms". Handbook on Promoting Social Justice in Education, 2417-2437. https://doi.org/10.1007/978-3-319-74078-2_27-1

Schlossberg, N.K. (1989). Marginality and mattering: Key issues in building community. In D.C. Roberts (Ed.), Designing campus activities to foster a sense of community (pp.5-15). New Directions for Student Services, No. 48. San Francisco: Jossey-Bass

Skaggs, M. L. (2015). The great divide: The perceptions and dynamics of the faculty and staff professional relationship [Doctoral dissertation, Western Kentucky University]. TopSCHOLAR. https://digitalcommons.wku.edu/diss/74

Smith, D. G. (2017). Progress and paradox for women in U.S. higher education. Studies in Higher Education, 42(4), 812-822.

Young, K., Anderson, M., & Stewart, S. (2015). Hierarchical microaggressions in higher education. Journal of Diversity in Higher Education, 8(1), 61–71.

Journal of Higher Education Management, **38**(2), 114-131 (ISSN 2640-7515).

Vaccination Equity Among Young Adults: Implications for Community Health Planning

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As of October 2022, COVID-19 vaccines are readily available in the U.S. and have been recommended to all population groups ages 6 months and above, excluding those deemed ineligible for medical reasons (CDC, 2022a). The U.S. Centers for Disease Control and Prevention (CDC) defines a **fully vaccinated** person as an individual who has received either one dose of a single-dose vaccine or both doses of a two-dose COVID-19 vaccine primary series approved or authorized for use in the United States (CDC, 2022b). As of September 28, 2022, the CDC's COVID data tracker reported that approximately 264.1 million people, or 79.5% of the total U.S. population, had received at least one dose of a COVID-19 vaccine. However, only 67.9% (n=225.3 million) – approximately 2 in 3 people – of the total U.S. population are fully vaccinated (CDC, 2022c). Similarly, as of September 28, 2022, 48.8% (n=109.9 million) of the total U.S. population had received a first booster dose, while only 36.6% (n=23.8 million) had received a second booster dose (CDC, 2022c).

COVID-19 vaccination has proven to be an effective strategy for controlling the transmission of the coronavirus (CDC, 2022d). Vaccination is also widely regarded as an essential approach for restoring normalcy on college campuses. Yet, recent estimates show that 25 – 40% of American adults of college age either persist in being hesitant to vaccination or have decided not to do so (Callaghan, et al., 2021; Hamel et al., 2020; Khubchandani, et al., 2021; Tyson, et al., 2020). Factors contributing to vaccine hesitancy need further investigation to inform policy development and health communication.

The World Health Organization (2015) defines vaccine hesitancy as a "delay in acceptance, or refusal of vaccination despite the availability of vaccination services." Some of the reasons for vaccine hesitancy include the relative novelty of COVID-19, the rapid nature of vaccine development and approval process, concerns about safety, side effects, and efficacy, beliefs in conspiracy theories and misconceptions, and political dogmas (Khubchandani, et al., 2021; Muñana, et al., 2020; Tyson, et al., 2020).

Essentially, factors contributing to vaccine hesitancy among young adults are dynamic and multifaceted (Nazlı et al., 2021; Soares et al., 2021), and should be investigated more deeply to

better understand the relationships between individual attitudes and perceptions and vaccine hesitancy, as well as the moderators between them (Nazlı et al., 2021; Soares et al., 2021). Such evidence-based knowledge will be invaluable for targeted public health interventions aimed at improving vaccine equity in both the present and future. The purpose of this study was to investigate common psychological barriers to vaccine uptake and identify drivers of vaccine hesitancy among college and university students in the United States.

Methods

This was a qualitative study design using thematic analysis. 885 college students at a mid-sized university in the Midwest were surveyed in Spring 2021 to gather opinions about the COVID-19 vaccination. The students were asked demographic questions and an open-ended question inviting them to share their thoughts about getting vaccinated. The exact wording of the survey question was:

> "Is there anything else that you would like to say about the topic of COVID-19, and COVID-19 vaccines? Any final thoughts?"

Survey distribution and data collection were done through Qualtrics™ software. Out of the total number of eligible students who were surveyed (885), the researchers recorded a total of 177 responses to the open-ended question, equivalent to a 20% response rate. Responses were downloaded and printed from the Qualtrics database. Afterward, using the long-table approach as established by Krueger & Casey (2000), the investigators independently read each response and grouped similar responses into themes. The investigators carefully allowed ideas to emerge organically from the responses while labeling and categorizing responses into core themes and sub-themes. Finally, the researchers discussed any variances in their themes and re-evaluated responses until a 100% consensus was reached.

Results

Participant Characteristics. The 177 respondents were primarily white (87.2%), non-Hispanic (96%), and female (64.6%), with their educational level split between graduate (51.9%) and undergraduate students (48.1%). The average age was 24 years, and most respondents were between 18 and 29 years old (76.7%).

Qualitative Findings. The thematic analysis revealed the following seven core themes that helped explain participants' vaccine hesitancy/acceptance: (1) propitiousness, (2) blame, (3) public good, (4) concerns about side effects, (5) personal liberty, (6) return to 'normal', and (7) conspiracy theories and misinformation. The spread of coverage from the thematic analysis showed that 21.5% (n=38) of the responses were related to propitiousness, 15.3% (n=27) were related to blame, 7.3% (n=13) were related to the public good, 6.2% (n=11) were related to concerns about the side effects of the vaccine, 5.65% (n=10) were related to personal liberty, 5.65% (n=10) were related to a return to 'normal,' and 4.5% (n=8) were related to conspiracy theories and misinformation. Finally, 33.9% (n=60) of comments were set aside during the thematic analysis, as they were either unrelated or lacking in sufficient information for the research method.

These 7 core themes are summarized in the following section, along with a discussion of impact. Salient quotes are also provided for each theme to give further elaboration.

Theme 1: Propitiousness.

The term 'propitiousness' refers to a favorable disposition towards an object or idea (Merriam-Webster, n.d.). In this context, propitiousness refers to individuals having a favorable disposition towards the topic of COVID-19 vaccination. The theme of propitiousness (21.5%, n=38) was dominant throughout the thematic analysis. In addition, three distinct subcategories were identified, namely gratitude, trust, and a state of being 'pro-vaccine'. The following section elaborates on each subcategory in clearer detail.

Gratitude. Gratitude is a state of being grateful (Merriam-Webster, n.d.). It is an expression of appreciation regarding a thing of value, whether a product or service. Gratefulness emerged as a strong subcategory throughout our analysis, comprising 50% (n=19) of all our "Propitiousness" responses. Participants expressed gratitude to the healthcare workforce for the development of the vaccine and to relevant authorities for the availability of the vaccine.

Gratitude to the healthcare workforce. The global community of healthcare professionals and scientists worked to produce an effective vaccine against the 2019 Coronavirus. Many respondents indicated that they followed the process of testing and trials for each proposed vaccine through the media and scientific research articles, and thus expressed gratitude for the work of the scientists and the entire healthcare workforce. An exemplar comment from our respondents captures this idea adequately:

> "I am very grateful for our hard-working healthcare workforce, the scientists who developed these vaccines at breakneck speed, and our new presidential administration who values transparency, honesty, and accessibility for the vaccine." (*20-year-old white male*)

Thankfulness to relevant authorities for the availability of the vaccine. Amid uncertainty about the availability and accessibility of the Coronavirus vaccine, many respondents were thankful that they could access the vaccine easily and seamlessly. The following comments typify this idea:

> "Just very grateful that BGSU offered free vaccines for students and the community. I feel very safe because of this." (*26-year-old white female*)

> "I'm grateful that I was able to get the vaccine." (*30+-year-old white male*)

Trust. In contemporary terms, trust refers to an assured reliance on the character, ability, strength, or truth of someone or something (Merriam-Webster, n.d.). Trust is often at the root of actions and decisions that we make as humans. Trust influences our behavior and is often a basis for our actions and inactions. So, while scientists and researchers began developing mechanisms for combating the Coronavirus, trustworthiness was a key element to deliberate on, as it is crucial to uptake. Trust (6.7%, n=12) emerged as a strong subcategory under the theme of Propitiousness. Many respondents reported a sense of absolute confidence in the effectiveness of the coronavirus vaccine

and the accuracy of the information from leading public health organizations like the CDC and the World Health Organization. They also expressed increased confidence about their state of health following vaccination. The following comments are handpicked and highlighted to contextualize the "Trust" sub-theme:

> "COVID-19 is real and vaccines are helpful, get vaccinated, everyone." (*30+-year-old white male, graduate student*)
>
> "I trust the medical experts, not people who have little experience dealing with infectious diseases." (*24-year-old white male, graduate student*)
>
> "I got the vaccine early as a volunteer for the Pfizer trial. I knew I identified as strongly "pro-vaccine" as a general principle (love getting my flu shot every year, tetanus booster every 10 years, etc.) but I guess I didn't realize until now how strongly I trust the scientists doing this work. I think my level of confidence is pretty unusual, even in my very liberal social group." (*30+ year white female, graduate student*)

Pro-vaccine. Howard (2022) defines being pro-vaccine as "taking into account all of the relevant data to make a fair, accurate risk-benefit calculation about a vaccine." Generally, people who identify as pro-vaccine express beliefs and opinions that support the use of vaccines as preventive measures against disease outbreaks. Based on the comments of 4% (n=7) of participants, a state of being "pro-vaccine" falls under the theme of Propitiousness because it expresses a positive inclination and a favorable disposition toward the subject of COVID-19 vaccination. A few comments extracted verbatim from the raw survey data listed below underscore this categorization.

> "Vaccines work. Science works. Wear a mask and get the vaccine"! (*20-year-old white female*)
>
> "Vaccines are important! Everybody should get one!" (*30+-year-old white male*)
>
> "Everyone should do their part and get the vaccine." (*23-year-old white female*)
>
> "Get the shot." (*30+-year-old white male*)

<u>Theme 2: Blame</u>

Since the early 1900s, psychologists have identified a general human tendency to attribute responsibility for unfortunate occurrences to others while "diminishing the importance of individual personal responsibility" (Farber, 2011). According to Henricks (2020), the theory of 'Scapegoating' – or blameshifting, which is the "psychological and social process of assigning blame to others for one's own difficulties," adequately explains this phenomenon. Essentially, blaming helps people temporarily feel better about their circumstances. Identifying a safe target and vilifying that target for one's misfortune transfers responsibility for that outcome without the expectation of retaliation

(Henricks, 2020). As a coping mechanism (Stosny, 2020), resorting to blaming effectively keeps people from confronting the true sources of their difficulties (Henricks, 2020).

The theme of blame emerged strongly during our analysis. Several respondents blamed the U.S. government, county and state health officials, colleagues at work, political polarization, and the general public for the way the pandemic progressed. Here are a few excerpts:

> "My mother would not have died from Covid if it was not politicized by the previous administration." (*30+-year-old white male*)
>
> "I wish more people took the pandemic seriously. If so, I believe we as a country would have recovered from the pandemic months ago. Other countries' governments took the pandemic much more seriously and are in better standing than we are." (*25-year-old white female*)
>
> "Vaccines are good. I wish US government officials and their substituents would have taken the issue more seriously." (*22-year-old white male*)
>
> "America's incorrect idea of "freedom" has caused our Covid-19 outbreak to be astronomically worse than what it should have been. My fiancé and I are hoping to move out of the country when I finish my degree." (*23-year-old white female*)
>
> "This whole thing got WAY too politicized. Healthcare professionals and government officials didn't do this right AT ALL." (*30+-year-old middle eastern female*)
>
> "I do believe the media has scared people about COVID-19. I have asthma and when the pandemic first started I was extremely scared of getting it. Scared to the point I began having anxiety for the first time in my life. It took months for me to feel somewhat normal again. I still struggle with anxiety today but have been able to overcome how bad it was for a while. Although I do take it seriously I feel like the media is to blame for this." (*30+-year-old white female)*
>
> "I am sad for those who have been misinformed (like members of my extended family) about Covid-19 and the associated vaccines. I am angry that misinformation has been spread about a very serious virus and a very necessary vaccine. I am also frustrated that Covid-19 has been politicized in any way." (*20-year-old white female*)

Theme 3: Public Good

A sense of public duty is critical for public health interventions requiring human participation to succeed. As effective as herd immunity can be in curbing the spread of infectious diseases, it is still dependent on the cooperation of individuals within communities. Thus, amid the rollout of public health measures, a sense of personal responsibility for the public good is crucial to support vaccination efforts. Amid the myriad themes and subcategories we identified in our analysis, several individuals were observed to have a keen sense of public good. For instance, the following comment is from a 27-year-old white female:

> "Even if the vaccine/measures such as wearing masks was [sic] detrimental to me, I would still get the vaccine/religiously wear my mask because it is my duty and my pleasure to care about the wellbeing of not only my loved ones, but the individuals in my community and beyond. This pandemic is more than a simple issue to be discussed on a personal level. "Our lives are not our own..."."

Another 25-year-old white female added, "I am extremely grateful for everyone who created the vaccine and have made it possible for the public to receive them. The last year has been difficult and the future will continue to be difficult if people choose not to get vaccinated. We collectively need to protect the health of the public and vaccinations are for the common good."

Other participants remarked:

> "I personally believe that while everyone is allowed and encourage [sic] to have their own opinions, being vaccinated against a global pandemic is a logical social obligation each individual has to ensure the survival of family, friends, and neighbors." (*23-year-old white female*)

> "Everyone should get the vaccine, not only for themselves but for the good of others as well. You are not getting chipped. This isn't completely about you. We want this pandemic to end already and the vaccine brings us one step closer to that." (*19-year-old white female*)

A 26-year-old white female described vaccination as a public duty comparable to jury duty. She wrote, "COVID-19 is a public health crisis that deserves to be treated with severity and caution. Yes, I believe that there are some individuals who should not receive the vaccine if they have serious health conditions and have been medically advised not to. However, for everyone else, this is a public duty – just like jury duty, voting, paying taxes, etc."

<u>Theme 4: Concerns about vaccine side effects</u>

The rollout of the Moderna, Johnson & Johnson, AstraZeneca, and Pfizer vaccines was not without much controversy. Mainstream and social media were rife with reports and stories about the most severe side effects of some of these vaccines, which contributed to the hesitancy of several unvaccinated individuals who continue to adamantly refuse vaccination.
Here are some quotes from selected participants:

> "The main reason I'm hesitant is because my stepmother, who is completely healthy, never had COVID, or any complications, received the Moderna vaccine and is completely deaf in one ear now. She has gone to a few doctors who have all said it is a side effect of Moderna, and more and more people keep coming in with the same issue of complete hearing loss. I just plan to stay home for as long as I can. It's a sucky way to live, but I am fearful of COVID and do not trust the vaccine even though I have read so, so much about it from peer-reviewed articles." (*26-year old white female, graduate student*)

"I basically am waiting to get the vaccine because I am seeing the total side effects." (*24-year-old black male, graduate student*)
"In my experience, people I know had worse side effects from the vaccine than COVID itself. My biggest concern is that we don't know the long-term effects for something that was mass-produced. During COVID, suicides, job loss, and other negative factors have affected more people than the disease itself. I only got the vaccine because I have a wedding coming up and I will not being [sic] wearing a mask for it." (*22-year-old white male, graduate student*)

"My number one reservation to not taking the vaccine is hugely impacted by the fact that the true effects of the vaccines may not be known for years to come. Being international, there are many vaccines that I have had to take, with no reservation whatsoever, as those vaccines have taken decades to develop. I cannot put my health at risk by taking a vaccine that was developed in a number of months without knowing the potential effects it may have on my health in the future. I would rather keep washing my hands, socially distance, avoid crowds, and wear a mask to minimize my risk of getting COVID rather than get the vaccine this early on." (*29-year-old Middle-eastern female student*)

Theme 5: Liberty

The subject of personal liberty in healthcare decision-making has become very controversial in recent times. From the overturning of Roe v. Wade to advance care planning and vaccination, there often seems to be a conflict between individual/personal perceptions and public health advice in the United States. Our study identified a unique theme related to individual rights and freedoms, and excerpts from a few responses are shared verbatim:

"It is a SCAM. How can you prove that a vaccine works when the survival rate is so high? Being FORCED to get this stupid thing so that I can be placed in the field next semester is VIOLATING my freedoms, and personal beliefs." (*23-year-old white female*)

"Getting the vaccine or not is completely a personal choice and even after understanding the risks and benefits it brings, it should remain a personal choice. Forcing people to get a vaccine is 100% taking away personal freedoms, even if it does mean reducing infection rate for the entire population it undeniably takes away the freedom of choice. All of the incentives being offered are only making people more and more skeptical to get it because the government has never pushed so hard for something at a more vulnerable time. Being a medical/health related major, I have learned and researched and have a fair understanding of how the vaccine works and still choose at this time to not get it, because that is a personal choice I just have. Vaccinations should never be required in order to participate in events or entertainment in this country." (*20-year-old white male*)

"If I choose to not get vaccinated, that should be my own choice! I shouldn't be blackmailed by ANYONE to get it!" (*21-year-old white female*)

"Getting vaccinated should be a personal choice, especially when the vaccine is NOT fully FDA approved, it's approved for emergency authorization. 1/3 of all FDA-approved drugs get recalled. **"**My body my choice" should apply to everything, including vaccinations. The major side effects reported with the vaccine makes me skeptical. Other vaccines have limited side effects but not to the extent where you have extreme flu-like symptoms for 48 hours. Not normal and shouldn't be considered normal. Influenza does not kill more people than COVID per year, that's because there is a vaccine - which is not mandated so neither should this one." (*30+-year-old white female*)

"Look into the health issues popping up possibly due to the vaccines now. Should be ashamed of yourselves for pushing this practically experimental vaccine on people. Let people make their own choices about their health. "My body my choice", remember? If you [sic] mask work I shouldn't have to wear one if I don't want. And if yours doesn't work, why wear it anyway?" (*21-year-old white male*)

Theme 6: Return to 'Normal'

Change is one of the most predictable phenomena common to humans, yet we struggle with it and often find ourselves ill-prepared when change occurs. While the COVID-19 pandemic has indeed altered our normal way of life, several participants in the survey expressed a keen desire to return to normal. The vaccine is regarded as an essential factor in bringing things back to normal.

A few comments echoed this theme throughout our analysis:

"Get the vaccine!!! It'll end the pandemic sooner and we can all return to normal." (*23-year-old white male*)

"I am glad that BGSU is doing all it can to make vaccines available to students and is providing accurate information to the college community. We need as many people to be vaccinated as possible if we have any hope of returning to "normal". There is just so much misinformation out there." (*30+-year-old white female*)

"BGSU is doing a great job hosting quite a few vaccine clinics on campus. This was extremely helpful for me to get the vaccine. I hope all the students will get vaccinated before the Fall semester starts and campus could go to its normal operation." (*30+-year-old Asian female*)

"I have received both doses of Pfizer and was only sick one day after taking the shot which is a risk I am willing to take to stop the spread of Covid-19 and attempt to return things to "normalsy" [sic]." (*22-year-old white female*)

Theme 7: Conspiracy theories and misinformation

Conspiracy theories are alternative perspectives of a situation that are not consistent with the actual reality or the facts of the situation. The following comments from our study relate to the theme of misinformation:

> "I've found that most of the people who speak out against the vaccine have been severely misinformed, and their false claims have been debunked numerous times, so it can be frustrating to hear them." (*19-year-old white male*)

> "The mixed messaging from various sources make it difficult to determine the necessity and effectiveness of a vaccine." (*30+-year-old white male*)

> "It has been dually fascinating and horrifying to watch the development of society's perspective on COVID and the vaccine. I miss when everyone was working together to support each other instead of squabbling over all varieties of mis/disinformation." (*30+-year-old white female*)

> "I think there is a lot of misinformation that can be spread super easily on social media (such as sterilization as a result of vaccines) that is causing people to be concerned about getting the vaccine." (*21-year-old white female*)

Unrelated and uncategorizable responses

A total of 33.9% (n=60) comments were set aside from the thematic analysis, as they were either void or lacking in information sufficient for the research method. The responses included comments such as “Nope”/“No” (13%, n=23), “N/A” (11.3%, n=20), unrelated comments regarding the survey design (4.5%, n=8), miscellaneous entries (1.7%, n=3), and uncategorizable comments (3.4%, n=6).

Regarding Survey Design – The present study examined the qualitative findings from a larger survey that contained numerous quantitative items. In this study, the researchers intended to elicit information about specific areas of investigation in parts of the survey, so the items were worded precisely for the effective collection of comparable data. The use of structured questions in a survey helps limit the number of possible responses and thus standardizes the data collected. However, while this was advantageous for the researchers, some participants (4.5%, n=8) found it cumbersome and thus commented on the overall flow of the survey, without addressing the main survey question. A few comments are mentioned below:

> "The study seems to be organized in a way that makes it easier for people to just skim through and answer without reading properly, mainly in the section in which ALL the statements are myths (about changing your DNA, about government control, about the side effects of the vaccine being worse than Covid-19 itself, etc.).

Shouldn't the false statements be mixed with true statements for you to get unbiased results?" (*29-year-old white male*)

"Related to question 3 asking about the worst being behind, current or ahead of where we are at now, I think the answer is more complex than the multiple-choice responses address. I generally think the worst is behind us, in terms of death rates and hospital overflows, etc; however, I do think it is seriously concerning that people think it is safer to go out now with or without vaccinations, while variants are increasing. In other words, I think the past was slightly worse, but today is still scary. (Positives now are that many people are getting the vaccine, and we know much more about the virus)." (*27-year-old white female*)

"I do not feel like the surveys covered medical health freedom effectively. I am someone who believes no one should be forced to obtain this vaccine, however I am strongly in favor of this vaccine and encourage those around me to take it. I feel that was not an option it wanted me to be anti-vax to answer questions in that area, which I am not." (*20-year-old white male*)

Miscellaneous Comments – A few participants (n=3, 1.7%) took the opportunity to air personal perspectives and thoughts on COVID-19 without directly addressing the survey question. Here is a classic example from a 30+-year-old white female, "I was very sick in April of 2020, however I was never tested for Covid. I do believe that is what I might have had. I have struggled with mental illness issues since then, I have taken the steps to work on myself and now I am very pleased with my recovery and continue to work on myself everyday."

"N/A" and "Nope"/"No" – A number of responses contained comments like "N/A" (11.3%, n=20) and "Nope/No" (13%, n=23) and were set aside from our thematic analysis. Several reasons could have contributed to the nature of responses the investigators received under this category, including lack of concern about the subject, being in a hurry to finish the survey and leave, etcetera.

Discussion

This study investigated vaccination hesitancy and equity among young adults to inform community health planning among college students at public universities in Ohio. The qualitative findings from this study suggest that attitudes toward vaccine hesitancy are typically formed from personal opinions, past and present experiences, as well as general perceptions about the specific public health issue(s). However, it is worth also noting that these attitudes do not just revolve around the specific individuals involved. Instead, as the thematic analysis revealed, external individuals and institutions play important roles in either driving or reducing vaccine hesitancy.

Throughout the study, the researchers first observed the prevalent favorable disposition of several respondents towards COVID-19 vaccination. Related comments in this category were grouped under the broad theme of propitiousness, and subcategories under this theme include gratitude, trust, and a pro-vaccine nature. Several participants expressed gratitude for the opportunity to access the vaccine free of charge. Likewise, other participants also indicated great trust in the

government, the healthcare system, and the vaccine itself. A handful indicated a proclivity for promoting vaccine compliance in their own unique ways after getting vaccinated themselves.

A second theme without subcategories was related to blame. During the analysis, the researchers discovered that, while many participants were thankful for having access to the vaccine and seeing a decline in spread and fatality rates, several others bemoaned the general handling of the pandemic situation and blamed several entities for its deadly progression and the damage caused. The government, healthcare workers, and authorities at every level had their share of the blame as participants generally ascribed greater control over their health outcomes to external factors. However, considering that an internal locus of control, which purports that health is within one's own control, has been strongly associated with positive health outcomes in previous studies (Nazareth et al., 2016), inculcating self-management skills among young people may be effective in encouraging them to take ownership of their health and make wise decisions to improve their health outcomes (Nazareth et al., 2016).

A third theme that was identified was regarding public good. Undoubtedly, a consideration for the public good is essential for improving and promoting public health and welfare. Public health communication and education must be primed to persuade individuals to make decisions and practice behaviors that promote the public good. According to Beauchamp (1983), where individual liberty and public good collide in the area of public health, insisting that individual responsibility aligns with collective evidence-based directives to protect the common good will always remain the most effective way of preserving life and preventing disease. Thus, it was interesting to observe how several participants thought about vaccination as a decision to be taken for the benefit of themselves first, and also other people in their communities.

A fourth theme revolved around concerns about the side effects of the coronavirus vaccine. After the much-publicized adverse effects of some of the earliest candidates for the coronavirus vaccine, many participants indicated a strong hesitation toward COVID-19 vaccination because of uncertainty about the possible side effects. Even those who had been previously vaccinated expressed a certain degree of fear and skepticism about the safety and side effects of the coronavirus vaccine. Unfortunately, even after the passage of time and the implementation of several public health campaigns and policies, thoughts about the short and long-term side effects of the vaccines still linger in people's minds. Common side effects of the vaccines include fever, headache, muscle pain, and diarrhea (World Health Organization, 2021a). Rare side effects include allergic reactions such as anaphylaxis, thrombosis with thrombocytopenia syndrome (TTS), and myocarditis, all of which the CDC has defined as rare adverse events because they occur at less than 100 cases per one million doses administered (CDC, 2022e). It is important to acknowledge the basis for these concerns about side effects. Data released by the CDC indicated that as of July 22, 2022, as many as 1,357,940 total adverse events were reported to Vaccine Adverse Event Reporting System (VAERS), including 29,790 deaths (VAERS Database, 2022). The large number of reported adverse events and deaths is indeed worrisome from any point of view. However, 1,054,195 deaths were due to COVID-19 as of October 3, in the U.S. (CDC, 2022c).

The fifth emergent theme in our analysis was regarding liberty. The classic phrase, "my body my choice," was observable in both text and attitude. Many participants indicated that they believe they should be allowed to decide whether they want to get vaccinated or otherwise, despite the

obvious possible consequences or benefits of that decision. Since the U.S. Supreme Court upheld the authority of states to enact vaccine mandates in the landmark trial of Jacobsen vs. Massachusetts in 1905 (Skelton, 2019), the powers of states to enforce state-wide public health measures have come under severe scrutiny and political polarization. For instance, Weber & Barry-Jester (2021) discovered that republican lawmakers representing more than half of the states in the United States are taking steps to limit the authority of state and local health officials. Currently, as many as 26 states have successfully enacted laws to limit government authority to protect the public against disease outbreaks (Weber & Barry-Jester, 2021). Essentially, such moves tend to yield a higher degree of individual freedom and flexibility with public health measures, which may delay or jeopardize public health interventions and fuel the spread of disease.

The sixth main theme we identified was an overwhelming desire for things to "return to normal." While the pandemic has brought unprecedented disruptions, many participants indicated a strong desire to return to the way things used to be before the pandemic. Interestingly, several participants in this category believe that the Coronavirus vaccine is critical to the process of restoring things back to normal.

Finally, the least dominant theme we identified was regarding misinformation and conspiracy theories. We assume that this is the case because the participants were highly educated individuals capable of making decisions based on facts and evidence. According to the CDC (2022f), the main myths surrounding the subject of COVID-19 vaccines include that the vaccines contain secret microchips, that the constituents of the vaccines are dangerous, that natural immunity is superior to the immunity offered by the vaccine, that the vaccines can alter the recipient's DNA structure, that the vaccine causes infertility, that the vaccines make recipients somewhat magnetic; that the mRNA vaccine is not a real vaccine; and that all events on the VAERS (Vaccine Adverse Event Reporting System) database are all as a result of COVID-19 vaccination. Interestingly, most of these myths started with an iota of truth, especially regarding some of the earliest known side effects (Brumfiel, 2021). Brumfiel (2021) suggests that myths get started when a social media influencer begins to spread doubts and questions about the subject matter. In the absence of consistent and sufficient answers, these influencers solidify the case by adding other related myths to it and promoting the whole message well enough for the mainstream media to take it up. At this stage, propagandists are able to take the story and fit it into any form they want to promote their causes, even though it is not usually based on data and scientific evidence (Brumfiel, 2021). To this end, the CDC (2022f) recommends the following strategies for addressing misinformation about COVID-19 vaccines: listening to and analyzing misinformation in circulation; engaging with one's community; sharing accurate, clear, and easily accessible information; and using trusted messengers such as religious leaders and community organizations to boost credibility and create trust in the right information (CDC, 2021). The State of Tennessee's COVID-19 Health Disparity Task Force is a shining example of an institution that successfully employed the CDC's strategy for addressing misinformation about COVID-19. They collaborated with leaders of minority groups and faith leaders from all denominations to build trust and host vaccination events, which were well attended (CDC, 2022g).

Some participants wrote that they had decided not to participate in vaccination because of the things they had heard. Others also linked their decision not to get vaccinated to what seemed to be conflicting information about the coronavirus, coming from official sources like the CDC and the

World Health Organization. Inconsistent and rapidly changing public health advice weakened public trust in the information that was being disseminated from those sources. Our analysis corroborates previous findings and further suggests that the lack of consistent information about the effectiveness of the COVID-19 vaccines facilitates the proliferation of misinformation and conspiracy theories and strengthens arguments against widespread vaccine uptake, which ultimately drives us further from achieving vaccination equity (Harvard School of Public Health, 2021; World Health Organization, 2021b).

Implications for Colleges and Universities

The results of our analysis indicate that young adults can have an overwhelming propensity to both participate in vaccination and encourage others to do so. More importantly, the role of colleges and universities in promoting vaccination among the general population cannot be overemphasized. U.S. institutions of higher education have led the way for vaccination programs and other public health measures across the country (Mulligan & Harris, 2021). In practice, most colleges adopted the proverbial "stick and carrot" technique for increasing vaccination rates among students by employing a mixed strategy of strong vaccination requirements with incentives like tuition and housing credits (Moody, 2021). Rowan University, in particular, offered a $1,000 incentive in credit toward tuition and housing (Beer, 2021; Moody, 2021). Similarly, Bowling Green State University launched a vaccination contest for students and staff. Students were required to be fully vaccinated to be eligible to participate, and winners were rewarded with various prizes ranging from expensive electronics to a full four-year tuition scholarship (BGSU, 2021). Also, in the state of Alabama, Auburn University offered fully-vaccinated students prizes like premium parking passes, unlimited meal plans, and cash scholarships (COVID-19 Resource Center, Auburn University, n.d.; Gibson, 2021).

However, despite the high popularity and success of vaccine incentivization programs on various campuses, the most dominant strategy employed by U.S. colleges and universities has been the enforcement of vaccine mandates (Thomason & O'Leary, 2021). A 2021 report on vaccinations among U.S. colleges and universities indicates that more than 680 colleges across the country have required vaccination by students and staff (Thomason & O'Leary, 2021), and these mandates have been largely successful in improving vaccination equity (Mulligan & Harris, 2021). A model example is the University of Virginia, where a sweeping vaccine mandate was introduced for faculty, staff, and students in the 2021/2022 academic year (University of Virginia, 2021). The results of their approach were admirable from the public health point of view: at least 99% of the school's 23,800 students have become fully vaccinated (Schnell, 2021). In fact, until recently, the university had required students to provide evidence of booster vaccination (Stracqualursi, 2022).

Nonetheless, despite obvious successes with vaccine mandates, it is worthy to note that the success of these mandates in improving vaccination equity can be attributed to two key factors. First is sound public health policy (Mulligan & Harris, 2021). Second, targeted public health communication regarding the benefits of vaccination compliance and the repercussions of non-compliance (Schnell, 2021). For instance, 1% (n=238) of students at the University of Virginia who were unvaccinated at the university's vaccination deadline were disenrolled from classes in the Fall of 2021 for failure to comply with the school's vaccine requirement (Reilly & CNN, 2021; Schnell, 2021), while Xavier University of Louisiana and Virginia Tech followed through with plans to disenroll unvaccinated

students (Burke, 2021; Schnell, 2021). Similarly, the University of Pittsburgh and Rowan University had plans in place to either disenroll unvaccinated students, withdraw permission to stay in residence halls, or both (Moody, 2021; Pitt, 2022; Schnell, 2021); while Quinnipiac University, Birmingham-Southern College, and Wesleyan College imposed monetary fines – ranging from a few hundred to thousands of dollars – on unvaccinated students (Associated Press, 2021; Gibson, 2021)

While these seemingly strong measures were somewhat successful at improving awareness and uptake of the Coronavirus vaccine, they were not without legal challenges (Gershman, 2021; Hattersley-Gray, 2021). For instance, on August 16, 2021, 18 students at Rutgers University, in collaboration with Children's Health Defense, filed a lawsuit against Rutgers University regarding its COVID vaccine mandate, alleging a violation of their right to informed consent, among other rights (Children's Health Defense, 2021; Cordi, 2021). Elsewhere, four students on the female soccer team at Western Michigan University sued the university for violating their religious freedoms due to the decision to implement a vaccine mandate (Polacek, 2021; Thaler, 2021), while eight students at Indiana University petitioned the Supreme Court to stop the university from implementing their proposed vaccine requirements for on-campus education, emphasizing their constitutional rights to autonomy and bodily integrity (Riess & Almasy, 2021). Similarly, in the state of Ohio, fifteen students at Ohio University filed a lawsuit seeking to stop the rollout of the university's vaccine requirement (Maxin, 2022), while a group of students at the University of Cincinnati also sued their university over its vaccination policy (Jarrell, 2022). However, like Indiana University and several others, it is worth noting that most of the courts eventually affirmed the universities' vaccine mandates (Wallace, 2021).

Study Limitations

The results of our study should be interpreted with potential limitations in mind. First, our response rate of 20% suggests that substantial non-response bias may be present. Second, although our sample was randomly selected, students were from only one public university in Northern Ohio. Third, due to the cross-sectional nature of our study, we cannot infer any causality, and we lack the ability to determine whether those who intended to get a vaccine actually received it. Lastly, social desirability bias may have influenced some of the respondents' answers. If that is the case, the percentage of those who are vaccine receptive or hesitant may have been overstated. However**,** the strength of our study is the utilization of well-accepted theoretical models as the framework of our research to increase its validity (Glanz et al., 2015).

Conclusions

As future infectious disease outbreaks occur, it is clear that public compliance – as in the case of vaccine requirements, for instance – as well as persuasion with valuable incentives, are critical to achieving vaccination equity. Public policymakers can consider the current vaccine mandates on U.S. campuses as an effective pilot program that offers critical insight into the public health value of vaccine requirements in modern times. More importantly, the researchers infer that, without these mandates, it would have been difficult, if not impossible, to achieve the current appreciable vaccination rates among young people and the general population. Therefore, our observed attitudes, behaviors, and opinions of young people regarding the coronavirus vaccine can be

invaluable to future public health interventions aimed at promoting vaccine equity among this target group.

References

Associated Press (2021, August 10). *This college is charging students $750 if they're not vaccinated*. New York Post. https://nypost.com/2021/08/10/unvaccinated-students-will have-to-pay-750-at-wv-wesleyan/

Beauchamp, D. E. (1983). What is Public About Public Health? *Health Affairs*, *2*(4), 76–87. https://doi.org/10.1377/hlthaff.2.4.76

Beer, T. (2021, May 6). *Rowan University To Offer Up To $1,000 To Students Who Are Fully Vaccinated*. Forbes. https://www.forbes.com/sites/tommybeer/2021/05/06/rowan-university-to-offer-up-to-1000-to-students-who-are-fully-vaccinated/

Bowling Green State University. (2021, August). *BGSU launches #VaxBGSU, COVID-19 vaccination incentive program for students, faculty, and staff*. Bowling Green State University. https://www.bgsu.edu/news/2021/08/bgsu-launches-vaxbgsu-covid19-vaccination-incentive-program-for-students-faculty-and-staff.html

Brumfiel, G. (2021, July 20). *The Life Cycle Of A COVID-19 Vaccine Lie*. NPR.org. https://www.npr.org/sections/health-shots/2021/07/20/1016912079/the-life-cycle-of-a-covid-19-vaccine-lie

Burke, M. (2021, September 1). *Virginia Tech, Xavier latest universities to disenroll students who don't get Covid vaccine*. NBC News. https://www.nbcnews.com/news/us-news/virginia-tech-xavier-latest-universities-disenroll-students-who-don-t-n1278274

Callaghan, T., Moghtaderi, A., Lueck, J. A., Hotez, P., Strych, U., Dor, A., Fowler, E. F., & Motta, M. (2021). Correlates and disparities of intention to vaccinate against COVID-19. *Social Science & Medicine*, *272*(1982), 113–638. https://doi.org/10.1016/j.socscimed.2020.113638

Centers for Disease Control and Prevention. (2021, November 3). *How to Address COVID-19 Vaccine Misinformation*. Centers for Disease Control and Prevention. https://www.cdc.gov/vaccines/covid-19/health-departments/addressing-vaccine-misinformation.html

Centers for Disease Control and Prevention (2022a, June 30). *COVID-19 Vaccination for Children 5-11 Years Old*. Centers for Disease Control and Prevention. https://www.cdc.gov/vaccines/covid-19/planning/children.html

Centers for Disease Control and Prevention (2022b, April 13). *COVID-19 Vaccination*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/reporting-vaccinations.html

Centers for Disease Control and Prevention (2022c, July 21). *COVID Data Tracker*. Centers for Disease Control and Prevention. https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-people-additional-dose-totalpop

Centers for Disease Control and Prevention (2022d, July 14). *COVID-19 Vaccination*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/your-vaccination.html

Centers for Disease Control and Prevention (2022e, August 1). *COVID-19 and Your Health*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/adverse-events.html

Centers for Disease Control and Prevention. (2022f, July 20). *Myths and Facts about COVID-19 Vaccines*. Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html

Centers for Disease Control and Prevention. (2022g, April 5). *Tennessee COVID-19 Health Disparity Task Force Builds Trust to Battle Misinformation | CDC*. Www.cdc.gov. https://www.cdc.gov/vaccines/covid-19/health-departments/features/tennessee.html

Childrens Health Defense. (2021, August 17). *Children's Health Defense Sues Rutgers University Over COVID Vaccine Mandate*. Children's Health Defense. https://childrenshealthdefense.org/defender/chd-sues-rutgers-university-covid-vaccine-mandate/

Cordi, P. (2021, August 25). *Why I filed a lawsuit against my university's COVID vaccine mandate*. The College Fix. https://www.thecollegefix.com/why-i-filed-a-lawsuit-against-my-universitys-covid-vaccine-mandate/

COVID-19 Resource Center | Auburn University. (n.d.). Auburn.edu. Retrieved July 22, 2022, from https://auburn.edu/covid-resource-center/vaccine-incentive/

Farber, N. (2011, January 19). *National Blaming Week | Psychology Today*. www.psychologytoday.com. https://www.psychologytoday.com/us/blog/the-blame-game/201101/national-blaming-week

Gershman, J. (2021). Universities Face Student Lawsuits Over Covid-19 Vaccine Mandate. In *Wall Street Journal*. https://www.wsj.com/articles/universities-face-student-lawsuits-over-covid-19-vaccine-mandate-11628242202

Gibson, K. (2021, August 19). *Unvaccinated college students face COVID-19 test fees—and sometimes stiff fines*. Www.cbsnews.com. https://www.cbsnews.com/news/covid-19-college-students-testing-fees-fines/

Glanz, K., Rimer, B., & Viswanath, K. (2015). *Health behavior: Theory, research, and practice.* (5th ed.). New York, Ny John Wiley & Sons.

Hamel, L., Kearney, A., Kirzinger, A., Lopes, L., Muñana, C., & Brodie, M. (2020, September 10). *KFF Health Tracking Poll – September 2020: Top Issues in 2020 Election, The Role of Misinformation, and Views on A Potential Coronavirus Vaccine*. KFF. https://www.kff.org/coronavirus-covid-19/report/kff-health-tracking-poll-september-2020/.

Harvard School of Public Health. (2021, February 9). *Fighting the spread of COVID-19 misinformation*. News. https://www.hsph.harvard.edu/news/features/fighting-the-spread-of-covid-19-misinformation/

Hattersley-Gray, R. (2021, July 2). *Campus Vaccine Mandates Face Legal Challenges*. Campus Safety Magazine. https://www.campussafetymagazine.com/news/campus-vaccine-mandates-face-legal-challenges/

Henricks, T. (2020, May 18). *Scapegoating: Why We Blame Others for Our Problems | Psychology Today*. Www.psychologytoday.com. https://www.psychologytoday.com/us/blog/the-pathways-experience/202005/scapegoating-why-we-blame-others-our-problems

Howard, J. (2022, February 20). *"We're Pro-Vaccine But" | Science-Based Medicine*. Science-Based Medicine. https://sciencebasedmedicine.org/provaccine/

Jarrell, Z. (2022, January 17). *UC students sue over COVID-19 vaccination requirement*. The News Record. https://www.newsrecord.org/news/uc-students-sue-over-covid-19-vaccination-requirement/article_1d78e1a2-7811-11ec-bec5-c7ef0c479c93.html

Khubchandani, J., Sharma, S., Price, J. H., Wiblishauser, M. J., Sharma, M., & Webb, F. J. (2021). COVID-19 Vaccination Hesitancy in the United States: A Rapid National Assessment. *Journal of*

Community Health, *46*(2), 1–8. https://doi.org/10.1007/s10900-020-00958-x
Krueger, R. A., & Mary Anne Casey. (2000). *Focus Groups: a practical guide for applied research*. Sage Publications, Inc.
Maxin, R. (2022, January 12). *OU students, employee sue university over COVID-19 mandates*. The Post. https://www.thepostathens.com/article/2022/01/ohio-university-students-sue-university-vaccine-mandate
Merriam-Webster. (n.d.). *Definition of PROPITIOUS*. Www.merriam-Webster.com. Retrieved July 22, 2022, from https://www.merriam-webster.com/dictionary/propitious
Merriam-Webster. (2019a). *Definition of GRATITUDE*. Merriam-Webster.com. https://www.merriam-webster.com/dictionary/gratitude
Merriam-Webster. (2019b). *Definition of TRUST*. Merriam-Webster.com. https://www.merriam-webster.com/dictionary/trust
Moody, J. (2021, August 12). *Colleges Requiring a Coronavirus Vaccine for Fall*. US News & World Report; U.S. News & World Report. https://www.usnews.com/education/best-colleges/articles/colleges-requiring-a-coronavirus-vaccine-for-fall-what-to-know
Mulligan, K., & Harris, J. (2021, July 8). *COVID-19 Vaccination Mandates for School and Work Are Sound Public Policy*. USC Schaeffer. https://healthpolicy.usc.edu/research/covid-19-vaccination-mandates-for-school-and-work-are-sound-public-policy/
Muñana, C., Hamel, L., Kirzinger, A., & Brodie, M. (2020, December 15). *KFF COVID-19 Vaccine Monitor: December 2020*. KFF. https://www.kff.org/coronavirus-covid-19/report/kff-covid-19-vaccine-monitor-december-2020
Mundt, D. (2021, April 13). *More vaccine than arms to put it in*. Denison Bulletin & Review - DBRNews.com. https://dbrnews.com/news/more-vaccine-than-arms-to-put-it-in/article_2f493244-9ca5-11eb-b90b-8ff33f358930.html
Nazareth, M., Richards, J., Javalkar, K., Haberman, C., Zhong, Y., Rak, E., Jain, N., Ferris, M., & A.L. van Tilburg, M. (2016). Relating Health Locus of Control to Health Care Use, Adherence, and Transition Readiness Among Youths With Chronic Conditions, North Carolina, 2015. *Preventing Chronic Disease*, *13*(160046). https://doi.org/10.5888/pcd13.160046
Nazlı, Ş. B., Yığman, F., Sevindik, M., & Deniz Özturan, D. (2021). Psychological factors affecting COVID-19 vaccine hesitancy. *Irish Journal of Medical Science (1971 -)*, *191*(1). https://doi.org/10.1007/s11845-021-02640-0
Polacek, S. (2021, August 31). *4 Western Michigan Women's Soccer Players Sue School over COVID-19 Vaccine Mandate*. Bleacher Report. https://bleacherreport.com/articles/10011446-4-western-michigan-womens-soccer-players-sue-school-over-covid-19-vaccine-mandate
Pitt: Unvaccinated students disenrolled for spring semester. (2022, January 12). MSN. https://www.msn.com/en-us/news/us/pitt-unvaccinated-students-disenrolled-for-spring-semester/ar-AASGfYB
Reilly, L., & CNN. (2021, August 23). *University of Virginia disenrolls 238 students for not complying with university's vaccine mandate*. ABC7 Los Angeles. https://abc7.com/university-of-virginia-disenroll-disenrolled-unvaccinated-vaccine-mandate-covid/10969693/
Riess, R., & Almasy, S. (2021, June 23). *Students sue Indiana University over vaccine mandate*. CNN. https://www.cnn.com/2021/06/22/us/indiana-university-covid-19-vaccination-lawsuit/index.html
Rowan University. (n.d.). *Vaccination Rates*. Www.rowan.edu. Retrieved July 22, 2022, from https://www.rowan.edu/returntorowan/vaccination-rates.html
Schnell, L. (2021, August 24). *More colleges are requiring the COVID-19 vaccine. Some are starting*

to kick out unvaccinated students. USA TODAY. https://www.usatoday.com/story/news/education/2021/08/24/some-colleges-and-universities-kicking-unvaccinated-students-out-school/5579106001/

Search Results from the VAERS Database. (2022, July 22). Www.medalerts.org. https://www.medalerts.org/vaersdb/findfield.php?TABLE=ON&GROUP1=CAT&EVENTS=ON&VAX=COVID19

Skelton, C. (2019). *Jacobson v. Massachusetts, 197 U.S. 11 (1905)*. Justia Law. https://supreme.justia.com/cases/federal/us/197/11/

Soares, P., Rocha, J. V., Moniz, M., Gama, A., Laires, P. A., Pedro, A. R., Dias, S., Leite, A., & Nunes, C. (2021). Factors Associated with COVID-19 Vaccine Hesitancy. *Vaccines*, *9*(3), 300. https://doi.org/10.3390/vaccines9030300

Stosny, S. (2020, July 12). *Outgrow the Impulse to Blame | Psychology Today*. Www.psychologytoday.com. https://www.psychologytoday.com/us/blog/anger-in-the-age-entitlement/202007/outgrow-the-impulse-blame

Stracqualursi, V. (2022, February 1). *Virginia universities end student vaccine mandates after state attorney general's legal opinion*. CNN. https://www.cnn.com/2022/01/31/politics/virginia-universities-covid-vaccine-mandates/index.html

Thaler, S. (2021, August 31). *Soccer players sue Western Michigan over vaccine mandate*. Mail Online. https://www.dailymail.co.uk/news/article-9943927/Four-soccer-players-sue-Western-Michigan-vaccination-mandate-violates-religious-freedom.html

Thomason, A., & O'Leary, B. (2021, October 26). *Here's a List of Colleges That Require Students or Employees to Be Vaccinated Against Covid-19*. Chronicle.com. https://www.chronicle.com/blogs/live-coronavirus-updates/heres-a-list-of-colleges-that-will-require-students-to-be-vaccinated-against-covid-19

Tyson, A., Johnson, C., & Funk, C. (2020, September 17). *U.S. Public Now Divided Over Whether To Get COVID-19 Vaccine*. Pew Research Center Science & Society. https://www.pewresearch.org/science/2020/09/17/u-s-public-now-divided-over-whether-to-get-covid-19-vaccine/

University of Virginia. (2021, January 22). *Vaccinations*. Coronavirus Information. https://coronavirus.virginia.edu/vaccinations

Wallace, D. (2021, August 3). *College vaccine mandates: Highest court yet affirms Indiana University requirement*. Fox News. https://www.foxnews.com/us/college-vaccine-mandate-appeals-court-ruling-indiana-university

Weber, L., & Barry-Jester, A. M. (2021, September 15). *Over Half of States Have Rolled Back Public Health Powers in Pandemic*. Kaiser Health News. https://khn.org/news/article/over-half-of-states-have-rolled-back-public-health-powers-in-pandemic/

World Health Organization. (2015, August 18). *Vaccine hesitancy: A growing challenge for immunization programmes*. Www.who.int. https://www.who.int/news/item/18-08-2015-vaccine-hesitancy-a-growing-challenge-for-immunization-programmes

World Health Organization. (2021a, March 31). *Side Effects of COVID-19 Vaccines*. Www.who.int. https://www.who.int/news-room/feature-stories/detail/side-effects-of-covid-19-vaccines

World Health Organization. (2021b, April 27). *Fighting misinformation in the time of COVID-19, one click at a time*. Www.who.int. https://www.who.int/news-room/feature-stories/detail/fighting-misinformation-in-the-time-of-covid-19-one-click-at-a-time

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