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Higher Education Financing in Ghana: The Case of the Ghana Education Trust Fund (GETFund)

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ABSTRACT

I examine the Ghana Education Trust Fund (GETFund), an agency established by the Ghanaian government to finance higher education institutions. I focus on the organizational and governance structure of the GETFund and the autonomy of the fund. Some important research questions in the literature include the justification for creating such Funds, the extent of power these funds hold, and the degree of control their sector ministries exert over them. The study argues that if the autonomy and control issues are addressed properly by giving the GETFund a more appropriate level of autonomy, the fund can use its resources to the fullest. Still, as it stands, it appears that the GETFund does not have its statutory autonomy, leading to a clash of goals. This limited autonomy of the GETFund does not help the management of the GETFund understand the complexity of the revenue streams and their effect on the GETFund's organizational and governance structure.
Keywords: financing, autonomy, agency, government, organizational structure, governance structure, Ghana

Higher education is imperative for national development. Marina and Irina (2025) note that higher education is closely tied to productivity and economic growth and is supported by many governments worldwide. As the demand for higher education has risen over time, so has its cost, putting pressure on governments and individual households. Given its importance in economic development, many countries initially offered free higher education. However, rising costs coupled with declining national resources resulted in cost-sharing between governments and students (Salmi, 2003). The shortcoming of this strategy is that poor populations are denied access to higher education (Woodhall, 2004). In response, governments introduced financial support systems, principally student loan schemes, to promote equal access to higher education (Ziderman, 2013).

Student loan schemes have become one of the alternative solutions to the financial challenges facing higher education institutions worldwide. They provide considerable financial relief for students. Mostly, loans enable student beneficiaries to delay payment for higher education until they complete school and are employed (Ziderman, 2013). Many student loan schemes have been established by many governments and are publicly financed. Usher (2005) identified Australia, Canada, Germany, the Netherlands, New Zealand, Sweden, the United Kingdom (UK) (England and Wales), and the United States as some of the countries with long-standing publicly funded student loan programs. Such schemes are also common in African countries, including Zambia, Kenya, Tanzania, Rwanda, Uganda, Botswana, Lesotho, South Africa, and Ghana.

In South Africa, realizing the growing problem of inadequate access to higher education faced by disadvantaged students, the South African government established the National Student Financial Aid Scheme (NSFAS) as an income-contingent funding arrangement in 1996 (Wildschut et al., 2018). Essentially, the focus of NSFAS is on promoting equal access in higher education participation and establishing an affordable funding scheme (Wildschut et al., 2018). NSFAS is currently the leading student financial aid scheme in South Africa and has grown significantly that between 1999 and 2013 NSFAS funding grew from R441 million to R8.5 billion (Wildschut et al., 2018). According to the 2021 NSFAS report, the government released approximately R43 billion to fund students in all higher education institutions in 2021 (NSFAS, 2021). A total of R171 billion has been released by this funding scheme since 1999 (NSFAS, 2021). There have also been increases in the total number of students funded per year. In 2016/17, 451,507 students were funded, up 9% from 414,949 students funded in the 2015/16 financial year (NSFAS, 2016/17). Since 1999, more than 4.5 million students have been assisted by the Fund (NSFAS, 2021).

Since independence, financing higher education in Ghana has always been the sole responsibility of the central government. Students enrolled in public universities of Ghana have enjoyed tuition-free education, free room and boarding, and even the provision of allowances to cover living expenses and academic amenities, such as textbooks (Abass et al., 2024). This condition lasted until the end of the 1960s, when the education budget bloated to the level that the government could no longer afford to remain the sole sponsor of education in the country (Awotwe, 2020). The result of this was the neglect of certain sectors of education, particularly higher education.

The government alone could not afford the responsibilities of funding tertiary education in Ghana. Higher education has been predominantly free with no tuition fee, and the government provides for accommodation, boarding, and allowances for books and living expenses (Sawyerr, 2001). While the budget for education was increasing, other public and social services were competing for limited government financial resources, so there was a need to introduce some kind of cost-sharing mechanisms (Bondzi–Simpson & Agomor, 2021).

In Ghana, where the higher education system is constitutionally funded by the state, the introduction of cost-sharing policies has not only been politicized and rejected but also brought inequalities, making higher education exclusive for the socially privileged (Acquah, 2021). Given this, the government introduced a meagre cost-sharing mechanism by establishing a student loan scheme (Dadzie, 2009). The rationale of the loan scheme was to reasonably spread the cost of education among the students, parents, and government (Addo & Adusei, 2021). Even though parents and students contributed to the financing of higher education under the cost sharing policy, higher education continued to take a sizeable part of the government's annual budget and higher education remained under funded, because the contributions of students and their parents were woefully inadequate (Abass et al., 2024). Higher education institutions were faced with numerous challenges, such as the increasing rate of the number of tertiary education students; deterioration of academic and residential facilities; lack of better pay incentive to reward academic staff; brain drain, quality and relevance of academic programs to national development agenda; and other related problems remained the hallmark of higher education development in Ghana (Pongo, 2018).

Aware of these predicaments and appreciating the importance of higher education to national development, Parliament passed a bill that created the Ghana Education Trust Fund in 2000, which levies a 2.5% Value Added Tax (VAT) on goods and services to complement government budgetary allocations to education (GETFund Act, 2000). The aim is to offer financial resources to support all educational institutions and offer financial assistance to genuinely needy and academically talented students. Hence, this study is an analysis of the organizational and governance structure of the Fund. The study also examines how much autonomy the Fund has and how much control is exerted by the Government.

Research Questions

My choice was to study the GETFund from a specific analytical perspective, that is, principal-agent theory. Taking that as a starting point, the following research questions have been formulated:

1. How is the GETFund organized and governed?
2. How has the organizational autonomy of the GETFund developed since its establishment?

THEORETICAL FRAMEWORK

In this study, I largely explain perspectives and some strands of the principal-agent theory. I anticipated this theory would provide some important explanatory factors about how GETFund is organized and governed, and how the fund is controlled by the Sector Ministry. Fundamental arguments for the theory are presented in the following sections.

Principal-Agent Theory

Through this theory, we can examine the link between two rational actors who have gone into a contractual relationship. The principal-agent relationship arises when one party (the principal) employs another party (the agent) to carry out a function or set of tasks on behalf of the principal (Kassim & Menon, 2003).

The principal-agent theory is a relevant approach for studying the contractual relationship between the government and its policy implementation agencies. It concentrates on how to govern the most effective contractual relationship between the sector Ministry and its agencies in the circumstance that forms the setting of goals (Buchanan et al., 2014). By giving functions to agencies, a contractual relationship is developed between the government and its agencies. Arising from that contractual relationship are the problems of information irregularity and the goal confusion between the two (Lægreid et al, 2006). The situation of information irregularity and goal conflict is particularly widespread in the public sector because public policies are often unclear concerning the goals, and policy actors do not always share the same goals (Bernhold & Wiesweg, 2021).

The issue of information irregularity is of central concern to the principal-agent theory. It is claimed that agents have a tendency to have more information than principals because of their specialization (more expertise) and due to their proximity to the point of service delivery (customers; Colin, 1994). Agencies are well-positioned to know the real costs, quality, and volume of goods and services delivered. In their own right, they are specialists in their fields, and they know the situations under which they produce the necessary goods and services (Bernhold & Wiesweg, 2021).

According to Kassim and Menon (2003), the irregularity of information allows the agency to engage in unscrupulous behavior that disturbs the interests of the principal. For instance, while the government may desire to ease the cost of public services by demanding the well-organized and efficient use of resources, agencies may be more concerned about increasing budgets for their offices so that their benefits also increase. Here we can see a clear clash of interests between the principal and the agent. The agent may as well spend fewer hours, less effort, and fewer skills in dealing with the productivity and the eminence of public services (Buchanan et al., 2014).

Buchanan et al. (2014) contend that because of information irregularity and goal confusion, the principal-agent relationship is characteristically challenged with the agency's unscrupulous behavior, and control of some kind is certainly necessary. Ensuring control to limit the avoidance of certain forms of behavior of the agent is essential to the principal, but the challenge has been how to achieve perfect obedience from the agent (Bernhold & Wiesweg, 2021).

The principal-agent model offers several ways of reducing these agency problems. In the literature, solutions are of two types depending on the nature of the problem to be solved. The first set of solutions is associated with information sharing and revealing actions to tackle the subject of information irregularity between the principal and agent (Verhoest, 2005). These measures would include performance monitoring, appraisal, and performance auditing, and these actions can help lessen the problems of an information breach between agencies and their sector Ministries (Lane, 2008). This permits the responsible sector Ministry to perceive not only any unscrupulous behavior of an agency but also to know the intervening environmental factors that may hinder the agency's candid efforts for success (Lane, 2008).

The principal-agent theory, therefore, advises that creating agencies necessitates the government to confirm that there is sufficient performance information flowing from the agencies (Laffont, 2003). This would permit the government to know the real costs, quality of goods, and the hard work put forth by the agency in producing the goods and services required. Because the principal has some information to help him or her to verify the agency's performance, the agency is expected to act in the principal's interest (Laffont, 2003).

Moreover, the government may employ methods to reduce goal confusion between agencies and their sector Ministries. The most important actions would include having the government design a well-functioning performance contract that sets clear performance goals, uses performance indicators for assessing results, and inspires agencies to attain those predetermined performance goals by introducing performance-related incentives (Verhoest, 2005). These foundations would help both actors (government and agencies) to have clear performance goals and to know what is anticipated from each actor, and here the question of goal uncertainty is abridged (Bernhold & Wiesweg, 2021). It is really contended that performance-connected payment may not only integrate the agency's interest with that of the government, but it also tends to move failure from the government to the agency. The disagreement here is that when the agency's performance is connected to expected performance, the agency may try as far as possible to see to it that expected criteria for decent performance are met so that its benefits are not reduced (Bernhold & Wiesweg, 2021). The two sets of solutions discussed above (information revealing measures and the design of a well-performing performance contract) have been defined in recent literature as management by results or result-based control (Lægreid et al, 2006).

Following the above discussions, when it comes to this study, the principal-agent theory would help to find out why the agency (GETFund) was established, how decisions are made the way they are made, and what the level of autonomy is for the Fund when it comes to making decisions. In this study, the GETFund is assumed to have a level of organizational capacity to cope with government influence. This is where this theory is important in revealing the extent to which the Fund can cope with government interference without compromising its effectiveness and efficiency.

Again, including the principal-agent theory in the analytical framework for this study is aimed at making it possible to examine the quality level of information delivery between the government as the principal and the GETFund as the agent, and how to resolve any information irregularity. The theory is also expected to help in placing this study in a relevant context when it comes to goal confusion that sometimes arises because of governments' interference and imposition of their policies on agencies.

METHOD

In this article, I employ the use of qualitative research methodology. Bryman (2012) posits that qualitative research is a research strategy that emphasizes words rather than quantification in the collection of data. Using qualitative research methodology, the researcher interviewed the GETFund Administrator about organizational structure, organizational autonomy, and the governance structure of the GETFund. In addition, government and other documents were examined and analyzed.

The GETFund Administrator was carefully chosen as an interviewee for this study. A pilot examination of the GETFund indicates that to get information about the operations of the Fund, one must look for specific individuals who have an in-depth knowledge about the operations of the Fund. Rubin and Rubin (2005), for example, underscore that to secure the reliability of research, the researcher should interview people who understand and have deeper information on the issue. Rubin and Rubin (2005) believe that the credibility of interviews depends on the knowledgeability of the interviewees or participants of the study. This means having an interviewee with different perspectives is an added advantage to the richness and quality of information collected. Moreover, it is only when you get individuals who understand the object of research, such as the activities and operations of the GETFund, that this requirement of reliability can be met.

Purposefully, the researcher identified and interviewed the GETFund Administrator because he met the following criteria:

a. The Administrator has actively been involved in the decision-making of the Ghana Education Trust Fund (GETFund).

b. The Administrator is aware of the operations of the Fund–formulation and implementation of the Ghana Education Trust Fund–and understands the goals and objectives of the Fund.

The purpose of this was to gather rich information that illuminates the research questions for the study. As noted by Patton (2002), the logic and power of purposeful sampling lie in selecting information-rich cases for the study. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry.

Document analysis is seen as one of the essential approaches to get information in the framework of a qualitative study. Documents collected for this study include GETFund's annual reports, official government publications, and educational policy reports. This study exploited the countless documents, reports, and information relating to the financing of higher education in Ghana. Government report papers on higher education and agencies were fully analyzed by considering the objectives and purposes of those reports. Emphasis was placed on government reports and papers on funding higher education, which has posed a serious challenge over the past four decades. In addition, policy papers, reports, and publications from the Ghana Education Trust Fund are the most accessible resources and reference tools for the study. Finally, publications and reports, and other important documents from the Ministry of Education and the National Council for Tertiary Education were critically considered in the study.

In this direction, I communicated with the appropriate offices, such as the Ministry of Education, the Ghana Education Service, the National Council for Tertiary Education, and the Ghana Education Trust Fund's headquarters to obtain all the necessary documents for the study. Having access to and understanding of documents on the research topic expands the richness of information for qualitative study, and learning to use, study, and understand documents and files is part of the stock of skills needed for qualitative inquiry (Patton, 2002).

GHANA EDUCATION TRUST FUND (GETFUND)

By far, one of the most important recommendations in the funding regime of tertiary education was the establishment of an education trust fund. This policy has been described by Effah (2003) as a *landmark policy* initiative in Ghana. In January 1999, the President of Ghana at the time incorporated the National Union of Ghana Students' (NUGS) proposal into his annual address to Parliament, and a technical committee subsequently recommended its broad objectives and outlines. Debates over the policy framework on the Fund led to a series of parliamentary deliberations until 2000, when the Ghana Education Trust Fund Act 581 of 2000 became law (Effah, 2003). The Internal Revenue Service was required to increase the already existing Value Added Tax (VAT) rate from 10 percent to 12.5 percent, of which 2.5 percent was scheduled for the GETFund account to supplement government budgetary allocations to education (GETFund Act 581).

In 2005, the GETFund announced the establishment of the Student Loan Trust Fund (STLF) under the GETFund with seed money of over 60 million Ghana Cedis (Atuahene, 2009). Student Loan Trust Fund (SLTF) provides loans to Ghanaian students in approved higher education institutions. The table below shows the total amount released by the Fund and the number of student beneficiaries. The amount is in Ghana cedis.

Table 1: Student Loan Trust Fund Annual Report (2019, 2020, 2023)

Construct	Min.	Max.	*M*	*SD*
Transformational	1.25	5.00	3.56	.78
Transactional	1.33	4.67	2.97	.77

From the table above, the Fund released 75, 964, 069 Ghana Cedis to about 30, 870 students in all higher education institutions in 2019. In 2020, a total of 23, 961 students in the higher education institutions received an amount of 53, 098, 425 Ghana cedis from the Fund. There was a reduction of an amount of 22, 865, 644 Ghana cedis and a decrease of 6, 909 students. In 2023, a total of 44, 927 students from higher education institutions received an amount of 52, 900, 230 Ghana cedis. There was a reduction of 198, 195 Ghana cedis from 2020. However, there was an increase of about 20, 966 students.

Recovery of loans has generally been a challenge worldwide. Shen and Ziderman's (2009) study of 44 loan schemes in 39 countries found an average recovery rate of 39 percent. Loan repayment arrangements can be income contingent, where repayment is a fixed percentage of the beneficiary's income, which is the case in Ghana's GETFund loans. Income-contingent repayment loans are more prevalent worldwide (Ziderman, 2013). The Fund allows for various means of repayment, including banks, cheque or cash payments at the Fund's headquarters, and cheques at its offices across the country (Boamah, 2015). The average monthly repayment per beneficiary was approximately GH¢50, while the loan recovery rate was around 55 percent (Bokpe, 2018).

FINDINGS, ANALYSIS, AND DISCUSSION

This section provides an analysis of the organizational structure, the governance structure, and the autonomy of the GETFund as perceived by the sampled respondent from the Fund. The documentary analysis consists of two different sets of data: the analysis of reform documents in general and the analysis of documents related to the official policy documents that explain the operations of the Fund. In what follows, the specific research questions are discussed in turn with data from the study.

The Organizational and Governance Structure of GETFund

According to Greenberg (2011), the term organizational structure refers to formal structures between individuals and groups concerning the allocation of tasks, responsibilities, and authority within the organization. Mintzberg (2009) points out that organizations or agencies can be distinguished along three basic dimensions: (1) the core part of the organization, that is, the part responsible for the main task that determines its success or failure; (2) the key organizing mechanisms, which are the primary methods organizations or agencies use to structure their activities; and (3) the level of decentralization employed, meaning how much organizations or agencies involve subordinates in the decision-making process.

The chairperson is appointed directly by the President of Ghana, and then there is an ex-officio member. There is an *ex-officio* member on the board because the law says that a member of the Ghana Revenue Authority should be a member of the board, who is the Commissioner General of the Ghana Revenue Authority. He is a permanent member of the board. The remaining members are the representatives of the specific bodies and institutions mentioned in the act. So, the Fund has: the religious bodies bringing their representative, Ghana National Association of Teachers and National Union of Ghana Students bringing their representatives, Ghana Employers Association bringing their representatives, financial institutions, that is, banking, insurance, non-insurance, non-banking bringing their representatives, and then the Ministry of Education, the Ministry of Finance also bringing their representatives. According to the structure, the GETFund has four levels- the board of trustees, the administrator and his deputy, management, and administration. The highest internal body next to the Board of Trustees is the Administrator and his deputy, who have the responsibility of managing the Fund on a day-to-day basis. The third highest body within the Fund is in the form of management officers, such as the financial controller, auditor, technical unit, and finance unit. Finally, there is the administration, which must make sure that the office of the GETFund is in good working conditions all the time in terms of the provision of logistics needed for the running of the office.

This is consistent with the work of Greenberg (2011). He argues that organizations or agencies need the coordinated work of many people to be able to function efficiently and effectively. The principal-agent theory also agrees that the division of labor and specialization are central to many of these organizations. Judging by the definition, the GETFund structure looks like a traditional model of public administration, as it is clearly under the control of the Ministry of Education. It is also hierarchically arranged and staffed by permanent officials. The GETFund also acts on the policy directives from the Ministry of Education. This is how the GETFund looks like according to the interviewee:

> We have the board of trustees at the top (…). We have the administrator (…). He is the Chief Executive Officer of the Fund. He has a deputy. We have management (…). We have a financial controller (…). We have an auditor (…). We have a technical unit (…). They do this in collaboration with the finance unit (…). We have administration (…). The Ministry of Education gives policy directives to the board. This is a policy directive, then the GETFund would now, under this policy directive, allocate funds to make sure that this policy directive is given effect.

Greenberg (2011) goes on to offer the characteristics and criteria for modern bureaucracy in the bureaucratic organization. For example, officials are generally free and are employed based on a contract. Officials are employed, not elected. Weber argues that elections alter the firmness of hierarchical subordination. Officials are employed based on professional qualifications. Officials have fixed salary and pension conditions. The official's post is his only or main occupation. An occupational structure exists with promotion based on merit. The employee is subject to a cohesive control and disciplinary standard in which the means of coercion and their use are clearly defined. The interviewee's response is an excellent illustration of the characteristics and criteria for GETFund:

> GETFund is part of the public services in Ghana. For the conditions of service, everything is guided by the rules emanating from the Public Service Commission. The tenure of an employee is permanent.... According to the specifications of the scheme, one periodically gets promoted.... This is the general framework within which GETFund operates, so that once a person is appointed here, until the person leaves for personal reasons, misconduct, or death, he or she cannot be removed but could be reassigned to other places, on transfer or to other public organizations.

A significant difference to this classical model of public administration was brought to the fore by Woodrow Wilson, who brought in the politics-administration division. Wilson (1887) defined public administration as the detailed and systematic execution of public law, and he argues that there should be a clear separation of politics from administration because administration lies outside the appropriate field of politics and administrative matters are not political matters. This argument is found to take a different form from the perception of the interviewee's suggestion of the prevalence of the government's interference in the decisions of the Fund. Mintzberg (2009) strongly argues that the division between politics and administration would not only get rid of the arbitrariness and corruption in the public administration, but also may have broader consequences (Mintzberg, 2009). At the core of the principal-agent theorization, particularly concerning the examination of bureaucratic incompetence, is the argument that human beings are rational actors and utility maximisers (Lægreid et al., 2006). According to principal-agent theory, it is this economic rationality that forms actors' behavior and their successive choices, and not entirely politics.

Contrary to this theory, the earlier discussions show various government interferences in the internal affairs of the GETFund, the major one being the policy directives from the Ministry of Education. The researcher agrees with Mintzberg (2009), who argues that, from a theoretical point of view, achieving the separation of politics from administration appears to be very easy, but in practice, this separation has not been total and clear.

In this makeup, even though the nature of the structure was, in general, hierarchical, critical analysis of power distribution reveals how the hierarchical structure was dictated by collective decision making. For example, though the apex of authority of the GETFund rises as one moves from bottom to top as is the case in the traditional single line bureaucracy, it is highly overtaken by horizontal relationships when it comes to the dynamics of interactions at a specific level such as between the administrator and the board of trustees, auditor and financial unit and management and administration. Although the GETFund is run by an Administrator and his deputy appointed by the government, the highest decision-making body is vested in the Board of Trustees. All in all, the organizational structure of the GETFund draws on predominantly collective decision-making in practice, but in law, it is hierarchical. Each of the units or bodies, like the audit unit, financial unit, management, and administration, is positioned and connected to the unit heads at its respective level. The following statement from the interviewee is an excellent illustration of what has been discussed above:

> The Fund was set in a hierarchical way, but in practice, we take collective decisions. Every department, made up of three to six members, meets on a day-to-day basis to deliberate on matters concerning their department. Any decision taken is presented to the administrator through their head before the administrator also presents it to the board of trustees. If there is a need for input from other departments, it is done before the final decision reaches the administrator. For example, the audit department often than not takes decisions in collaboration with the financial unit.

The GETFund is, therefore, organized as follows: At the top of the fund is the Board of Trustees, which is followed by the administrator and his deputy. Next in command is the management, which consists of a financial unit, an audit unit, a financial controller, and a technical unit. The final level is the administration.

Governance is the processes and interactions by which an organization engages and consults with its stakeholders and accounts for its achievements (Wilkins & Mifsud, 2024). Governance depicts how things are decided and then realized within an agency. Governance is thus an important issue for any agency or organization and determines how they are directed, administered, or controlled (Wilkins & Mifsud, 2024).

The Fund constitutes a seventeen-member Board of Trustees. The Board of Trustees of the GETFund is charged with the responsibilities, including policies concerning the goals and objectives of the Fund, overseeing the collection of monies for the fund, maintaining and keeping an accounting system, and raising funds and investing monies into productive ventures considered beneficial to the Fund. This is consistent with the findings by OECD (2004) six core functions of an agency. It was revealed that almost all six core functions, as enumerated by the OECD, were exercised by the Fund.

However, the board of trustees, in exercising its functions and power, shall receive policy directives from the Ministry of Education (GETFund Act, 2000). As part of this control exercised by the Minister, the Board is required by the Act to submit a report summarizing the general activities of the Fund within six months at the end of each financial year for scrutiny by the Minister; this report is then submitted to parliament two months after receipt (GETFund Act, 2000). The Board oversees the direct application of the Funds within a policy framework guiding the drawing up of the distribution formula. The Board exercises a supervisory function. For example, they can direct that the funds should be applied in line with the Fund's objectives for a particular year (GETFund Act, 2000). This result is in line with the proponents of the principal-agent theory in the sense that there is a link or contractual agreement between the government and the Fund. The government set up the Fund and gave it specific responsibilities. For example, the Fund was set up to provide a supplementary budget for funding education in Ghana.

This result again concurs with the main argument of principal-agent theory. The theory argues that, at the core of the public choice theorization, particularly concerning the examination of bureaucratic incompetence, is the argument that human beings are rational actors and utility maximisers (Colin, 1994). According to the theory, it is this economic rationality that forms actors' behavior and their successive choices in making decisions. It makes a case that bureaucrats are, in fact, egoistic, rational, and utility maximisers, and therefore, given the opportunity, they can step out of their boundaries and do things to maximize their satisfaction against the corporate interests of the agency. The government is, therefore, obligated to be part of the decisions of agencies to minimize the level of egoism.

Moreover, the Act lays down the policies and procedures by which Funds can be accessed by the institutions and agencies under the Ministry of Education (GETFund Act, 2000). These procedures have checks and balances that serve as a monitoring tool to ensure the smooth implementation of the policy. The GETFund is supposed to get its funds from a 2.5% Value Added Tax (VAT) on goods and services, which is supposed to go straight into the GETFund's account open at the Bank of Ghana (GETFund Act, 2000). These proceeds are accrued from the VAT deductions and are shared in a distribution formula approved by parliament. The GETFund is supposed to use some of it for the running of the secretariat, so salaries and everything that go into the running of the secretariat are charged to the distribution formula. Every year, the GETFund's budget is sent to parliament for approval, and then the managers of the Fund use some of the money to run the secretariat.

The interviewee emphasized that this is supposed to be a very unproblematic and straightforward issue, but the challenge is that the government withholds the money at the Ministry of Finance and pays the GETFund as and when it deems fit. The action of the government in this regard is therefore contrary to the law that established the Fund. The consequence of this action is that there is always a delay in receiving the money from the government. This, in turn, delays most of the projects earmarked for a specific year. When the beneficiaries of various projects (higher education institutions) complain about the implementation delay, the government hides under the autonomous nature of the Fund, as stipulated in the law, to blame the GETFund for delaying the execution of the projects to win a political point.

Development of the Organizational Autonomy of the GETFund since its Establishment

Central to the idea of creating agencies outside the Ministries is to give these agencies some flexibility to discharge their duties to the best of their knowledge, as some of these employees who work in these agencies are professionals. As is the case elsewhere, in Ghana, the autonomy of agencies usually emanates from the statutory, and GETFund is no exception (GETFund Act, 2000).

The fundamental notion behind autonomy is that by giving organizations more suppleness and managerial autonomy, the performance of public organizations is expected to be improved. It is presumed that there is a positive link between organizational autonomy and the level of performance of a particular organization (Blom-Hansen et al., 2024).

This research explains autonomy as the decision-making abilities of an agency, or the degree to which the agency can decide for itself on matters it finds important for reaching its goals. In the context of the public sector, this means that the agency is freed from centrally indomitable rules and regulations concerning input management (Verhoest et al., 2004). Therefore, theoretically agencies are free to make their own decisions on human resources management matters such as staffing, salary grading, dismissal, promotions, evaluation of performance, and on financial management aspects such as setting tariffs, generating revenues and shifting budgets between different financial years, and in taking loans for further investment (Blom-Hansen et al., 2024). These elements are traditionally the prerogative of central ministries, such as the Ministry of Education and the Ministry of Finance.

Though the heart of decision-making within the GETFund seems to be collective in theory, frequent interference from the government, especially the Ministry of Education, which is in a way outside the fund, was found to be the trend. Excessive government interference in the form of policy directives seems to have heavily undermined the autonomy of the GETFund. The following interview response confirms this:

> At the beginning of every year, the Ministry of Education gives policy directives to the board. The Ministry indicates that, this year, for example, we want to expand all tertiary institutions in the country. This is a policy directive, then the GETFund would now, under this policy directive, allocate funds to make sure that this policy directive is actually given effect.

The idea of control is here defined as the devices or tools used by the government to deliberately affect the behavior and action of agencies so that the government's purposes are attained (Verschuere, 2007). In order to incorporate the works of Verschuere (2007), the interviewee was asked to assess the relationship between the sector ministry, which is the Ministry of Education, and the GETFund by way of goal setting and information delivery. It was revealed that the Ministry of Education sets goals for the year in the form of policy directives. The GETFund also sets goals for the year in the form of a distribution formula. The distribution formula is drawn based on the policy directives from the Ministry. The confusion that arises concerns the actual meaning of a policy directive. The sector Ministry seems to define a policy directive in its way, completely different from the GETFund. The following interview response is the one in reference to this view.

> .... is the confusion as to what policy directives are. This has become a running battle between the Ministry of Education and the GETFund. Because policy directives are supposed to be broad indications of intent, of the sort of things the Ministry of Education wants to be done. The moment you go down to specifics, for example, build hall theatre in this institution, buy two vehicles for this institution, then, it means that you have moved away from policy directives to direct implementation which should not be the case, but the Ministry of Education does its interpretation of policy directives, because that gives them power.

This is consistent with the claims by principal-agent theorists that agents tend to have more information than principals because of their specialization (more expertise) and due to their proximity to the point of service delivery (customers). Agencies are well-positioned to know the real costs, quality, and volume of goods and services delivered. In their own right, they are specialists in their fields, and they know the situations under which they produce the necessary goods and services (Verschuere, 2007). But this is not the case with the GETFund, as the Ministry of Education seems to have taken over that role instead of the GETFund, who have the specialists on the ground and who are also close to the projects the GETFund is undertaking. In effect, the Ministry more often than not misreports the actual situation on the ground, either to score political points or escape blame. In support of this, this is what the interviewee said:

> .... The fund does not have a Public Relations department (PR), and so most time it is the Ministry of Education, which communicates with Ghanaians about the situation of the fund. This means that the fund does not have a medium other than the government to explain its activities, operations, programs, plans, strategies, policies, and challenges to the general public. This gives the government a leeway to extricate itself from any blame and put all the blame on the managers of the fund, so in the public eyes, the managers are to be blamed for the lapses but in fact, the government is to be blamed for not releasing money early enough as stipulated by the law for the fund to function as expected.

According to the administrative manager of the GETFund, there was a time when the Board of Trustees was forced by the Ministry's misinformation to hold a press conference to basically deny the government's allegation of misappropriation of money within the GETFund. This resulted in accusations and counteraccusations between the Ministry and the Board of Trustees of the Fund. This problem arose because of not allowing the agency (GETFund) to report to the public on whose funds are being used for numerous educational projects in Ghana. This is in line with principal-agent theory’ argument that the irregularity of information allows the agency to engage in unscrupulous behavior that disturbs the interests of the principal. In the case of the GETFund, the agent (GETFund) was rather disturbed by the irregularity of information, and there was also no proof of unscrupulous behavior on the part of the fund. Also, while the government may desire to ease the costs of public services by demanding the well-organized use of resources, agencies may be more concerned about increasing budgets for their offices so that their benefits also increase. It was revealed that this was not the case with the fund, as the activities of the government rather disorganized the resources of the fund. Here we could see a clear clash of interest between the principal and the agent. The agent may also spend fewer hours, less effort, and fewer skills, consequently affecting the productivity and the quality of public services. It was revealed that this was not the case with the fund. The managers of the fund spent more hours at work; at times, they went home very late.

Also, according to Kamala and Mustafa (2024), agents are likely to make full use of and derive the benefit of every opportunity to increase their level of egoism since the principal does not see or chastise them. It is, therefore, necessary that the government interfere to curtail the potential unscrupulous behavior of the agent (GETFund) to ease the cost, and to demand well-organized use of resources. Again, this was not the case with the Fund, as there was no proof of egoism.

To solve this problem of goal confusion and information irregularity, the parliament of Ghana is about to pass an Act to properly define a policy directive so that the Ministry of Education would know its limit as well as the GETFund. The Fund also has a performance monitoring system and an audit department. This is the interviewee's response to this:

> A few days ago, we had a meeting with the lawyers who are working on the Legislative Instrument (LI), this issue came out for discussion, and it was

> agreed that when the LI is passed, this issue would be straightened up. The LI operationalizes the act. An act is a broad statement of what should be done and what should not be done. The LI goes into the specific details of the act. This LI has not yet passed by the parliament of Ghana. When this is passed by parliament, this confusion as to what policy directives mean would be taken care of.

This is in line with principal-agent theory's set of solutions to information irregularity and goal confusion. To tackle the subjects of information irregularity between the principal and agencies, the measures would include performance monitoring, appraisal, and performance auditing. It was revealed that all these measures were being operationalized by the Fund. These actions can help lessen the problems of an information gap between agencies and their sector ministries. This permits the principal to perceive not only any unscrupulous behavior of an agency but also to know the intervening environmental factors that may hinder the agency's candid efforts for success.

Furthermore, according to principal-agent theory, the government may employ many methods to reduce goal confusion between agencies and their sector ministries. The most important actions would include having the government design a well-functioning performance contract in which the principal sets clear performance goals, performance indicators for gauging results, and inspires agencies to attain those pre-determined performance goals by introducing performance-related incentives. These foundations would help both actors (government and agencies) to have clear performance goals and to know what is anticipated from each actor. Here, the question of goal uncertainty is abridged (Kamala & Mustafa, 2024). But no evidence of a well-functioning performance contract was found in place for the Fund.

Moreover, the study of Lægreid et al (2005) in Norway has presented numerous fascinating practical teachings as far as the autonomy and control of agencies are concerned, which are in line with the relationship between the government and the GETFund. The government of Ghana has the ability to control the GETFund through legal frameworks such as the GETFund Act. In addition, the budget of the GETFund is provided by the government. Even though the Act stipulates that monies accrued to the Fund through Value Added Taxes should go to the Fund directly, the government does not do that but rather keeps the money at the Ministry of Finance and releases the money as and when it wants to. The Ministry releases the GETFund's money at the Ministry's convenient time at the detriment of the GETFund. So, the financial autonomy of the GETFund has been insufficient. The government has defied the law that set up the Fund when it comes to funding in order to control the GETFund. The following response is an exemplary point in this.

> Because the act that set up the fund stipulates that monies accrued be sent directly to the GETFund one month in arrears, so that when we are in June, then it is only May that should be in arrears. They must have paid up to April, but the government does not do that. They don't even pay directly to the GETFund as the law stipulates... The fund has an account at the Bank of Ghana, but it sends the money to the Ministry of Finance, and then the

> Ministry of Finance pays as and when it deems it fit or necessary. So, in total, there are about thirteen months of arrears in running. So, the fund does not have money.

This action of the government is causing unnecessary delay in the implementation of the GETFund's policies and programs, thereby hampering the smooth running of the development of education in Ghana, and especially higher education, which is seen as the fulcrum around which the country's development revolves. Owing to these facts, the GETFund had long not been in a position to enjoy its statutorily granted autonomy. Indeed, a serious assessment of the government's actions and practices does not defy the doubts on its resolve to undermine the autonomy of the GETFund. The government is still at fault for undermining the GETFund's autonomy, as it has the arbitrary power over various internal affairs of the fund.

The government again uses legal frameworks to control the GETFund when it comes to monitoring. The GETFund is, in fact, by legislation obligated to present a budget detailing allocation of funds to the various accounts open by the Board of Trustees for study (GETFund Act, 2000). This is a legislative control by parliament in the policy implementation process. In a way, it is imperative because such checks and balances are good for democracy, which cannot be downplayed. Blom-Hansen et al. (2024) unambiguously argue that if leaders exert but little influence on the action of subordinates, then one of the axioms of democratic government ceases to apply. In this sense, controlling the operations of the GETFund by the legislative organ of government cannot be taken for granted in the implementation process, but this is in opposition to the suggestion by Juyumaya et al. (2024) that organizational autonomy matters for performance-quoting occurrences where unnecessary political intrusion in the management of public organizations led to poor performance.

According to Verhoest et al. (2004), theoretically, agencies are therefore free to make their own decisions on human resources management matters such as staffing, salary grading, dismissal, promotions, evaluation of performance, and on financial management aspects such as setting tariffs, generating revenues and shifting budgets between different financial years, and in taking loans for further investment. This is in sharp contrast to what is happening to the GETFund, especially staffing and salary grading. In all these cases, the government is the sole principal in deciding who should be employed, and how much salary an employee should get based on a general framework for civil servants, which appears to be in line with government interest. The following interview response gives a typical view in this regard:

> GETFund is part of public services in Ghana, and all public services in Ghana operate under the framework of the Public Services Commission. So, for the conditions of service, everything is guided by the rules emanating from the Public Service Commission, so we have no control as to who should get what. All that we do as an agency is to present information on our employees, and then the Public Service Commission, which is under the Ministry of Finance decides the rest. But we get salary increments within the general framework of the yearly government salary adjustment.

This is not in line with Blom-Hansen et al. (2024) suggestion that the desire for more managerial autonomy for agencies is centered on the dispute that complex and competitive modern societies need more organizational flexibility and professional management. For effective public sector management, official rules and regulations that are mandatory for the public sector should be avoided (Blom-Hansen et al., 2024).

The government also interferes with the work of the fund by way of appointing senior members to the fund. For example, the administrator of the fund is appointed by the government. This is consistent with the work of Molander et al. (2002) in Sweden. They revealed that, as an outcome of the problems, politicians in Sweden turned to other means of dealing with the power of agencies. These included building additional areas of discretion rather than working within clear sets of rules. Also, they made sure that this action worked by growing party political selection to senior positions in the agencies.

All in all, the qualitative analysis made so far suggests the presence of a discrepancy between what has been put in place in the form of statutory frameworks and what has been the everyday practice. Hence, it can be said that, even though decision-making bodies from the board level to the lowest body are established in the law that enables the devolution of authority from higher to lower levels, in practical terms, the agency is being entangled with the government's constant and arbitrary interference in their operations. This tells that the empirical functioning of the fund is far from what it ought to be.

CONCLUSION

Addressing the pressing challenges with higher education financing in Ghana requires swift action, which the government has responded to with the creation of the GETFund to provide financial support in the form of loans to students enrolled in approved higher education institutions. Receipt of loans was also found to be a viable form of financing higher education in Ghana. In this article, I examined the organizational and governance structure and organizational autonomy of the fund. In terms of the organizational and governance structure of the fund, it can be concluded that even though the nature of the structure was, in general, hierarchical, critical analysis of power distribution reveals how the hierarchical structure was dictated by collective decision making. Concerning the organizational autonomy of the fund, it is concluded that the government interferes with the work of the fund by way of appointing senior members to the fund. The qualitative analysis made so far suggests the presence of a discrepancy between what has been put in place in the form of statutory frameworks and what has been the everyday practice. This tells that the empirical functioning of the fund is far from what it ought to be.

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Misunderstood: Stakeholder Perceptions of Respiratory Therapy Professional Identity

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ABSTRACT

No current literature explores how respiratory therapists describe their professional identity. To address this gap, this descriptive phenomenological study used stakeholder theory (Freeman, 1994) as a framework to explore the perspectives of practitioners and educators through the use of semi-structured interviews. Participants were asked to share perspectives about professional identity, minimum degree requirements for entry-into-practice, and the clinical implications for identity and practice. The purpose of this study was to explore how increasing professional education expectations may change the professional identity and clinical practice. This exploratory study found a lack of cohesive identity often ascribed to therapists rather than determined by therapists and problematizes future research about respiratory care identity, teaching, and clinical care. Implications for practice include recommendations for focused reflective practice and increased socialization within the profession.
Keywords: health personnel, professional practice, professional practice gaps, respiratory therapy, social identification, self-concept, social perception, stakeholder participation

Changing the minimum educational requirements for an applied health profession is a complex issue. Consideration must be given to the risks and benefits of the change, current rules and regulations, institutional implications, new curricular expectations arising from the change, and the current climate of support or opposition. Less frequently considered, however, is the impact such alterations have on the core identity of professionals. As the respiratory care profession prepares to advance educational standards for entry-into-practice, this study seeks to understand how current professionals describe their professional identity.

The professional landscape for degree advancement in respiratory care is quite complicated. The American Association for Respiratory Care (AARC) leads the charge with the Entry to Respiratory Therapy Practice 2030 initiative recommending increasing educational standards from an associate degree to a baccalaureate degree for entry-into-practice American (Association for Respiratory Care, 2019a; American Association for Respiratory Care, 2019b). However, AARC membership accounts for only one-third of employed respiratory therapists in the United States (Bureau of Labor Statistics, 2019, Myers, 2019). According to the Commission on Accreditation for Respiratory Care (CoARC), 84% of respiratory therapy programs confer associate degrees (Commission on Accreditation for Respiratory Care, 2018, p. 17). More than 300 programs receive sponsorship from community or junior colleges, technical or vocational schools, and career or technical colleges (Commission on Accreditation for Respiratory Care, 2018). Currently, only 23 states allow two-year institutions to grant bachelor's degrees, impacting the ability of respiratory care programs to offer a higher level of education (Fulton, 2020). Recent changes to accreditation standards require new programs, including satellites, to award baccalaureate degrees (Commission on Accreditation for Respiratory Care, 2018, 2019). Employers prefer to hire baccalaureate-prepared therapists because they exhibit strong critical thinking skills; however, there is minimal financial incentive for bedside therapists obtaining the higher degree (Becker, 2003; Farach, 2018; Gresham-Anderson et al., 2018; Mishoe, 2003). Identity research also shows increased time connecting with a profession, especially while in school, allows for socialization and strengthening of a professional identity (Cruess et al., 2014, 2015). Many other allied health professions are seeking elevated educational requirements because they believe advanced learning strengthens practitioners through expanded curriculum and increased exposure time to the profession (American Dental Hygienists' Association, 2019; American Occupational Therapy Association, 2014; American Occupational Therapy Association-Accreditation Council for Occupational Therapy Education, 2019; Caffrey et al., 2019; Gigli et al., 2020; Organization for Associate Degree Nursing and American Nurses Association, 2015; Stolberg & Tilliss, 2016)

Declining enrollments raise concerns about meeting future workforce demands. While the Bureau of Labor Statistics (2019) projects a 19% growth in the field of respiratory care by 2029, CoARC (Commission on Accreditation for Respiratory Care, 2018) reports declining program enrollments and the Western Interstate Commission (Bransberger et al., 2020) reports reductions in high school graduating class sizes, further exacerbating the college enrollment crunch. Demand for specialized practitioners continues to grow as baby boomers retire from the field or develop chronic illnesses like chronic obstructive pulmonary disease and become patients, thus increasing the burden on local healthcare systems (Han et al., 2016; Leider et al., 2018).

Increasing the minimum degree requirements impacts current educational stakeholders such as faculty, students, and practitioners. As healthcare students socialize through clinical practice and educational learning, they integrate various experiences, both personal and professional, to create their identity as practitioners (Cruess et al., 2014, 2015). Through the cycle of socialization (Adams et al., 2016), changes at the educational institution shape students' beliefs about the profession, which are then molded through exposure to clinical professionals. The influences of practitioners eventually return to impact the institution through student clinical experiences. Situational influences impact the perspectives of these primary stakeholder groups, which in turn affect the future of the profession and educational offerings.

Relevant literature (Barnes et al., 2011; Becker, 2003; Berker & Nguyen, 2014; Farach, 2018; Gresham-Anderson et al., 2018; Kacmarek et al., 2012; Mishoe, 2003; Sperle, 2017) focuses on the perspectives of department directors, educators, and practitioners who are AARC members regarding practical differences between associate- and baccalaureate-prepared therapists. There is no literature describing how degree standards impact the professional identity of a respiratory therapist. By understanding the perceptions of key stakeholder groups such as faculty and practitioners, educational institutions can work to create a sustainable system for change inclusive of stakeholder meanings and values (Barnett, 2011). The purpose of this phenomenological qualitative study was to examine stakeholder perspectives of how a degree transition may impact the professional identity of respiratory care professionals. This study was guided by the following research question: How do stakeholders describe their professional identity and those of the profession of respiratory care?

THEORETICAL FRAMEWORK

In this study, we used a theoretical framework to inform the design and methodology of this study as well as to conceptualize who is impacted by respiratory care bachelor's degree transition. R. Edward Freeman (1984) first described stakeholder theory in *Strategic Management: A Stakeholder Approach*. While the term stakeholder was used previously by companies like General Electric Company and Johnson & Johnson (Freeman, 1994), Freeman's research intended to elucidate a management theory integrating business and ethics and focused on social responsibility (Freeman, 1984; Freeman et al., 2012; T. Rowley, 1998). According to Freeman (1984), "The primary function of the corporation is to enhance the economic well-being, or serve as a vehicle for the free choices of the owners of the corporation" (p. 411). Narratives, arguments, business terms, and moral terms originating from an organization's foundational values shape the metaphor that becomes an emblem of the company's purpose (Freeman, 1994).

Stakeholder definitions evolved over time to describe "any group or individual who can affect or is affected by the achievement of an organization's purpose" (Freeman, 1984 p. 53). Wagner Mainardes et al. (2012) further explain the stakeholder-organization relationship as “a network of explicit and implicit relationships spanning both internal and external environments” (p. 1863). These definitions cover a broad scope of persons or groups invested in the success of any given institution. Stakeholder theory shaped this study through the identification of salient stakeholders for respiratory care education.

Wagner Mainardes et al. (2012) recommend using stakeholder theory for a business management approach across three levels: (a) identification of stakeholders; (b) development of processes that recognize their specific interests and needs; and (c) establishing and building relationships with stakeholders and with overall processes. Salient stakeholders of universities include students, governmental agencies, and the academic, or peer, community. Commission on Accreditation for Respiratory Care (2019) defines communities of interest as “both internal (e.g. current students, institutional administration) and external (e.g. prospective students, regulatory bodies, practicing therapists, clients, employers, the community/public) constituencies” (p. 47).

Clarkson (1995) delineates stakeholders into two generic groups based upon their relationships with organizations and their importance to institutional success (Benneworth & Jongbloed, 2010; Wagner Mainardes et al. 2012). Primary stakeholders actively invest in an organization while secondary stakeholders have a vested interest but may be passive recipients of the institution’s outputs (Benneworth & Jongbloed, 2010; Clarkson, 1995; Wagner Mainardes et al. 2012). Stakeholder classifications are further stratified based upon dynamic characteristics which can change over time (Clarkson, 1995; Mitchell et al. 1997). Sorting each group through the lenses of power, legitimacy, and urgency identifies which perspectives deserve the highest priority (Mitchell et al. 1997).

We applied stakeholder theory (Freeman, 1984) to determine salient stakeholders for respiratory care education. Study participants, identified as educators and practitioners, represent key stakeholder groups influencing an educational institution’s primary output – students. Educators exhibit power, legitimacy, and urgency as primary stakeholders who directly influence professional identity through curriculum delivery. Practitioners exhibit power, legitimacy, and urgency as they work in the field actively employing educational concepts and living out professional identity, which eventually comes back to an educational institution through advisory board recommendations, industry standard changes, or socialization with students. As each stakeholder group impacts professional identity development in a slightly nuanced way, both groups were studied to investigate their perspectives and experiences. Consideration of stakeholder theory (Freeman, 1984) led the researcher to create semi-structured interview questions applicable to all study participants, regardless of stakeholder group, with the intention to triangulate data sources during analysis (Farmer et al., 2006).

In this study, we focused on the identification of the needs and interests of respiratory care education stakeholders. Study participants represent primary stakeholder groups whose interests impact an organization’s mission. As respiratory care education looks to increase the minimum requirements for entry into practice, it is important to understand stakeholder perceptions to establish and build relationships that improve the degree transition process (Wagner Mainardes et al., 2012).

LITERATURE REVIEW

Focused on key elements shaping the academic progression of respiratory care and professional identity development, thematic organization shapes this literature review. Theme One provides an overview of how respiratory therapy developed as a profession over time and discusses past educational trends. Theme Two contextualizes how other professions view degree advancement to understand where respiratory therapy fits within these surrounding fields. Theme Three reviews current literature on stakeholder perspectives about respiratory care education. Lastly, Theme Four discusses professional identity formation and the roles of educators and socialization during this process.

Defining Respiratory Therapy

According to the AARC (American Association for Respiratory Care, 2015b), "respiratory care is the healthcare discipline that specializes in the promotion of optimum cardiopulmonary function and health and wellness. Respiratory therapists actively employ scientific principles to identify, treat, and prevent acute or chronic dysfunction of the cardiopulmonary system" (para. 1). The use of inhaled therapies is documented in India more than 4,000 years ago (Anderson, 2005). Yet, much of the supporting science for the respiratory care profession was not available until the 1700s (AARC's Virtual Museum, n.d.-a). Over time, scientific advances eventually led to the use of therapeutic gases to treat common cardiopulmonary maladies (AARC's Virtual Museum, n.d.-b; Miller & Levere, 2008; Nagendrappa, 2012; Sekhar & Rao, 2014).

Inhalation therapy became an organized profession in 1943 and was later renamed respiratory therapy (AARC Virtual Museum, n.d.-b; American Association for Respiratory Care, n.d.-c). Early practitioners started as on-the-job trainees and practiced under the supervision of nurses and physicians (AARC Virtual Museum, n.d.-a). As the profession advanced, education evolved from on-the-job training to certificates of competency and eventually associate degree education. This resulted in articulations with higher education institutions, most prominently career and technical centers, junior colleges, and community colleges (Commission on Accreditation for Respiratory Care, 2018, 2019). To demonstrate competency, the American Registry of Inhalation Therapists (ARIT) developed written and oral examinations to confer a registry credential (AARC Virtual Museum, n.d.-b). The ARIT is now known as the National Board for Respiratory Care (NBRC) and graduates of an accredited educational program must pass a multiple-choice test and a simulation examination to earn the registry credential (National Board for Respiratory Care, 2020). Currently, only six states require the Registered Respiratory Therapist (RRT) credential for entry-into-practice (American Association for Respiratory Care, n.d.-b). Students earning a low-cut score on the multiple-choice exam earn the Certified Respiratory Therapist credential and may begin practicing in 42 states (American Association for Respiratory Care, n.d-b; National Board for Respiratory Care, 2020).

According to the AARC's mission "[t]he AARC is the foremost professional association promoting respiratory therapists" (American Association for Respiratory Care. (n.d.-a). Organizational membership is voluntary and represents approximately 32 percent of employed respiratory therapists nationwide (Myers, 2019). In its role as advocate, the AARC released various guidance documents for reference irrespective of membership status. The scope of practice, the definition of respiratory care, and a professional code of conduct exist to provide direction for members of the field (American Association for Respiratory Care, 2015a, 2015b, AARC's Virtual Museum, n.d.-b). The AARC recently released an issue paper and position statement recommending all respiratory therapy programs award a baccalaureate degree by 2030, as well as encouraging all states to require the RRT credential for new therapists to enter practice (American Association for Respiratory Care, 2019a, b).

Professionalization Trends

The respiratory therapy profession is not alone in seeking advanced educational requirements (American Dental Hygienists' Association, 2019; American Occupational Therapy Association, 2014; Caffery et al., 2019; Organization for Associate Degree Nursing and American Nurses Association, 2015). Dental hygiene seeks to establish baccalaureate education as the new minimum to fill dentist shortage gaps and better train hygienists as patient complexity and diversity increases (Battrell et al.., 2016; L. Rowley & Stein, 2016; Stolberg & Tilliss, 2016). American Occupational Therapy Association (2014) targeted 2025 for a full transition to doctoral education for entry into practice, citing increased requirements for research and scholarship, an increased need for autonomy, and a changing healthcare delivery model that requires more educational content. As of 2018, the American Physical Therapy Association (American Physical Therapy Association, n.d.) set the minimal education requirement as a Doctor of Physical Therapy (DPT) degree. Paramedicine desires to increase their education from certificate to associate degree and nursing seeks to increase their overall number of baccalaureate nurses while ensuring all nurses have access to continuous academic progression (Caffery et al., 2019; Organization for Associate Degree Nursing and American Nurses Association, 2015; The National Academic Press, 2011). Occupational researchers often study stakeholder perceptions regarding the educational changes (Benpow & Kanji, 2019; Druse, 2012; McCombie, 2016a, b; Molitor & Nissen, 2018; L. Rowley & Stein, 2016). Studies showed most professionals disagree with their organization's desire to increase educational requirements (Benpow & Kanji, 2019; Druse, 2012; McCombie, 2016a, b; Molitor & Nissen, 2018).

Stakeholder Perspectives About Education

Current respiratory care literature reveals four distinct themes regarding stakeholder perspectives about associate and baccalaureate-prepared therapists. First, employers prefer to hire therapists matriculating from baccalaureate programs (Barnes et al., 2011; Becker, 2003; Gresham-Anderson et al., 2018; Sperle, 2017). Second, students receiving baccalaureate education for respiratory therapy have better soft skills than their associate degree counterparts (Barnes et al., 2011; Farach, 2018; Gresham-Anderson et al., 2018; Sperle, 2017). Third, there are few immediate or tangible benefits to those who obtain a baccalaureate degree (Becker & Nguyen, 2014; Farach, 2018). Lastly, divergent opinions exist about the necessity of a bachelor's degree for entry-into-practice (Kacmarek et al., 2012; Mishoe, 2003; Smith et al., 2017).

Professional Identity Formation

Professional identity formation is "multiple, dynamic, relational, situated, embedded in relations of power, yet negotiable" (Goldie, 2012, p. 645). More specifically, Cruess et al. (2014) define professional identity as "a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician" (p. 1447). Identity formation research recognizes the implications of myriad factors such as history, lived experiences, other identities, communities of practice, educator roles, and reflection on identity development. These studies, while typically focused on medical school or physician education, reveal insights generalizable to all healthcare professions.

Socialization is the integration of numerous experiences, values, norms, traditions, and identities to create a sense of self (Cruess et al., 2014, 2015). Students entering a health profession learn to separate being, doing, and having through a lifelong process of comparing and contrasting within themselves and amongst others (Colesso et al., 2013). Entering into a system they had no part in creating, healthcare practitioners are shaped by that system and comparing their roles to those of friends, mentors, and colleagues (Adams et al., 2016; Colesso et al., 2013). According to Adams et al. (2016), "The characteristics of this system were built long before we existed, based upon history, habit, tradition, patterns of belief, prejudices, stereotypes, and myths" (p. 17).

Professional identity formation (PIF) research reveals focused educational inquiry is tantamount to positive development (Chen & Hubinette, 2017; Kay et al., 2019; Silveira et al., 2019; Wong & Trollope-Kumar, 2014). Identity development should be an educational objective whereby educators engage students to guide professional growth because classroom learning positively reinforces professional norms and standards and reiterates a distinct collective identity (Cruess et al., 2015; Chen & Hubinette, 2017). Students experience disequilibrium and cognitive dissonance during their educational journey as they learn about the profession and integrate their experiences, influences, and the impacts of societal expectations (Kay et al., 2019; Wong & Trollope-Kumar, 2014). According to Silveira et al. (2019), repetition without reflection diminishes identity development, disconnection between what is desired and what is observed causes cynicism, and negative role modeling alters the perception of work as a meaningful profession.

Studies regarding stakeholder perceptions of identity formation report different perspectives about the impacts of program duration and time with a profession. In a study by Caplin (2016), nursing students reported increased confidence, empowerment, and changes to professional identity following completion of a bachelor's degree. King et al. (2010) studied physical therapist's perspectives about how increasing educational requirements impact patient care. Study participants believe experience in the field improves the quality of care more than DPT training (King et al., 2010). Intensive care nurses believe educational level is less influential than specialty training to the development of professional identity, self-efficacy, and role clarity (Gigli et al., 2020). Fisher (2014) evaluated professionalism among three levels of nursing education to learn professionalism is not significantly impacted by educational level and depends on the quality of education and well-formed educational standards that account for values and morals.

METHODS

Research Design

This was a phenomenological qualitative study where we used stakeholder theory (Freeman, 1984) to explore the ways educators and practitioners describe their professional identity (Creswell & Poth, 2016). We chose this approach to collect narrative information for evaluation of participants' perspectives, behaviors, emotions, attitudes, or thoughts ascribed to a social problem (Creswell & Poth, 2016). Similar approaches have been used to gain an understanding of professional identity formation (Caplin, 2016; Chen & Hubinette, 2017; Kay et al., 2019; Privitera & Ahlgrim-Delzell, 2019; Silveira et al., 2019). We interpreted findings through a constructivist research paradigm whereby we sought to understand how others make sense of the world (Creswell & Poth, 2016). This study was guided by the following research question: How do stakeholders describe their professional identity and those of the profession of respiratory care?

Positionality

Qualitative research requires the researcher to disclose biases, values, and personal background as they may influence data interpretations throughout the study (Creswell & Poth, 2016). The primary author is a White female educator with ten years of experience working for a consortium program awarding associate degrees for respiratory therapists. The co-author is a mixed-heritage Latino male with significant years as a researcher in higher education. The primary author acknowledges her own experience entering the respiratory care profession after trying a different healthcare program and the impact an associate degree for entry-into-practice had on her ability to begin working. Positionality may limit her perspective and require continual reflexive practice to understand how personal background shapes the interpretation of the data (Creswell & Poth, 2016).

Participants

Stakeholder theory and CoARC definitions informed contributor classification into two groups: educators and practitioners (Clarkson, 2016; Commission on Accreditation for Respiratory Care, 2018; Freeman, 1984; Mitchell et al., 1997; Wagner Mainardes et al., 2012). We recruited participants through e-mail and social media correspondence to form an intentional purposive sample (*n*=12). Inclusion criteria for faculty members was full-time employment at their institutions in an educational role and at least five years of experience in respiratory care education. Inclusion criteria for practitioners was full-time employment at their institutions as a practicing respiratory therapist and have at least five years of clinical practice experience. Sixteen potential participants responded to the recruitment notices; however, only 12 met the inclusion criteria and completed the necessary steps for participation. All participants were assigned a pseudonym to protect confidentiality (see Table 1). No participants came from the same institution.

Table 1: Participant Demographics

Participant	Total Years of Experience	Gender	Highest Degree Earned	AARC Membership	NBRC Credentials
Practitioner 1	30	Female	Master's	No	RRT
Practitioner 2	42	Female	Master's	Yes	RRT
Practitioner 3	37	Female	Bachelor's	Yes	RRT, ACCS
Practitioner 4	6	Female	Master's	No	RRT, NPS
Practitioner 5	13	Female	Associate	No	CRT
Practitioner 6	48	Male	Associate	No	CRT
Educator 1	20	Male	PhD	Yes	RRT, ACCS
Educator 2	16	Female	Master's	Yes	RRT
Educator 3	20	Male	Doctorate	Yes	RRT, ACCS
Educator 4	15	Male	Master's	Yes	RRT
Educator 5	38	Female	Bachelor's	Yes	RRT, CPFT, NPS
Educator 6	26	Female	Bachelor's	Yes	RRT

Data Collection

We recruited participants through e-mail and social media correspondence. A semi-structured interview guide facilitated the exploration of contributor perspectives during individual interviews each lasting approximately 60 minutes. Study questions focused on stakeholder perspectives of professional identity, beliefs about the minimum degree necessary to obtain licensure, factors impacting professional identity, and how changing the minimum educational requirements may influence professional identity. We clarified meaning when participants used vague language or shared complex concepts. Interviews occurred virtually and were audio-recorded. We conducted interview until achieving saturation, which indicates there are no new insights or properties in the data. Prior to each interview, we established eligibility via e-mail and social media discussion with prospective participants. Participants received a standard informed consent form which they returned by e-mail or fax. A professional third-party transcribed audio recordings for data analysis.

Data Analysis & Trustworthiness

To understand perceptions of identity and experiences shaping those perceptions, the researcher employed a phenomenological approach. This method "describes the lived experiences of individuals about a phenomenon as described by participants" (Vukojević, 2016 p. 14). Data analysis occurred through a multi-stage approach of reviewing and evaluating interview transcripts and interviewer memos (Creswell & Poth, 2016). We read through the transcripts as data sources several times before initiating the coding process. Three cycles of coding were used to generate final themes. Application of line-by-line initial coding identified elements of meaning for further consideration. We then employed open coding using elemental coding methods including in-vivo, structural, and process coding (Creswell & Poth, 2016). Focused coding was used to group similar open codes into concepts and selective coding collapsed these into themes (Creswell & Poth, 2016). Code charting was used to organize the codes and themes (Creswell & Poth, 2016). We utilized the following trustworthiness strategies (Creswell & Poth, 2016): (a) member checking of interview transcripts by participants; (b) a subject matter expert reviewed and validated the main themes to mitigate researcher bias; (c) triangulation of findings between two stakeholder groups; and (d) the use of thick-description to adequately convey and describe participant perspectives.

FINDINGS

Through our research findings, we present four themes describing the professional identity perceptions of respiratory therapists. First, study participants depict themselves as a motley crew of healthcare providers, with a varied but flexible skillset often shaped by external influences such as mentors and hospital systems. Second, entrance into the field was described as a fortuitous happenstance encounter rather than an intentionally planned academic route. Third, participants described a "dark side of the moon" phenomenon where they are told they are valuable but instead they are misunderstood and feel disrespected. Lastly, clashes with professionals, both in and out of the field, greatly impact how participants perceive themselves.

The Motley Crew

One theme that emerged from the interviews is the idea of respiratory therapists as a motley crew of healthcare providers. Participants appeared to think of themselves collectively as a group of disjointed misfits with a flexible, but varied, skillset. This heterogeneity often stems from the external influences surrounding practitioners, such as respiratory care departments, mentors, and hospital systems. Despite individuality, participants described a tribal existence where the actions of one impact the entire group.

All interviews revealed a diverse and multi-faceted description of how a respiratory therapist operates, with few overlaps of identical descriptive verbiage. Participants described themselves as "MacGyver" with the ability to quickly analyze, problem-solve, and promote solutions to serve both patients and colleagues well. Practitioner 3 described respiratory therapists as, "We all have this high energy level. We are all very demanding. We have high expectations of everyone around us and ourselves." Participants also reported a distinct ability to "get shit done" while "being able to handle every single population in that hospital, every shift." Participants perceive this flexibility to be a core characteristic of a respiratory therapist. However, flexibility and adaptation are circumstantial traits based on clinical experiences and result in a motley skillset.

When describing the characteristics of a respiratory therapist, educators primarily used verbiage portraying higher-order thinking. Educators spoke of a therapist's ability to quickly analyze a situation and apply a depth of knowledge to optimize patient care. This concept is best represented by Educator 3 stating,

> When you walk in a room you're processing all of the non-verbal cues and you're putting that together with the heart rate and blood pressure. It's not a checklist. It's the ability to take a singular set of concepts and apply it to a patient that has a multitude of pathologies and realizing that, while this is how you deal with that type of patient usually, this COPD patient also has a crushing chest injury. So now they have a restrictive and obstructive disease and the therapist can think through those processes.

All participants in the educator group identified critical thinking and analysis as a core trait of a respiratory therapist.

Alternately, practitioners describing professional characteristics focused on the moral sense and heart of a respiratory therapist. Contributors in this group often used situational stories or related the question to specific work areas to contextualize their perspectives. Using words like "flexible", "strong", "passionate", and "empathetic", practitioners depict a group of helpers centered on quality patient care.

Both participant groups expressed how mentorship and organizational cultures shape their professional identity. Participants described being shaped by positive and negative influences external to themselves. For example, Educator 1 shared:

> I 100% think that I am who I am now because of the people that were around me, people that saw something in me that I didn't see. I just mocked them. I mimicked them. I did what they did. I truly honest to God believe the reason I became who

> I am in my profession now is because of the people that mentored me, not because I have some special set of skills.

Many of the participants described being shaped positively by mentors. However, members of the practitioner group spoke frequently about the negative aspects of working within a hospital or respiratory care department.

All participants described instances where the way they were treated or how others were treated was the direct result of personal behavior. Educator 2 shared that individual personality has a bearing on perception when discussing “they treated me differently and I think that was because they knew who I was.” Practitioner 4 shared:

> You can have 20 years of experience and still be a bad therapist. If you have a bad attitude, they really don’t care how long you’ve been a therapist. It still makes you look like a bad part of the team. A bad apple.

All participants agreed the professional identity portrayed within an organization is dependent upon the actions and values of each individual therapist.

Practitioners also noted that despite their individuality and varied abilities and personalities, they are still treated like a tribe or group. Participants appeared irritated when they described being painted with a broad brush by their colleagues. Additionally, practitioners spoke of how the hospital and departmental environment changes individual behavior over time. Practitioner 3 shared,

> If you work somewhere where everyone is lackadaisical and don’t take their job seriously, you will eventually become like that. You will either leave, or you will become like that. It becomes tribal I think. It’s just tribal through and it’s very difficult to break that because they teach it to the younger ones and it just perpetuates itself.

This institutionalization, or apathy as a custom that occurs after a long period at an institution, impacts all providers regardless of individual traits.

Respiratory therapists perceive themselves as a motley crew, or a diverse assortment of characters banding together for a similar purpose. Interviews revealed educators and practitioners perceive themselves as individualistic caregivers with variable skillsets shaped by external influences. Participants noted a desire to be a part of the healthcare team but describe difficulties navigating the complexities between group and individual recognition. Individual characteristics and behaviors appear to be more influential for professional identity development than mentorship or training. Professional identity is perpetuated through socialization and institutionalization.

Fortuitous Happenstance

Participants shared professional origin stories often rooted in happenstance. The patterns by which people enter the profession appear to be through a personal connection or an unexpected encounter, as well as an internal recognition that other professions would not be a right fit. A need to get to work is also a recurrent theme throughout the data. Each pathway denotes an unintentional approach to entering the profession.

Educators and practitioners both described how a personal connection made them aware of the respiratory therapy profession. For some, this connection came through a sick relative, such as a sibling or friend. Educator 5 shared

> When I was about 15, my mom ended up getting sick and spending about a month in a hospital. She got very sick and I saw a lot of, back then they were called inhalation therapists, come in and treat her. That was pretty influential in my life where I watched people come in and work on my mom. She ended up spending a month at the hospital and then after that she ended up spending four months at a chest hospital. At that time, I really wasn't sure where you went to school to become an inhalation therapist. I kind of always kept that in the back of my mind.

For other study participants, they learned about the profession because they knew someone in the field. A parent or friend in the field gave the participants insights as they sought to determine a career path. These personal connections directly influenced participant decisions to become a respiratory therapist, either through encouragement to join the profession or through direct observation of the role of a respiratory therapist.

Unexpected encounters are also a hallmark of contributor professional origin stories. Described as "a funny story", "random", a "spur of the moment decision", or an "accident", study participants revealed a lack of intention when seeking the career. This concept was carried throughout the interviews of both participant groups. When describing what drove her to enter the field, Practitioner 1 shared

> An accident. My momma was a respiratory therapist and I told her I would never be one. I went to the technical school to sign up for X-ray because that's what I wanted to do. I was walking down the hall and my momma's teacher saw me. I told her what I was doing and she said 'You don't need to be an X-ray tech. You need to be a respiratory therapist.' When I got to the X-ray department, they acted like they didn't want to talk to me. I wasn't comfortable. In about 15 minutes, I was back in my momma's teacher's office saying 'I give up.' That how I became a respiratory therapist. That was the best spur-of-the-moment decision I ever made.

Both educators and practitioners described a lack of premeditated planning. They also portrayed a fondness for their origin story as a mechanism shaping them rather than depicting how they themselves shaped their professional origin.

Another key finding across both participant groups was how they desired to work in healthcare, often describing a "not nursing" mentality. One participant shared,

> My grandmother was a nurse and I just, I thought that I wanted to be a nurse. I went and shadowed a nurse and it was the most boring thing ever in this whole entire planet. It was not for me.

Educator 1 echoed this sentiment saying, "I enrolled as a nursing student, the first two years where the prerequisite coursework is done. I started that and I just never felt like I was in the right place." Both educators and practitioners shared how they "always wanted healthcare" but were unsure which field to choose. This finding depicts respiratory therapy as an unknown profession and as an alternative medical profession rather than its noteworthy field.

The happenstance described by study participants suggests a lack of intentionality and planning for those entering the respiratory care field. Findings depict respiratory therapy as an alternative to well-known medical professions when those professions do not suit the learner. Knowledge of the field is circumstantial and relies on a chance occurrence exposing people to the skills or nature of the profession. Findings suggest professional recruitment occurs through an unstructured and uncontrollable model of interpersonal connection – fortuitous happenstance.

Dark Side of the Moon

Participants report competing perspectives of the field. Grouped as positive and negative, these lenses reveal known and unknown views of the profession. The *light* side perspectives depict the positive attributes of respiratory care often known or shared with those considering entering the field. The *dark* side perspectives depict the lesser-known considerations of working as a respiratory therapist, such as unequal pay, lack of respect, and a lack of understanding of a respiratory therapist's skillset. Participants discussed the reality of both perspectives impacting professional identity without specifically noting one as more powerful than the other.

While both groups shared positive perspectives of the profession during interviews, educators were significantly more optimistic than practitioners. Study participants described a profession full of caring, hardworking, specially trained patient advocates who can work independently but are a crucial part of the healthcare team. Educators and practitioners depict respiratory therapists as able to problem-solve on the fly, a critical element of quality patient care. Practitioner 1 stated, "We're the ones they call when something goes wrong" and Educator 1 expanded this notion, saying, "We're the people that, if you don't get it right, the outcome is death or brain death." Subjects in both participant groups shared that this expertise and depth of knowledge drew them to the field once they learned about it. These known attributes, often shared during recruitment efforts, paint a positive image of the respiratory care profession.

Simultaneously, interviews revealed a darker, more negative tone about how respiratory care professionals are treated despite their essential role in patient care. All participants expressed being misunderstood, overlooked, undervalued, frustrated, disrespected, perceived as "less than", and tired. Participants described multiple instances where they clarified their skills to other professions because of a lack of understanding about the respiratory therapy scope of practice. Practitioner 1 shared, "I heard one person say, 'I look at an associate degree RT and I think of on-the-job training." Educator 6 echoed this sentiment when stating, "We're still referred to as inhalation people and inhalation therapy hasn't been used since the '50s or '60s." This is also aptly depicted as Educator 4 described an interaction between his students and working emergency medical technicians (EMTs), "One of my students asked if RTs can become a flight therapist. And their response was no, no, no. And I said 'That's not right, we can and we do it all the time in the NICU world'." Participants revealed a sense of frustration at these misconceptions and a desire to rectify the confusion because they cause conflict and impact working relationships.

Participants also identified feeling undervalued for their level of expertise, both professionally and financially. Practitioners focused on the day-to-day wage inequality and communications with other professionals. Participants described the frustration they experience when hospitals quickly provide bonuses or elevated pay to nurses, but respiratory therapists do not receive the same perks despite working right alongside the nurses. Educators spoke of literal devaluation because the Centers for Medicaid and Medicare Services (CMS) do not recognize respiratory therapy as a profession, which "limits what we can bill for." Members of both groups described how the feeling of being undervalued was communicated by other professionals. Educator 6 shared, "We are undervalued for the amount of knowledge we have. We have a wealth of knowledge when we're given the chance to share it. The nurses and physicians don't fully understand what it is we do." Participants consistently reported feeling "less than" as healthcare colleagues override care decisions, fail to recognize the therapist's expertise, and refuse to compensate them in an equal manner.

Educators and practitioners depicted a profession with a bright side and a dark side with "a constant undertone of being disrespected and underappreciated." Participants mentioned how the positive aspects drew them toward the field; however, they spent more time discussing negative aspects than positive. To those inside and outside of the profession, the positive attributes are always illuminated. However, like the dark side of the moon, the negative attributes are also ever-present and only visible to those who know the profession.

The Clash

Participants often described clashing with colleagues as an impactful component of identity perception. Contributors depicted unequal treatment and being "our own worst enemy" as common occurrences influencing self-perception. Participants often expressed frustration when discussing how these inter-personal and intra-professional conflicts communicate the value of the respiratory therapist.

Both participant groups depicted a professional environment invalidating the role of the respiratory therapist through differing standards, unequal treatment, and the resultant conflicts that occur. Educator 6 shared, "Our profession is held to a different standard than nurses, because I know plenty of nurses that acted the same way but they didn't seem to get in trouble...for some reason it's ten times worse for us." When discussing interdisciplinary quality improvement projects, Educator 6 also shared:

> They [PT] were given time to work together on these projects because historically physical therapists only have to see 10 patients a day. I get handed 35 patients in the morning to see. I got a massive amount of people to go take care of. So my director would get very frustrated because OT, PT, and speech would do very well on their performance improvements. RT could never even come close...because of patient load.

Participants described how unfair workload expectations, as well as the discounting of their knowledge by other professionals make them feel "frustrated", "disrespected", and "undervalued". Study participants verbalized this idea of "if I'm supposed to be part of the team", indicating confusion and frustration with work environments whose words and actions do not match.

Both educators and practitioners described instances where respiratory therapists are their "own worst enemy." Participants depicted this intra-professional clash in a multitude of ways, such as when the poor actions or behaviors of one therapist negatively impact how the whole group is treated, causing turmoil and a constant need to prove their knowledge and skills to other healthcare colleagues. Participants described how respiratory therapists "rip each other apart" and "trash talk" each other openly. Practitioner 1 shared:

> I think respiratory therapists, we're our own worst enemy. We want this, we want this, but we're not willing to do this, this, and this to get it. We want to be treated like diamonds when at this point, we're a lump of coal.

Participants also expressed frustration over the lack of consensus surrounding correct medical treatments "even though we all went to school" and described how therapists undermine each other's treatment choices. Study participants report this intra-professional conflict causes tension, frustration, and an inability to gain respect because "Why would other people give us respect when we don't even give it to ourselves?"

Both participant groups identified unequal treatment and conflicts with other therapists as contributing factors shaping professional identity. Participants feel differing standards and unequal treatment communicate how hospital facilities do not value the therapist's contributions. Therapists also do not value each other as they argue over proper therapies, refuse to take necessary steps to improve their status, and undermine each other's work. The regularity of these conflicts makes practitioners who are defensive, argumentative, and frustrated.

DISCUSSION

Participants addressed the research question through their description and exploration of the intersection of educational changes and current respiratory therapy practices. Practitioners and educators perceived themselves as a group of caregivers with a helping orientation who regularly inhabit multiple, disparate identities often assigned to them by others. Participants described being a critical member of a patient care team that often undervalues their expertise, causing frustration and discord. Despite having an internal recognition of worth and skill, respiratory therapists often feel like second-class citizens when hospitals and colleagues, both in and out of the profession, do not recognize the therapist's value. Awareness of the profession is highly circumstantial and dependent upon personal connections.

Our primary research finding is a lack of cohesive professional identity. Participants of the educator group shared descriptions focused on higher-order thinking, while those in the practitioner group spoke more about the heart and principles of the respiratory therapist. Surprisingly, none of the participants implicated the AARC as a key force shaping professional identity. When faced with documents from the AARC defining respiratory therapy (American Association for Respiratory Care, 2015b) and outlining the code of conduct (American Association for Respiratory

Care, 2015a), less than half of all participants knew of the documents and only one participant in the educator group described actively using the documents. Across both participant groups, the only common language used to describe the respiratory therapist was "critical thinking". This finding complements research that identifies critical thinking as a valued skill in the respiratory therapist (Gresham-Anderson et al. 2018; Mishoe, 2003, 2007; Turkestani, 2022).

Practitioners and educators consistently described how relationships, socialization, and institutionalization impact how they perceive their professional identity. Considered to be primary stakeholders, respiratory care practitioners and educators play a particularly important role in respiratory care education (Adams et al., 2016; Colesso et al., 2013; Commission on Accreditation for Respiratory Care, 2019). As active participants in the systems shaping respiratory care students, educators and practitioners directly influence a student's socialization and identity development journey. During the socialization process, educators and practitioners exercise legitimacy, urgency, and power over students and institutions to categorize what is socially acceptable, how to influence others, and when to act on particular topics (Clarkson, 1995; Mitchell et al., 1997).

Participants in both study groups openly described working among disparate identities, which complements current research depicting socialization as an integral component of identity development (Cruess et al., 2014, 2015; Colesso et al., 2013). In this study, educators acknowledged the negative reality that exists in the professional workplace but primarily focused on the positive attributes of the field. Practitioners tended to focus on the negative attributes. Students are influenced by both perspectives while in school but primarily ascribe to the positive perspectives because they continually return to the educator's influence. Upon entering the workforce, students move away from the educator's influence and the circle of socialization changes. Surrounded by seasoned healthcare providers, the new practitioner's perspectives may change to fit more closely with those in their circle of influence. These findings build on current research depicting identity development as a dynamic process occurring over time and subject to influences shaping the individual (Adams et al., 2016; Colesso et al., 2013, Cruess et al., 2014, 2015; Goldie, 2012;). Additionally, these findings amplify the importance of stakeholders and their perspectives because they are change agents and perpetuators of established norms through the cycle of socialization (Adams et al., 2016).

Limitations

There are limitations associated with this study and the findings. This study did not feature a homogenous sample which consisted primarily of older female educators and practitioners. Their perspective and lived experiences may not reflect those of the entire profession about professional identity and increased educational requirements. The primary author is a respiratory care faculty member and may have *a priori* participant knowledge which may have influenced the responses of the participants. Also, some participants may have selectively disclosed because of fear of stigma. Given these considerations and due to the small size of the research sample (n=12) through the use of a qualitative methodology, findings may not be transferable to across respiratory care practitioners. Future research should address the limitations of this research study and explore professional identity among specific populations' stakeholders (educators or practitioners), particularly among professionals of color, men, women, and students. Additionally, consideration should be given to regional perspectives of professional identity.

Implications for Practice

Because of their power as shaping constructs, socialization and identity formation should become a requisite component of respiratory care education. To mitigate the impacts of identity convergence, a clear, concise professional identity should stem from one place and be perpetuated by all. Reflective practice with targeted educational outcomes assessing professional identity formation over time assists students as they integrate multiple selves.

To break the cycle of socialization and reset current identity perspectives, respiratory therapists must begin questioning the current systems shaping them. Educational institutions should also focus efforts to shape the identities of practitioners working with students to reformulate perspectives of the profession. Increasing exposure time to respiratory care professionals through increased clinical hours or increased classroom time provides more opportunity for identity integration.

Awareness of the profession's existence relies heavily on personal connection and circumstance. This may be a limiting factor for the growth of the profession because the recruitment of practitioners depends on access to a network of professionals. Those people focused on recruiting people to join the profession must expand the size of their network or find a way to improve access to the information provided by the network.

CONCLUSION

This study explored how respiratory care practitioners and educators describe their professional identity. Participants use a multitude of action descriptors to depict a group of individuals with a helping orientation but no clear, cohesive professional identity which supersedes the identities of schools, facilities, or departments. Educational institutions should monitor and evaluate identity formation over time to guide students through the cognitive dissonance they experience during socialization. Formalization of a professional identity may clarify the disparate identities therapists navigate daily. Future research should continue to expand the understanding of the respiratory therapist's professional identity. Moreover, researchers should evaluate more closely the impacts of the cycle of socialization from a student's perspective.

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Examining the Private Undergraduate Admission Exemption to Title IX's Prohibition on Sex Discrimination

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ABSTRACT

This study examined the implications of the statutory exception that allows private undergraduate institutions to be excluded from Title IX's prohibition on considering an applicant's sex in admissions decisions. Across both public and private institutions, applicant pools with larger proportions of women tended to correspond to higher admission rates for men. In contrast, institutions with higher proportions of enrolled women were associated with higher admission rates for women. Notably, lower overall admission rates at private institutions had a statistically significant correlation with higher admission rates for men, indicating a possible male admission advantage at selective private institutions. These results motivate further research on this topic using student-level admissions data to better assess whether such patterns reflect systematic differences among applicants or potential bias.

Keywords: Title IX, college admissions, enrollment management, education policy, access

It has been over 50 years since the passage of Title IX, a landmark achievement for women's equity in education, and yet this widely celebrated legislation contains a surprising exemption. Admission to private undergraduate colleges is not covered by Title IX's prohibition on sex-based discrimination.[1] While the legislation

[1] The text of Title IX refers specifically to "sex" discrimination in educational programs. However, in academic literature and everyday conversation, the term "gender" is often used when discussing Title IX.

unequivocally states that no individual should face discrimination "on the basis of sex" in federally funded education programs, this protection explicitly does not extend to private undergraduate admissions, as the groups subject to legislation are specifically listed as,

> … institutions of vocational education, professional education, and graduate higher education, and to public institutions of undergraduate higher education. (Title IX, 20 U.S.C. §§ 1681(a)(1))

While the exemption was originally introduced due to concerns among private institutions about legal liability during the initial implementation of Title IX (Rose, 2015), shifts in student demographics and outcomes have arguably weakened this justification over time. Private institutions, at the time, lobbied for the exemption due to concerns that increasing female enrollment would decrease academic standards, upset alumni, and deter donors leading to possible legal challenges during the initial implementation of the policy (Lew, 2021). The substantial increase in women's application rates, college enrollment, and postsecondary success relative to men over the last half century undermines arguments that sex-conscious admissions are necessary to maintain academic standards.

The continued inclusion of this exemption in Title IX presents two core questions for lawmakers. First, the ethical question of whether it is justifiable for private colleges to retain the legal ability to use an applicant's sex as an influential factor in undergraduate admissions decisions. And second, the empirical question of whether sex-based discrimination actually occurs in practice within private undergraduate admissions. Because this study relies on aggregated institutional data rather than student-level records, it cannot establish causality or speak to discriminatory intent. However, the results show a pattern in which highly selective private institutions appear to admit men at higher rates than less selective private colleges, offering suggestive evidence that warrants closer scrutiny and further research on this topic.

Analysis of institutional data from 2019 and 2022 indicates that highly selective private colleges more frequently exhibited patterns in admission that favored men compared to less selective private colleges. These observations raise important questions for policymakers about maintaining the Title IX exemption for private college admissions. They also highlight the need for further research using student-level admissions data to better understand whether these outcomes stem from differences among applicant groups, institutional bias, or other factors.

This conflation arises partly because discussions about equity, identity, and discrimination increasingly address not only biological distinctions (sex) but also social and cultural constructs (gender). Throughout this paper, I use the term "sex" to reflect the language of the statute, but when referencing sources that explicitly use "gender," I preserve their original terminology to accurately represent the focus and analytic framework of these researchers. It is important to note that some studies used "sex" and "gender" interchangeably, which may reflect evolving perspectives on identity in policy and research. In this paper, I attempt to be both legally accurate and precise in describing the diversity of approaches used in the scholarly literature.

LITERATURE REVIEW

Research on the disparate outcomes between sexes in college admissions, though limited, highlights important differences in how men and women experience the admissions process. A study that pre-dates Title IX found that some universities favored male applicants among the group of students admitted with lower academic qualifications (Walster et al., 1971). A later study found that declining numbers of male applicants at residential liberal arts colleges led to higher admission rates for men, particularly among less academically accomplished applicants (Baum & Goodstein, 2005). Practitioners have known of these differences for years and a former dean of admission at Kenyon College, a private selective institution in Ohio, addressed the issue in a *New York Times* op-ed, writing: "The elephant that looms large in the middle of the room is the importance of gender balance. Should it trump the qualifications of talented young female applicants?" (Delahunty Britz, 2006, p. 25). Nearly two decades later, the *Times* dubbed this pattern "affirmative action for men" (p. 54) in a story highlighting widespread institutional efforts to preserve balance between the sexes on campuses as the share of female applications continued to grow (Dominus, 2020).

To understand the role of an applicant's sex in the admissions process, it is essential to first examine how colleges and universities evaluate applications. Most U.S. colleges use holistic admissions, an evaluation process that considers not just an applicant's academic record, but the whole applicant and their fit with the institutional mission and priorities (Bastedo et al., 2018). Admission officers consider a combination of academic achievement (e.g., grades, test scores), nonacademic qualities (e.g., personal attitudes and character), and an applicant's background (e.g., family and school environment) when making decisions (Hossler et al., 2019). While balancing the sexes may factor into admissions decisions, it is presented in this literature as one priority among many. However, whether it is a thumb on the scale favoring an equally qualified male applicant over a female applicant or an elephant providing a substantial advantage to men is not easily discernible to admission outsiders.

Differences in how applicants are evaluated and the relative weight assigned to components of the application, such as academic achievement, nonacademic qualities, and background characteristics, may influence the composition of the admitted student cohort, reflecting differences between men and women in these areas of assessment. An ideal analysis of admission differences by sex would utilize student-level data to enable matching techniques, such as propensity score matching, across multiple admission criteria. In the absence of such data, analyses should seek to account for potential group-level average differences informed by existing research on these factors. The following subsections review research related to the primary areas of holistic admission evaluation, highlighting documented differences between men and women in academic achievement, nonacademic qualities and applicant background.

Academic Achievement

The primary metrics for assessing academic achievement include standardized test scores, high school grades, and the rigor of a student's high school curriculum. Standardized test scores have been associated with higher admission rates for male applicants (Bielby et al., 2014). Colleges aiming to raise their average test scores may, therefore, exhibit admission patterns favoring men without specifically intending to increase the male student population. However, improvements in female performance on standardized tests (Cho, 2007; Goldin et al., 2006) may weaken this association and updated research in this area would be valuable. Conversely, admissions practices that emphasize high school grades, where women have generally outperformed men (Flashman, 2013; Fortin et al., 2015), may correspond with higher female admission rates. Policies such as test-optional admissions and automatic admission based on class rank, which could be viewed as putting less weight on test scores in admissions, have been documented to advantage female applicants (Bennett, 2022; Conger, 2015; Conger & Dickson, 2017).

The question of whether to prioritize test scores or high school grades in admissions remains highly contested and is ultimately determined by institutional priorities and values. One factor that institutions might consider is whether testing or high school performance is a better predictor of college success, which could be defined as first-year GPA, likelihood of persisting from the first to second year of college, or college graduation. Some research suggests that standardized test scores are more predictive of college success (Chetty et al., 2023; Friedman et al., 2025), while other studies find high school GPA and performance in rigorous courses to be stronger predictors (Galla et al., 2019; Hoffman & Lowitzki, 2005; Koretz et al., 2016). Other studies offer evidence that combining test scores with high school performance may offer the best prediction of college success (Marini et al., 2021; Sawyer, 2013; Westrick et al., 2020; Zwick, 2019).

Another factor that institutions might consider is whether standardized testing poses a potential barrier for some students.[2] For instance, Dartmouth College reinstated its standard testing policy after the COVID-19 pandemic based on internal data that indicated that the inclusion of test scores would benefit students from lower socioeconomic backgrounds in its admission process (Sacerdote et al., 2025). Meanwhile, other researchers (Bennett, 2022; Bleemer, 2024; Zwick & Himelfarb, 2011) have found evidence that requiring test scores may serve as a barrier to students from low-income backgrounds, noting that higher income students have greater access to test prep services. The discrepancy between these studies may indicate differences in how test scores are used across institutions.

The landscape of standardized testing has shifted notably since the COVID-19 pandemic, with most institutions having adopted test-optional policies. For the 2025

[2] In addition to the example of socioeconomic disparities, concerns have also been raised that the predictive validity of test scores vary by race and ethnicity (Hoffman & Lowitzki, 2005) and language background (Zwick & Sklar, 2005).

fall semester, over 80% of four-year institutions did not require standardized test scores (FairTest, 2024), including both test-optional institutions, where submission is voluntary, and test-blind institutions, which do not consider test scores at all. Assessing the impact of test-optional policies on admissions by sex is complex without student-level data. Some applicants submit test scores and others do not, which could vary by sex. Moreover, institutions weigh test scores or the absence of test scores differently. The literature is inconclusive about how test scores may affect admission offers made to male and female applicants, but there is some evidence that requiring test scores may contribute to the differences in outcomes.

Despite the widespread move away from mandatory testing, a subset of institutions continues to require test scores. According to the College Board, 19 private and 35 public institutions will require SAT or ACT scores for admission in the 2025–26 cycle (College Board, 2025). These include most U.S. service academies, several southern public institutions, and some of the nation's most selective private institutions, such as Harvard, Stanford, and MIT. At highly selective institutions with large applicant pools, standardized test scores function as a tool to narrow the pool of qualified candidates. At the same time, when institutions have an abundance of choice amongst their applicants, they can consider nonacademic factors and applicant backgrounds when making admission offers. As such, it is also important for college admission researchers to consider how these factors may also influence male and female admission rates.

Nonacademic Qualities and Applicant Background

Nonacademic and contextual components of applications, which can be evaluated through components such as recommendation letters, play a significant role in admissions decisions at selective institutions and have the potential to introduce sex-related differences in admission outcomes. An analysis of over 600,000 applications found letters for female students tended to be longer and emphasize personal qualities and leadership, whereas letters for male students more often highlight intellectual promise, extracurricular involvement, and classroom behavior (Kim et al., 2025). While this research did not account for how these differences influenced admission decisions, it offers compelling evidence to differences in how male and female applicants are presented by recommenders. Research has shown that boys tend to receive lower grades when teachers include behavior assessments (Contreras, 2023; Ferman & Fontes, 2022). This may mean that recommendation letters, which often comment on student behavior, could be detrimental for male applicants.

It is also important to recognize that admission officers' interpretations of application materials can vary across institutions and may be affected by both individual biases and institutional priorities (Rowan-Kenyon et al., 2024). Experimental evidence indicated admission officers responded more positively to communications from female applicants than male applicants, revealing a possible unconscious bias amongst admission officers that may affect decisions (Hanson, 2017). Regarding broader institutional priorities, research at the University of California, Berkeley indicated recommendation letters for underrepresented student groups tended to be less strong on average, but admission officers placed less emphasis on these letters for such applicants due to the institutional desire to increase college access for these groups of students (Rothstein, 2022). This highlights how institutional goals can shape individual admissions decisions by shifting the weight of different components of the application and ultimately the composition of an admitted cohort of students.

Furthermore, broader institutional priorities may extend beyond applicant-level factors. Recent research found that institutions not meeting Title IX requirements for proportional female participation in athletics were more likely to admit men at higher rates (Creps, 2025). Efforts to limit female enrollment may represent an attempt to maintain compliance with Title IX athletic standards by controlling the ratio of female students and athletes, allowing institutions to avoid expanding women's athletic programs. This study did not differentiate between public and private institutions, underscoring a critical avenue for future research, particularly given the differing Title IX regulations governing admissions in these sectors.

Positionality Statement

Research on the differences in male and female admission outcomes is limited, partly due to restricted access to student-level data. My interest in this issue stems from nearly a decade of experience as a college admission officer at two highly selective private institutions with predominantly female applicant pools. Consistent with previous reports of a male admission advantage (Delahunty Britz, 2005; Dominus, 2023; West, 2021), I witnessed practices aimed at *sex balancing* admission cohorts. In these instances, the institutional preference for enrolling a similar share of men and women resulted in moving many qualified female applicants, whom the admission committee initially selected based on their academic and nonacademic achievements, to waitlists or denial, then filling those spaces with male applicants, who had originally been waitlisted or denied. This process, commonly known as *shaping*, motivated my investigation into the extent of such practices across undergraduate admissions.

While my motivation is grounded in my professional experience and supported by the aforementioned anecdotal report, this study intentionally shifts from anecdotal observation to systematic analysis by using publicly available institutional data. Unlike internal admissions records, which provide detailed student-level insight, publicly reported data such as IPEDS enable cross-institutional comparison. However, this approach masks within-institution variation and the institutional priorities that shape individual applicant decisions. This methodological reliance on aggregated data complements but cannot confirm my institutional insights as it cannot make any causal claims. With that in mind, my analysis of institutional data revealed patterns suggesting that selective private colleges may favor male applicants.

Although Title IX's exemption for private undergraduate admissions makes sex-conscious admissions legally permissible for these institutions, legal permissibility does not necessarily imply fairness, which can be understood as equitable treatment of applicants irrespective of their sex. While relying on institutional data limits claims about individual-level treatment, these findings provide broader evidence beyond my own institutional context, indicating that sex-conscious practices warrant further suspicion and scrutiny. This study's results align with my professional observations and public reports from other former admissions officers. They underscore the importance of policy discussions concerning the continued inclusion of this exemption within Title IX and the need for more detailed research on this subject.

THEORETICAL FRAMEWORK

This study leverages the theoretical framework of discrimination economics (Arrow, 1973; Becker, 2010) to investigate the possibility of sex differences in undergraduate admission outcomes. Becker conceptualized discrimination as a *taste* or preference that leads individuals or institutions to treat some groups differently, even when all observable qualifications are equal. In labor markets, this manifests as unequal wages or hiring practices that disadvantage certain groups, such as women. Translating this model to the sphere of college admissions, an institution or admissions officer might consciously or unconsciously prefer one sex over another. This could result in systematically higher or lower acceptance rates for similarly qualified applicants.

Arrow's (1973) statistical discrimination framework builds upon taste-based discrimination by considering the impact of imperfect information. Admission committees lack perfect insight into every applicant's ability and character and therefore may rely on group characteristics, such as sex, as proxies for unobservable attributes like leadership potential or perseverance. As noted in the literature review, these intangible factors can be presented differently for male and female applicants in recommendation letters (Kim et al., 2025), suggesting that institutions that prize certain factors over others may unintentionally bias admission offers to men or women. Arrow's (1973) emphasis on the limitations of market forces to self-correct underscores the potential need for policy intervention in admissions. This idea is at the heart of Title IX and its mandate to end sex-based discrimination in education. Thus, an exemption from this legislation leaves private undergraduate admission decisions subject to the limitations of market forces to correct any potential discrimination.

Empirical evidence from related fields add to this theoretical framework. For example, a study of *blind* auditions in orchestras revealed that removing personally identifying information increased the likelihood that women advanced through competitive selection, suggesting that processes designed to reduce the prominence of group identity can mitigate bias against a disadvantaged group (Goldin & Rouse, 2000). Similarly, research on double- and triple-blind peer review in scientific publishing provides mixed but suggestive evidence that anonymizing both applicant and reviewer identities can help diminish the effects of implicit or explicit gender bias, but these studies also caution that such procedural changes alone may not deliver complete equity (Conklin & Singh, 2022; Kern-Goldberger, 2022).

Combining these theoretical models and empirical studies offers a framework that suggests that both taste-based and statistical discrimination can influence outcomes in undergraduate admissions. Preferences of admission officers, reliance on group-based heuristics, and institutional priorities are possible contributing factors to potential gaps between male and female acceptance rates. This framework provides both a theoretical rationale and empirical grounding for investigating sex-based inequities in college admissions.

METHOD

This study leverages a dataset derived from the Integrated Postsecondary Education Data System (IPEDS) and the Equity in Athletics Disclosure Act (EADA) to explore possible determinants of male-female admission rate disparities across private and public postsecondary institutions. The sample comprises 377 public and 480 private co-educational institutions that participated in intercollegiate athletics. This exploratory analysis used the following cross-sectional analytical framework applied to 2022 data,

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \sum_j \gamma_j \left(X_{1i}^* + Z_{ji}\right) + \varepsilon_i$$

where Y is the difference in the male and female admission rates at institution, i. β_0 is the intercept and β_1, β_2, β_3 are the coefficients for the three different groups of variables: institutional characteristics, admission requirements, and admission statistics. X_{1i} is the vector of all institutional characteristics, including the binary indicator for private institutions, X_{1i}^*. X_{2i} is the vector of admission requirement variables, and X_{3i} is the vector of admission statistics variables. γ_j is the interaction term between private institutional status and all other variables in the model, Z_{ji}. Interaction effects allowed for the identification of how these associations differed between private and public institutions. The error term is ε_i.

To assess the robustness of the findings, parallel analyses were conducted using data from 2019, the year before the COVID-19 pandemic to account for any potential pandemic-related effects in the model. The models also accounted for potential heteroskedasticity by estimating robust standard errors. This approach enabled evaluation of the consistency and reliability of observed relationships across different time points.

Measures

The dependent variable is defined as the difference between male and female admission rates, calculated by subtracting the female admission rate from the male admission rate. A positive value indicates a higher admission rate for males, whereas a negative value indicates a higher admission rate for females.

Admission factors and institutional characteristics were selected as independent variables based on the findings in the literature review. The descriptive statistics for the independent variables are presented in Table 1. The model incorporates binary indicators for institutionally reported admission requirements, specifically whether an institution required students to complete a college preparatory curriculum, request recommendation letters, and submit standardized test scores. Consistent with prior research, an applicant's performance in high school (Conger, 2015; Conger &

Dickson, 2017), their test scores (Bielby et al., 2014; Bennett, 2022), and their recommendations (Kim et al., 2025) can play a role in shaping admission decisions and may explain any observed difference in admission outcomes between men and women.

In 2022, public institutions were more likely to require a college preparatory curriculum and standardized test scores compared to private institutions, though only 13% of public institutions required standardized tests, reflecting the widespread adoption of test-optional policies during the COVID-19 pandemic. In contrast, private institutions were far more likely to require recommendation letters, with 48% having this requirement compared to just 13% of public institutions. Both institution types had predominantly female applicant pools. Previous studies suggest that a higher female applicant share may be associated with a relative admission advantage for male applicants (Baum & Goodstein, 2005; Creps, 2025). Public institutions showed marginally higher admission rates on average, admitting 77% of applicants compared to 68% at private institutions. Admission selectivity varies widely across institutions, ranging from highly selective with single-digit admission rates to nearly open admission.

Institutional control variables include undergraduate enrollment size, the share of female students enrolled, tuition levels, and net assets per full-time student. Prior literature indicates that enrollment size and female enrollment share may influence institutional preferences for men or women in admissions (Baum & Goodstein, 2005; Creps, 2025), while tuition and net assets serve as proxies for institutional resources and prestige, factors potentially affecting admission strategies. Given the wide range, skewness, and potential for non-linear relationships, log-transformations were applied to enrollment, tuition, and asset variables. While this analysis primarily focuses on admission factors, caution is advised when interpreting coefficients of logged control variables, which should be understood as the estimated change in the male-female admission rate gap associated with a 1% increase in the corresponding variable.

RESULTS

The analysis identified statistically significant factors associated with the observed admission gap, including the share of female students enrolled, the share of female applicants, and the admission rate of public and private colleges. To address potential heteroskedasticity in the error terms, robust standard errors were calculated. The results were consistent when using robust standard errors compared to conventional standard errors, lending greater confidence to the findings.

Notably, the degree of selectivity at private institutions, which was the interaction effect between admission rate and private institution status, indicated that lower admission rates correlated with a relative preference for male applicants in admissions. This was a highly significant negative association ($p < 0.001$), demonstrating a substantial difference in admission rates for men and women between highly selective and less selective private institutions. For example, a private

Table 1: Descriptive Statistics of the Independent Variables by Institutional Control, 2022-23

	Public		Private	
	Average (SD)	Range	Average (SD)	Range
Institutional Characteristics				
Undergraduate Enrollment	10,741 (9,487)	679-59,765	2,915 (3,654)	337-33,203
Enrollment (log)	3.860 (0.405)	2.832-4.776	3.302 (0.342)	2.528-4.521
Female Enrollment (%)	57.0% (6.8)	23.3-75.6	55.4% (8.3)	22.9-77.1
Tuition	10,528 (3,130)	3,356-23,970	42,963 (12,516)	6,304-66,490
Tuition (log)	4.021 (0.128)	3.543-4.397	4.629 (0.143)	3.817-4.840
Net Assets / FTE (log)	3.685 (1.902)	0-5.902	5.201 (0.498)	0-6.950
Admission Requirements				
College Prep Curriculum	56.0% (49.7)	0-100	41.5% (49.3)	0-100
Recommendation Letter(s)	12.7% (33.4)	0-100	47.9% (50.0)	0-100
Standardized Test Scores	13.3% (34.0)	0-100	1.9% (13.6)	0-100
Admission Statistics				
Female Applications (%)	59.1% (6.3)	31.1-73.3	55.7% (0.092)	15.4-79.8
Admit Rate	76.9% (18.3)	8.6-99.9	67.6% (0.250)	2.7-99.9
Observations	377		480	

SOURCE: IPEDS and EADA.

Table 2: Regression of Male-Female Admission Rate Gap by Institutional Control, 2022-23

	Main Effects			Private Interaction Effects		
	Coeff.	SE	RSE	Coeff.	SE	RSE
Institutional Characteristics						
Private	0.078	0.143	0.172	-	-	-
Enrollment (log)	-0.002	0.007	0.005	0.009	0.011	0.012
Female Share of Enrollment	-0.297	0.075***	0.070***	-0.126	0.089	0.111
Tuition (log)	-0.020	0.022	0.019	0.006	0.031	0.037
Net Assets / FTE (log)	0.001	0.001	0.001	-0.007	0.007	0.008
Admission Requirements						
College Prep Curriculum	-0.006	0.006	0.004	0.005	0.008	0.007
Recommendation Letter(s)	-0.012	0.008	0.006+	-0.001	0.010	0.009
Standardized Test Scores	0.010	0.008	0.007	0.045	0.020*	0.020*
Admission Statistics						
Female Share of Applications	0.316	0.080***	0.073***	0.087	0.091	0.109
Admit Rate	0.039	0.016*	0.013**	-0.078	0.021***	0.019***
Observations			857			
Prob > F			<0.0001			
R-squared			0.1645			
Adj. R-squared			0.1456			
Root MSE			0.0511			

SOURCE: IPEDS and EADA. NOTE: + = $p < 0.1$, * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$. Coefficients, standard errors, and robust standard errors are reported as decimals, but are referred to as percentages within the text for interpretability.

institution with a 10% admission rate, compared to one with a 70% rate, would be predicted to offer a male admission advantage approximately five percentage points higher than the less selective institution.

Additional findings point to positive main effects for both the female share of applications ($p < 0.001$) and undergraduate admission rates, with the statistical significance of admission rates increasing under robust standard error estimation from $p < 0.05$ to $p < 0.01$. The practical impact of the admission rate effect, however, is relatively small. A 50-percentage point difference in institutional admission rates was associated with only a 2-percentage point greater predicted male admission advantage. This finding runs counter to the assumption that more selective institutions would exhibit greater opportunities for sex-based selection bias but does not fully offset the male advantage at highly selective private colleges. The share of female applicants had a greater practical impact. A 10-percentage point difference in the share of female applications was predicted to correspond with a 3-percentage point higher male admission advantage.

The admission requirement variables did not demonstrate significant main effects except for the requirement of recommendation letters when robust standard errors were applied. Institutions requiring recommendation letters exhibited a modest but statistically marginal tendency to admit women at a rate 1.2 percentage points higher than men (coefficient: -0.012, $p < 0.1$). A positive and statistically significant ($p < 0.05$) interaction between private institutions and the requirement for standardized test scores was found, implying that private institutions that required test scores had a predicted 4.5-percentage point greater male admission advantage compared to their counterparts without such a requirement. However, this result should be interpreted extremely cautiously, as only 1.9% of private institutions required standardized test scores in 2022.

The analysis of institutional characteristics revealed a statistically significant negative main effect of the female share of enrollment on the male-female admission rate gap ($p < 0.001$). This indicates that colleges with higher proportions of enrolled women, regardless of sector, tended to exhibit relatively higher admission rates for women. Specifically, a coefficient of -0.297 suggests that an institution with a 10-percentage point higher share of female enrollment (for example, 60% versus 50%) is predicted to admit women at a rate approximately 3 percentage points higher than men compared to the institution with balanced enrollment.

Robustness Check

Given that the primary analysis used data collected during the post-COVID-19 period, it is important to consider how pandemic-related shifts in student and institutional behaviors may have influenced these findings. To assess the stability of the results, a robustness check was conducted using cross-sectional data from 2019, which represents the last pre-pandemic cohort.[3]

Descriptive statistics for the independent variables from this period are presented in Table 3. Institutional characteristics and admission outcomes were largely consistent with those observed in 2022, however, some differences existed regarding admission requirements. Most importantly, the share of institutions requiring standardized test scores was substantially higher in 2019, with 87% of public and 63% of private institutions requiring testing, compared to only 13% and 2% respectively in 2022. Additionally, while slightly fewer private institutions required a college preparatory curriculum in 2019, 36% versus 42% in 2022, a greater share required recommendation letters, 55% compared to 48%. This may mean as a group, private institutions were more influenced by test scores and recommendation letters in this cohort than in 2022. Similarly, admission decisions from public institutions may have been more influenced by test scores in 2019.

The 2019 regression analysis revealed that the negative interaction effect between private colleges and admission rates remained statistically significant ($p < 0.05$), reinforcing the finding that more selective private colleges tended to exhibit a male admission advantage. The main effect of admission rates retained a positive association but was not statistically significant. The effect size for the female share of applications (0.303) was nearly identical to 2022 (0.316), reflecting a consistent influence of the demographics of the applicant pool on admission outcomes. While the 2019 data suggested a potential interaction effect between private colleges and their female share of applications ($p < 0.05$), this effect did not hold under robust standard error estimation.

Unlike the 2022 findings, the interaction effect for the requirement of standardized test scores and private colleges was not significant in 2019. This supports my initial concerns that the 2022 result may have been influenced by the small subset of private colleges requiring test scores during this time. Further examination of the data revealed that these institutions tended to be highly selective with high average test scores. However, in 2019, requiring standardized test scores was positively associated with a male admission advantage across all institutions, with an estimated effect size of approximately a 2-percentage point higher male admission rate for institutions requiring scores compared to those that did not. Since this association did not differ between public and private institutions, it raises further speculation that preference for standardized test scores may explain part of the male admission advantage. In other words, men may be advantaged by institutions requiring test scores, not because they are male, but because their test scores meet a specific institutional priority.

[3] In addition to the 2019 analysis, I conducted several other analyses of pre-pandemic admission cycles and found similar results. I can include these analyses in an appendix if reviewers feel this would strengthen the robustness of this research.

Table 3: Descriptive Statistics of the Independent Variables by Institutional Control, 2019-20

	Public		**Private**	
	Average (SD)	Range	Average (SD)	Range
Institutional Characteristics				
Undergraduate Enrollment	11,219 (8,981)	596-47,537	2,993 (3,389)	421-28,434
Enrollment (log)	3.903 (0.377)	2.775-4.677	3.334 (0.322)	2.624-4.454
Female Share of Enrollment	56.1% (6.7)	23.9-76.0	55.9% (8.0)	21.9-77.6
Tuition	10,051 (2,891)	3,260-23,628	39,885 (11,001)	5,790-61,788
Tuition (log)	4.061 (0.122)	3.589-4.450	4.658 (0.135)	3.539-4.867
Net Assets / FTE (log)	3.344 (2.065)	0-5.790	5.137 (0.496)	0-6.904
Admission Requirements				
College Prep Curriculum	58.3% (49.4)	0-100	35.6% (47.9)	0-100
Recommendation Letter(s)	13.5% (34.2)	0-100	54.6% (49.8)	0-100
Standardized Test Scores	86.8% (33.9)	0-100	63.3% (48.2)	0-100
Admission Statistics				
Female Share of Applications	58.8% (6.5)	28.5-73.2	57.2% (8.9)	21.8-77.1
Admit Rate	71.9% (17.1)	12.3-100.0	62.8% (22.6)	4.3 -100.0
Observations	379		480	

SOURCE: IPEDS and EADA. NOTE: Admission requirements are binary variables indicating whether an institution required these materials for admissions. The average is the share of institutions requiring this material.

Table 4: Regression of Male-Female Admission Rate Gap by Institutional Control, 2019-20

	Main Effects			Private Interaction Effects		
	Coeff.	SE	RSE	Coeff.	SE	RSE
Institutional Characteristics						
Private	-0.102	0.131	0.165	-	-	-
Enrollment (log)	-0.003	0.007	0.007	0.18	0.010+	0.011+
Female Share of Enrollment	-0.386	0.066***	0.114***	-0.098	0.081	0.134
Tuition (log)	-0.027	0.020	0.024	0.019	0.028	0.036
Net Assets / FTE (log)	<-0.001	0.001	0.001	-0.004	0.006	0.006
Admission Requirements						
College Prep Curriculum	-0.004	0.005	0.004	-0.003	0.007	0.007
Recommendation Letter(s)	-0.008	0.007	0.006	-0.002	0.009	0.008
Standardized Test Scores	0.022	0.007**	0.007***	-0.004	0.008	0.008
Admission Statistics						
Female Share of Applications	0.303	0.067***	0.128*	0.156	0.079*	0.146
Admit Rate	0.008	0.014	0.015	-0.045	0.019*	0.019*
Observations				859		
Prob > F				<0.0001		
R-squared				0.2196		
Adj. R-squared				0.2019		
Root MSE				0.0443		

SOURCE: IPEDS and EADA. NOTE: + = $p < 0.1$, * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$. Coefficients, standard errors, and robust standard errors are reported as decimals, but are referred to as percentages within the text for interpretability.

Consistent with the 2022 data, the female share of enrollment maintained a highly significant negative association with the male admission advantage ($p < 0.001$). This suggests that institutions with higher proportions of enrolled female students tended to admit female applicants at relatively higher rates than male applicants compared to institutions with balanced student bodies.

DISCUSSION

The results of this study align with the claims of former admission officers and with my own professional experience, indicating that private institutions with selective admission processes possess the capacity to balance the sexes of their admitted cohorts. This association between admission selectivity at private institutions and higher admission rates for male applicants compared to female applicants persisted after controlling for institutional characteristics and accounting for variation in admission requirements. Taken together, these patterns sharpen the ethical question of whether it remains defensible for private institutions to retain a legal exemption that permits the use of an applicant's sex as an influential factor in undergraduate admissions. Private colleges and universities would likely contest any effort to remove this exemption by invoking principles of institutional autonomy and limited governmental intrusion into academic affairs, yet in a period of declining public trust in higher education, particularly among elite private institutions, securing broad public support for such a position may prove especially difficult.

Assessing Admission Outcomes Using Aggregated Data

While statistical evidence is not necessary to examine the ethical question of whether the exemption should be eliminated, it is essential for addressing the empirical question of whether private institutions are discriminating against female applicants. The patterns documented in this analysis in combination with anecdotal reports provide suggestive but not definitive evidence that the exemption is being misused. Private institutions could make a case that, in the absence of student-level evidence of discriminatory treatment, the differences observed in the aggregated institutional data merely reflect underlying differences in applicant characteristics, and that institutional preferences correlated with those characteristics may, in turn, generate the observed differences in admission rates.

For instance, the literature suggests that requiring standardized test scores may advantage men (Bielby et al., 2014), whereas test-optional policy may advantage women (Bennett, 2022). Consistent with these studies, the 2022 results indicate that private colleges requiring test scores were associated with admitting men at rates approximately 4.5 percentage points higher than the private colleges that did not require scores, although this pattern may be partly due to the limited number of private institutions requiring test scores in 2022 and was not present in the 2019 data when more than half of private institutions required test scores. Instead, in 2019, there was a main effect for test requirements, where both public and private institutions requiring test scores were predicted to admit men at rates 2.2 percentage point higher than institutions that did not require scores, an association that may reflect differences in test scores between men and women rather than bias in the admission process. Notably, in both years, the male admission advantage at selective private institutions existed in addition to the male admission advantage associated with test requirements, indicating that above and beyond differences related to testing, private colleges with lower admission rates still offered a relative admission advantage to male applicants, underscoring the need for additional research on how test-required and test-optional policies shape sex differences in admission results.

The irony of private institutions potentially asserting that there is no evidence of discrimination is that they already possess the student-level data necessary to evaluate this empirical question. Their unwillingness to share anonymized student-level admissions data, such as test scores and transcript information disaggregated by sex, helps to sustain the evidentiary gap that limits empirical scrutiny. Although the federal government has proposed requiring institutions to report more detailed admission data disaggregated by race and sex beginning in 2026 (IPEDS 2025-26 through 2026-27, 2025), these data will still be aggregated at the institutional level, limiting strong causal inferences about any observed asymmetries across groups. From a research standpoint, a better approach would involve the collection of anonymized student-level data that could be made available to researchers under restricted-use agreements. However, critics already contend that the new federal reporting requirements are administratively burdensome for colleges and universities and exceed the capacity of a downsized Department of Education to collect, manage, and monitor such information (Barshay, 2025; Peters & Velez, 2025). These critiques would almost certainly grow much louder if institutions were required to submit anonymized student-level data, even if the mandate applied only to a limited set of highly selective institutions.

The Difficulty of Defining Discrimination in Holistic Admissions

Additional data for empirical inquiry would still face difficulties in effectively assessing all components of holistic admissions review, many of which may vary systematically between male and female and could lead to different admission outcomes without necessarily reflecting bias in the process. For instance, the literature suggests that the information and characteristics presented in recommendation letters may differ for men and women, possibly reflecting teacher's assessments of behavioral differences (Contreras, 2023; Ferman & Fontes, 2022; Kim et al., 2025). The 2022 analysis found marginal evidence for the claim that requiring recommendation letters is linked to differences in admission rates between the sexes. Institutions requiring recommendation letters had 1.2 percentage point higher admission rate for women ($p < 0.1$) compared to institutions that did not require recommendation letters, although this correlation was not significant in 2019 and is complicated by that fact that fewer than 15% of public institutions required recommendation letters in either year. The finding is generally weak, but the detection of statistical significance encourages further quantitative analysis into the effects of recommendation letters on admission outcomes, especially given that much of the research on this topic is qualitative or descriptive (Kim et al., 2025; Rowan-Kenyon et al., 2024) and has rarely examined its direct links to admission decisions (Rothstein, 2022).

There is no policy solution that can easily define discrimination in holistic admissions. A federal mandate for additional data alone would not resolve this challenge because the evaluation of essays and letters of recommendation are inherently subjective and these components are difficult to systematically compare across applicants. Even if lawmakers were to rescind the Title IX exemption for private institutions, regulators would still need a mechanism to monitor institutional practices and to investigate suspected discrimination. A radical alternative would be for the federal government to prohibit the collection of applicants' sex at Title IV institutions, in essence creating a sex-blind admission process for all federally funded institutions. Such a mandate, however, would require reenvisioning the college application since interviews, essays, recommendations letters, and even applicants' names or extracurricular activities can reveal or strongly signal sex.

Focusing on the Highly Selective Institutions

A striking takeaway from this analysis was the main correlations of the female share of enrollment and the female share of applications with the male admission advantage. The literature indicates that higher female representation in the applicant pool and among enrolled students has been associated with an admission advantage for men at selective institutions (Baum & Goodstein, 2005; Creps, 2025). Consistent with this work, this analysis found that a larger share of female applicants was associated with higher admission rates for men, whereas higher rates of female enrollment were surprisingly associated with lower admission rates for men. These results were statistically significant and indicate a potential nonlinear relationship or interaction effect between these two variables.

When considering the dynamic between female applicants and female enrollment among private institutions of different degrees of selectivity, it may be explained as a tipping point in enrollment management. As the share of female applicants increases, highly selective institutions can strategically adjust admission offers to balance the sexes, while non-selective institutions, which admit most applicants, have less capacity to confer a male admission advantage and therefore enroll more women as the applicant pool becomes more female. These findings motivate further research on how the interaction between the share female application and female enrollment is linked to differences in admission outcomes between men and women across institutional tiers of admission selectivity.

From a policy perspective, these findings highlight the heterogeneity of colleges and universities within the higher education system. Since most institutions are not selective and admit most of their applicants, concerns about sex-based discrimination in admissions are most salient at institutions that can choose among many qualified applicants. One possible regulatory approach would be for the federal government to focus monitoring, investigation, and enforcement efforts on a narrower set of highly selective institutions, both public and private, requiring only these institutions to submit detailed admissions data for review. To buffer against any potential political interference, responsibility for routine data review and audit could be assigned to accrediting agencies, with cases exhibiting strong signals of discrimination referred to the Office for Civil Rights for formal investigation. This policy would have to address difficult questions about how to define which institutions are sufficiently selective to fall under such requirements, how frequently audits should occur, and what evidentiary thresholds should trigger a finding of bias.

Limitations

As noted in the positionality statement, while the current findings suggest a potential link between highly selective private institutions and a male admission advantage, the available data are insufficient to establish a causal relationship. IPEDS data, which are aggregated at the institutional level and cannot be disaggregated to the student level, present several limitations: they cannot account for sex-based variation in admissions factors such as test submission status, test scores, or admission rates by score and status; they may incorporate internal institutional priority biases; and they do not capture holistic application elements such as essays or letters of recommendation.

The evidence in combination with my professional experience and publicly reported observations of other former admission officers provides initial support for an association (Delahunty Britz, 2005; Dominus, 2023; West, 2021), but important criteria such as exclusion of alternative explanations cannot be fully evaluated with the use of institutional data. Therefore, these results should be interpreted with caution while also inviting further inquiry and encouraging deeper dialogue regarding the Title IX exemption for private undergraduate admissions. Further research with student-level data is needed to clarify whether the observed association reflects a causal effect. Until such evidence is available, the interpretation of these findings remains suggestive rather than conclusive.

CONCLUSION

The private college admission exemption reflects a tradition of granting private institutions autonomy in academic decisions; however, sex-based admission practices raise important questions about equity and reveal enduring resistance to demographic change within higher education, particularly among the most selective institutions. This research may lead to calls to rescind the private undergraduate admissions exemption under Title IX, requiring private colleges to meet the same federal standards in undergraduate admissions as all other postsecondary institutions. This change would require congressional action, a process fraught with political challenges. If rescinded, practical questions would need to be addressed, such as how to monitor and enforce compliance and whether institutions could continue collecting sex-related data or would this change lead to sex-blind admissions requirements.

A blinded review of applications has demonstrated the potential to reduce bias in other highly selective venues, including academic research (Conklin & Singh, 2022; Kern-Goldberger, 2022) and orchestra selections (Goldin & Rouse, 2000), though this approach does not necessarily eliminate all disparities and may not be a perfect corollary to undergraduate admissions. Further, a move to sex-blind policies in college admissions could require revisions to application materials, potentially requiring the omission of references to sex or gender in recommendation letters and personal essays, which would add complexities to its implementation and impact public institutions as much as it does private institutions.

As noted in my positionality statement, based on my experience as an admission officer, I can confirm that at least at the institutions where I worked, there were significant disparities in the academic and nonacademic accomplishments of average admitted male and female applicants. Public reports and personal conversations have indicated that this situation was not unique to my experience. The analysis in this study raises further suspicions about the extent of a male admission advantage in higher education and especially at highly selective institutions.

Yet, until large-scale student-level admission data is made available to researchers, the strength of these claims remains suspect at best. Advancing research on this topic using student-level data is vital for understanding the factors behind disparities in the admission rates of men and women. Although institutional reluctance to share their data creates barriers to this work, the involvement of independent, nonpartisan research organizations and anonymized data could foster trusted, rigorous analysis that could shed more light on this issue and reveal greater nuance across the higher education landscape. Increased transparency into admissions data is important for evidence-based policymaking and institutional reforms that promote diversity and access across higher education.

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University Urban Development and Studentification: Evidence of Neighborhood Change Unique to Higher Education

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ABSTRACT

Studentification is a process of neighborhood change characterized by the in-migration of postsecondary students. While studentification is generally conceptualized in the literature as an organic process tied to shifts toward mass higher education participation, I argue universities are not powerless actors in development. They have some degree of control over student residential patterns through university-led urban development initiatives, known as anchor institution initiatives. Utilizing US decennial census data from 1970 to 2010, I employ an inverse probability weighting difference-in-differences model to estimate the effect of anchor initiatives on rates of studentification. Results show a positive effect on studentification in neighborhoods targeted by an anchor initiative. I also find a positive relationship between studentification and rent prices.

Keywords: Studentification, anchor institution, student housing, university urban development, off-campus housing, student affordability

A growing body of literature conceptualizes higher education organizations as anchor institutions to analyze the relationship between higher education and local development (Ehlenz, 2019; Hodges & Dubb, 2012; Orphan & McClure, 2019). Anchor institutions are organizations that are anchored to a specific location due to mission or moving costs. Additionally, communities are anchored by these organizations as they provide a reliable source of employment and economic activity.

Two common types of anchor institutions are hospitals and universities. Due to their relative size and economic stability, universities and hospitals are often centered in urban and regional development strategies in cities across the globe (Addie, 2018; Bank et al, 2018; Porter, 2016; Wiewel & Perry, 2008). Universities, with their large populations of associated students, have unique effects on their surrounding neighborhoods and communities. One concept used to make sense of these effects is studentification, a process of neighborhood change in which the residential make-up is increasingly students, along with changes in neighborhood characteristics associated with the preferences of students and typical age groups (Moos et al., 2018; D. P. Smith & Holt, 2007). This study uses United States (US) decennial census data and the American Community Survey (ACS), standardized to 2010 census tracts, to estimate changes in studentification associated with intentional economic/community development projects launched by universities, referred to as anchor institution initiatives.

Universities act as anchor institutions simply through conducting daily business in service of their educational and research missions. The sheer number of employees receiving salaries to be spent at local businesses, students converging in specific locations, human capital gains for students, and productivity-enhancing discoveries and inventions by faculty are all ways universities contribute to the economic resiliency of communities without necessarily having stated or intended goals of economic development (Andersson et al., 2009; Arteaga, 2018; Kantor & Whalley, 2014). Many universities, however, intentionally design and implement projects for the explicit purpose of local development, called anchor institution initiatives. Anchor initiatives are projects targeted toward specific spatial areas with goals of economic or community development (Garton, 2021).

Anchor institutions and anchor initiatives are often lauded as powerful tools for purposes of building community wealth in presumably equitable ways (Hodges & Dubb, 2012; Saltmarsh et al., 2014), most recently shaping higher education campus reforms in South Africa to be less exclusive and more integrated into cities (Combrinck & Nortjé, 2021; Hendricks & Flaherty, 2018). Some new work, however, criticized universities in the US for participating in and accelerating gentrification processes (Baldwin, 2021; Taylor et al., 2018), a critique not limited to the US (Biswas et al., 2022; Jolivet et al., 2023). Numerous case studies of different anchor initiatives analyzed how intentional development strategies by universities fundamentally changed the targeted neighborhoods: the West Philadelphia Initiatives by the University of Pennsylvania (Etienne, 2012), the construction of the Auraria Higher Education Center in Denver (Page & Ross, 2016; Walker & East, 2018), and the construction of a new campus in Manhattanville by Columbia University (Gregory, 2013) are just a few examples of anchor initiatives that fed into larger gentrification processes. A quantitative study using census data found while physical construction by universities such as the Manhattanville campus did accelerate gentrification, other types of anchor initiatives actually slowed gentrification (Garton, 2023). This indicates the relationship between universities and neighborhood change is more complicated than a simple tale of development and displacement. Additional research is warranted to make sense of these initiatives so universities can purposefully leverage their resources to equitably build community wealth in ways that democratize regional economies rather than displace current residents.

One concept originating in the United Kingdom (UK) that can help make sense of universities and local development is studentification. While gentrification refers to the in-migration of relatively wealthy residents and associated changes in neighborhood amenities (Marcuse, 2015), studentification is the in-migration of students. The rationale for anchor initiatives is often to reshape neighborhoods to attract potential students (Etienne, 2012; Morris et al., 2010; Taylor et al., 2018), so rather than attracting relatively wealthy residents and participating in what we might consider to be gentrification, university anchor initiatives may instead be attracting students who might not personally have much wealth. The neighborhood changes associated with studentification are different from those associated with gentrification, which can help explain the complicated relationship to anchor initiatives and gentrification found by Garton (2023). Using a difference-in-differences model to estimate the effects of anchor initiatives on studentification, I found rates of studentification do increase in neighborhoods that are targeted for development by a university. Additionally, increases in studentification are associated with an increase in rent prices, with implications for housing affordability for students in cities. These results speak to the need to situate analyses of postsecondary institutions within their geographic contexts, not only in terms of state systems and national policies but also spatially and at the municipal level (Budd, 2022). The article also will inform future research and practice in the massification of higher education (Marginson, 2016). As enrollments grow, understanding student residential patterns and the ways universities influence these patterns will be essential to creating sustainable neighborhoods.

LITERATURE REVIEW

There is a relatively vibrant literature in geography on the concept of studentification, primarily based in the UK (e.g. Kinton et al., 2018; D. P. Smith & Holt, 2007; D. P. Smith & Hubbard, 2014) and Canada (e.g. Jolivet et al., 2023; Revington, 2024; Revington & Wray, 2022). Studentification is a form of neighborhood change in which there is an influx of students looking for housing near their university (D. P. Smith & Holt, 2007). As higher education enrollment expanded, more students began searching for off-campus housing, fundamentally altering many neighborhoods in shifting, transitory ways. A current debate in the studentification literature centers around either conceptualizing enrollment growth and ensuing studentification processes as an almost organic, unavoidable process, or conceptualizing studentification as a series of policy and consumer choices by communities and actors. While this article provides evidence of the latter, there is a recognizable pattern to studentification, beginning with the transformation to a high participation system, in which substantial numbers of the 18-24 age cohort are enrolled in postsecondary education (Marginson, 2016).

Studentification

Higher enrollments almost necessarily entail higher demand for housing near campuses as students tend to prefer to live close to their university (Revington et al., 2020). Students begin by moving into existing housing structures in nearby neighborhoods, typically standalone houses or duplexes, sharing the house with multiple roommates. Eventually, enough students will move into a neighborhood that private developers start to take notice, or universities will partner with developers to begin the new build phase of studentification. This phase is defined largely by new, large apartment complexes catering specifically to students, referred to in the literature as purpose-built student accommodations (PBSAs; Hubbard, 2009; Sage et al., 2013; D. P. Smith & Hubbard, 2014). With new PBSAs, the character of the neighborhood changes drastically. Most immediately, the PBSAs themselves construct exclusionary geographies, often literally with gated communities, but also implicitly by creating housing units preferable only to young age cohorts (Reynolds, 2020). The exclusionary geographies eventually extend beyond the PBSAs to the entire neighborhood as amenities shift to cater to the changing consumer base. Nightlife spots, coffee shops, and relatively cheap restaurants start to replace the existing establishments (van Liempt et al., 2015).

Although structural factors such as the nature of the housing supply and local development strategies are central to studentification, students themselves exercise agency in these processes. Students make value judgments and decisions about campus proximity, costs, and amenities, which collectively influence neighborhood change (Revington et al., 2020; Sage et al., 2013). These preferences drive demand for PBSAs, reinforcing market responses and university interventions. Studentification is thus conceptually aligned with other theories of neighborhood change in which structural, supply-side factors (Hackworth & N. Smith, 2001; N. Smith, 1998) are reproduced through individual, demand-side factors (Baum-Snow & Hartley, 2016; Hwang & Lin, 2016).

Neighborhoods that experienced studentification tend to have high rates of in-migration and out-migration, with newly enrolled students moving in and recently graduated students moving out (Duke-Williams, 2009). Though the residents change with high frequency, the neighborhood itself remains fairly stable. Part of why these neighborhoods remain so stable is because PBSAs are targeted so directly to students (Hubbard, 2009), often in direct partnership with universities (McClure et al., 2017) or as parts of larger development initiates spearheaded by universities (Etienne, 2012). Neighborhoods that are undergoing studentification or are already heavily populated by students deal with problems such as noise complaints and changes in traffic patterns, but also many of the same concerns of gentrification, namely changing neighborhood characteristics and the displacement of previous residents through price increases or changes in a sense of belonging to the neighborhood (Sage et al., 2013; D. Smith, 2008). Studentification, characterized largely by the transitory nature of students, is tightly connected to youthification, referring to the in-migration of relatively young residents (Moos et al., 2018). Measures of studentification should therefore capture both transitory housing supply (i.e. rent as opposed to own) and the general age of college students (i.e., older than 18 but not too far along in a career).

Contextual differences between UK and US higher education systems shape the nature of studentification in each country. In the UK, tuition is capped, and each constituent country determines how loans meant for living costs will be distributed, with England in particular disbursing only minimal funds for living costs (Bolton & Lewis, 2025). Conversely, almost all students in the US are eligible for Federal loans that can be used to cover off-campus housing costs. PBSAs developed around each system in similar regulatory structures. The PBSAs were developed by profit-seeking, commercial enterprises, though often in concert with universities and as part of larger development strategies of local planning authorities (Hubbard, 2009; Sage et al., 2013).

Anchor Initiatives

The literature on studentification is both predominantly within the context of the UK but also generally conceptualizes studentification as a process that occurs independently of specific policies or initiatives launched by universities beyond generic pushes to increase enrollment. This article contributes to the literature by applying studentification to the US and also by specifically examining the effects of intentional development strategies by universities on studentification. These intentional strategies are anchor institution initiatives.

Garton (2021) described anchor initiatives in terms of the capital the university invested in the target neighborhood: financial, physical, intellectual, and human. Financial investments are cash payments, or the promise of cash payments, to specific projects or cash transfers. These could include official policies to give priority to local businesses for purchasing, giving housing vouchers or mortgage incentives to employees to live in certain areas, payments in lieu of taxes to local governments, or funding community development corporations (Etienne, 2012; Hodges & Dubb, 2012). Physical investments are expansions of the campus physical plant or partnerships to build new structures with explicit rationales of local development (Dalton et al., 2018). For example, the University of Helsinki intentionally integrated itself into the city and became a major player in real estate development in the latter half of the 20th century (Haila, 2008). These types of physical strategies can accelerate gentrification in the targeted neighborhoods, potentially displacing residents (Garton, 2023). Intellectual capital is the knowledge held by students and faculty, leveraged through means such as technology transfer, spin-off companies, or engaged research and consultation (Etzkowitz, 2014). Finally, human capital is comprised of partnerships between universities and local stakeholders to increase local human capital such as through medical partnerships, K12 schools, etc. (Doberneck et al., 2010). These final two types of investments are often used in conjunction with a financial or physical strategy (Garton, 2021). Universities are not passive actors in the studentification process but are active participants who shape the very spaces they occupy.

Conceptual Framework

The rationale for launching anchor initiatives are not always clear beyond statements about desires for local community and economic development. Several initiatives, however, have been identified as launching specifically due to concerns about recruiting students (Hodges & Dubb, 2012). University leaders were concerned about losing their prestige as students would not enroll in their schools. These types of rationales lead directly to decisions that are not in the best interest of local residents and communities (Baldwin, 2021). In these cases, universities are attempting to create neighborhoods amenable to attracting students and faculty, not necessarily creating sustainable communities with equitable growth.

There are several potential mechanisms through which anchor initiatives could accelerate studentification. The most direct link is through physical construction. Sometimes this includes PBSAs, as was the case with the Gateway – University District development in Columbus by the Campus Partners corporation affiliated with Ohio State University. Many times, however, the physical construction does not involve housing and is instead retail, mixed-use, or even academic space strategically located to shift the characteristics of the neighborhood. For example, Georgia State University leveraged campus construction for classroom space, office space, and a recreation center as part of Atlanta's larger downtown development plan. PBSAs, proximity to campus, or the overall aesthetics of a newly developed neighborhood may attract students to live in a specific area. Less direct links are through the financial, intellectual, and human capital initiatives that may change aesthetics or perceptions of a neighborhood to be more attractive to students though across a larger time span. Overall, the causal mechanism is the university initiative changes the neighborhood to be more attractive to students, then students begin to live in the neighborhood as they now see it as a viable and desirable option.

This article thus aims to test two tightly related propositions about studentification. First, studentification is at least in part engineered through policy decisions, not simply the organic process assumed in much of the literature. I provide evidence universities do have some influence over where students choose to live, complicating and deepening our understanding of studentification. Second, anchor initiatives are able to achieve their objectives of increasing the proportion of students living in a targeted neighborhood. I also provide evidence supporting this proposition. Following from the two propositions and concerns of gentrification, I also test whether studentification is associated with changes in rent prices.

METHODS

This study estimates the relationship at the census tract level of being targeted by an anchor institution initiative and rates of studentification. The data are decennial census data from 1970-2010, standardized to 2010 census tracts. Using a series of difference-in-differences models and propensity score matching, census tracts that are targeted by an anchor initiative are compared to census tracts in the same cities that were not targeted. This provides estimates that can help universities and municipal leaders as they consider student housing and local development. As all data were publicly available and did not include engaging with human subjects, Institutional Review Board human subjects approval was not necessary. The following subsections detail the data sources, sampling procedures, and empirical strategy.

Data

The data are drawn from the decennial census from 1970 to 2010. Census tracts are redrawn every 10 years, so I use the Longitudinal Tract Database (LTDB; Logan et al., 2022). The LTDB standardizes census tracts across time to the 2010 boundaries, allowing for panel data analyses. Other datasets standardize census tracts, but the LTDB is more accurate for tracts that are experiencing high growth (Logan et al., 2016) and so is most appropriate for the question here about studentification. Most datasets that aim to standardize tracts assume the population is evenly distributed across the area, then adjust the reported parameters based on the proportion of land that changed tracts. The population distribution assumption can be weakened by accounting for water cover (Logan et al., 2016), only assuming the population is evenly distributed across land that is not covered by water. Logan et al. (2022) take one more step to weaken the assumption by also assuming the population is evenly distributed along roads. This final step results in slightly less accurate estimates overall but more accurate estimates in areas experiencing rapid growth (Logan et al., 2016) so is most appropriate for the research question here.

Using these data as the starting point, I identified the treatment group through a purposive sampling process, then I used a propensity score matching process to identify the control group. The treatment group (census tracts that were targeted by an anchor initiative) were identified through a multi-pronged sampling process. First, I cross-referenced universities part of the Coalition of Urban Serving Universities and the Coalition of Urban and Metropolitan Universities with universities that received the Carnegie community engagement classification or were named to the President's Higher Education Community Service Honor Roll. I then scanned these universities' websites for anchor initiatives. Second, I gathered anchor initiatives identified in the literature and participating in the Anchor Learning Network (Democracy Collaborative, 2018).

The initiatives were defined through three criteria. First, they are intentional. This means at least part of the rationale for the project(s) were explicitly for some form of place-based community or economic development. Second, they are targeted, meaning specific locations were selected to be a part of the initiative, and the initiative was limited to those locations. Finally, they are cohesive, in that there is an overarching strategy or plan guiding the initiative. I identified the census tracts that were targeted by these initiatives through official university statements related to the initiative and municipal planning documents. These identified tracts formed the treatment group. Examples of included anchor initiatives include Georgia State University's efforts to revitalize downtown Atlanta through real estate development, technology parks created by Clark University, and the West Philadelphia Initiatives by the University of Pennsylvania. For a more in-depth description of the included anchor initiatives, see Garton (2021).

The control group is made up of census tracts in the same cities as the treatment tracts that were identified through a propensity score matching process to be similar to the treatment tracts along observed variables related to both treatment assignment and the dependent variable. This process begins with a logistic regression in which the dependent variable is treatment status, either treated or untreated. The independent variables are pre-treatment variables that make up the dependent variable (a studentification index) in the main analysis, a series of pre-treatment covariates related to both treatment status and studentification, and a measure of distance in miles from the tract to the nearest university with an anchor institution initiative. See Table 1 for a list of the predictor variables and descriptive statistics. Following the regression, the resulting predicted values form the propensity scores. Treatment tracts were matched to tracts within the same Core-Based Metropolitan Area with propensity scores within .25 standard deviations in terms of the total distribution. The final sample resulted in 44 different institutions with initiatives targeting a total of 294 treatment tracts. The propensity score matching procedure then identified 536 control tracts. The 830 included tracts were then observed across 5 points in time.

The dependent variable is an index measuring studentification. The decennial census does not directly measure whether residents are students. There are neighborhood characteristics of studentification identified in the literature review, however, that are measured, namely the transitory nature of student residents and youthification. The index is composed of four variables. The transitory nature of student residents is measured by the percentage of households that are occupied by the owner and the percentage of housing units in multi-unit. The next two variables measure the connection of studentification to youthification by measuring the general age distribution through the percentage of the population under the age of 18 and the percentage of the population over the age of 60. Note these variables, with the exception of the multi-unit structure variable, are negative constructions of studentification, i.e. high values indicate low studentification. The signs on these variables are thus reversed to allow for ease of interpretation. The variables are weighted through a principal component analysis procedure, extracting only a single factor. The loadings become the weights for each variable. The variables are then standardized around 0, then the age variables are weighted by .5 again to reflect they are measuring a single dimension that is equal to the transitory dimension of the studentification index. The resulting values are then added together to create the studentification index. Due to the standardization of the variables comprising the studentification index, the mean value of the studentification index was -.00. An index value of 0 is indicative of average studentification, negative values are below average, and positive values are above average.

Independent variables are an indicator of whether the census tract was targeted by an anchor initiative, year indicators, and covariates that might have affected treatment selection. These covariates are the natural logarithm of population density, natural logarithm of median rent, natural logarithm of median home value, proportion of the population that identifies as white, proportion of the structures built 30 years ago, and proportion of the structures built less than 10 years ago.

Table 1: Descriptive Statistics

	n	*M*	*SD*
Anchor Initiative y/n	4,150	.35	.48
Studentification Index	4,143	-.00	.45
Proportion Owner Occupied Units	4,147	.37	.24
Proportion Multi-Family Homes	4,145	.56	.30
Proportion Population <18 Years Old	4,149	.24	.11
Proportion Population >60 Years Old	4,149	.17	.08
Log Population Density	4,149	9.19	1.09
Log Median Rent	4,135	5.60	.87
Log Median Home Value	4,064	10.92	1.19
Proportion White	4,149	.41	.35
Proportion Structures >30 Years Old	4,142	.70	.25
Proportion Structures <10 Years Old	4,142	.68	.15
Distance to Nearest Anchor University	4,150	3.62	3.04

Analytical Approach

Following the propensity score matching procedure, I use a series of difference-in-differences specifications to estimate the relationship between being targeted by an anchor initiative and rates of studentification. The treatment timing was heterogeneous, making two-way fixed effects difference-in-differences models unreliable as they may be comparing treated observations to observations that were never treated, not yet treated, or even already treated (Goodman-Bacon, 2021). I therefore present two difference-in-differences models. The first, and what I consider to be the main model, uses the Callaway and Sant'Anna (2021) inverse probability weighting model for difference-in-differences. The model is as follows:

$$Treatment\ Effect_{gt} = \left(\frac{G_g}{E[G_g]} - \frac{\frac{\hat{p}(X)C}{1-\hat{p}(X)}}{E\left[\frac{\hat{p}(X)C}{1-\hat{p}(X)}\right]} \right) \left(Studentification_t - Studentification_{g-1} \right)$$

where G is a binary indicator equal to 1 if the tract is in group g, or the year of treatment, $\hat{p}$ is the proportion of tracts that received treatment in the whole sample, X is a propensity score derived from a matrix of X variables, and C is a binary indicator equal to 1 if the tract is in the control group. The benefits of Callaway and Sant'Anna (2021) are twofold. First, the model provides treatment effects for each treatment period, plus an average treatment effect for the entire sample. Second, the model allows for more control over the comparison group. I only compared the treatment tracts to tracts that had never been treated and would not be treated at any point in the panel. As a sensitivity check, I also present a more traditional two-way fixed effects model. This model is unable to specify which tracts to use as a comparison or provide treatment effects for specific periods, but the average treatment effects remain roughly the same as in the Callaway and Sant'Anna (2021) model, giving evidence the results are robust.

I estimate two specifications for each model, one with and one without covariates, again to serve as a robustness check for the difference-in-differences design. Standard errors are robust and clustered at the CBSA level. Along with the difference-in-differences specifications, I also test the relationship between the studentification index and median rent using a random effects model. I regress the natural logarithm of median rent on the index and the same set of covariates. This will provide evidence as to implications for studentification in terms of gentrification.

Limitations

There are several potential limitations to these analyses. First, the studentification index would be improved by including the proportion of residents in a tract that are enrolled in a postsecondary school. While this article is concerned with the neighborhood changes associated with studentification rather than the number of students themselves per se, the index in its current form could be capturing some other form of neighborhood change along with studentification. For example, residents between the ages of 18 and 60 who prefer multi-family, rental properties could also describe entry-level workers, some of whom may have postsecondary credentials but many of whom may be coming directly from high school, with or without a diploma. Similarly, the age band of 18 to 60 is large relative to the typical age cohort. Groups like young professionals, recent graduates not enrolled in school, or young families could fit within this band and might exhibit some preferences similar to students, potentially confounding the results. However, this is the smallest band available in the LTDB that allows for longitudinal analysis. Given the sample selection process as beginning with neighborhoods specifically targeted by universities for some form of development, however, and the implicit rationale of many anchor initiatives to attract students, the studentification explanation is far more likely. For the control tracts selected through the propensity score matching process, they may be experiencing some form of neighborhood change similar to but different from studentification. This still serves as an interesting and useful counterfactual though, as long as the pre-treatment trends are the same, which the χ^2 tests provide evidence they are.

Second, propensity score matching has been critiqued as only creating comparable samples in terms of observed characteristics (J. A. Smith & Todd, 2005). There are multiple unobserved characteristics likely influencing the neighborhoods selected for development. Universities might be investing in neighborhoods that are about to begin changing anyways. Relationships with city officials and planning agencies likely influence neighborhood selection. Historical events straining town-gown relations might instigate anchor initiatives. While true, the matching process here reduced the bias resulting from the observed characteristics from 150% to 15%, and the difference-in-differences specification further controls for unobserved confounders. As universities do not select neighborhoods at random for anchor institution initiatives, nor should they, this approach at present is the most promising to produce an estimate for what is essentially a causal question. The matched neighborhoods in the same cities might also be experiencing spillover effects from nearby anchor initiatives. While this would result in biased estimates, the bias would be towards 0, meaning to the degree there is an observable effect, the true effect would be even larger. As a final point about matching, there are several observable neighborhood characteristics that were not included due to data limitations (e.g. proximity to any campus, public transportation availability, presence of amenities desirable or students, or crime rates). The difference-in-differences approach should implicitly control for some of these factors, though precision of the estimates will suffer.

Third, the data do not include the most recent estimates from the 2020 decennial census. This potentially limits generalizability as the financial and enrollment landscape of universities changes to become more concentrated and housing markets become more expensive. The data are limited to 2010 for two reasons. First, the 2020 census was conducted in the midst of the COVID-19 pandemic, when the vast majority of students were taking classes online, thus any attempt to estimate student residence in this period would be highly unreliable. Second, the data used for this study link the ACS to the decennial census. The ACS is conducted using 5-year estimates, with best practice for analysis being to center the 5 years around the time of interest. The most recent ACS data standardized in the LTDB at the time of this study were 2015-2019. Treating the 2015-2019 estimates as if they were collected concurrently with the 2020 decennial census would be inappropriate in the best circumstances, but with the addition of COVID-19, it becomes completely untenable. Future research should reexamine anchor initiatives and studentification with more recent data.

RESULTS

Following the propensity score matching procedure, there were a total of 830 tracts across 5 points in time in 75 cities (see Table 1 for descriptive statistics). To construct the studentification index, I started with the principal component analysis to weight the variables. The factor loadings are presented in Table 2. The signs on proportion owner occupied units and the age variables were reversed in the weightings as they are negative indicators of studentification. After weighting, the variables were standardized, then the age variables weighted by .5 again before adding them together to form the studentification index.

Table 2: Studentification Loadings

	Factor Loadings
Proportion Owner Occupied Units	.92
Proportion Multi-Family Homes	-.96
Proportion Population <18 years old	.55
Proportion Population >60 years old	.01

The inverse probability weighting specifications are presented in Table 3. The first set of treatment effects present the results with no covariates. The pre-trend test showed no statistically significant differences between the treatment and control trends prior to treatment, with $\chi^2(6)=10.69$, $p> .05$, meeting the core assumption of difference-in-differences. Each treatment effect shows the effect on studentification of anchor initiatives that were launched in the decade prior to the listed year. For example, the effect on studentification of anchor initiatives launched between 1970 and 1980 is -0.30. The overall average treatment effect on the treated (ATT) is listed at the bottom. This ATT is calculated as a weighted average of all of the disaggregated average treatment effects. In this first specification, the only treatment period with statistically significant results at the .05 level is 1990 to 2000, with an effect of an increase in the studentification index of 0.12. This drives a statistically significant overall ATT of 0.07. The second specification includes covariates. Again, pre-trend tests showed no statistically significant differences with $\chi^2(6)=7.32, p>.05$. While the treatment effects change somewhat in terms of magnitude, the statistical significance does not change. The average treatment effect for tracts targeted by an anchor initiative launching in 1990 to 2000 was again statistically significant, with an effect of 0.08, and the overall ATT of 0.05 was also statistically significant. To contextualize this, the mean studentification index in the control group increases by approximately .07 points per decade. The anchor institution initiatives are therefore accelerating the studentification trends in these neighborhoods by approximately a decade's worth of growth.

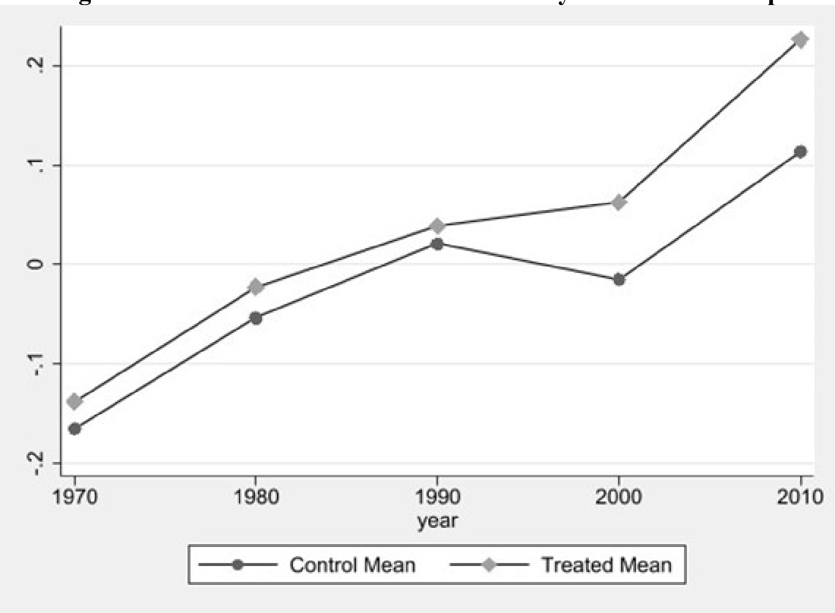
Figure 1 serves as a visual demonstration of this relationship. The Treated Mean line indicates the mean studentification value of all tracts that received treatment at some point in time, while the Control Mean line represents the mean for all non-treated tracts. The parallel trends in early decades are apparent before the major split between 1990 and 2000, coherent with the average treatment effects that found this decade to be the main driver of the positive results. This result makes intuitive sense given the context of anchor initiatives in the US and the overall economic contexts at the times of data collection. Most of the anchor initiatives included in this study were launched in the 90s, so large effects would be expected at this time. The divergence likely would have been even more pronounced in 2010, except the global recession of 2008 hit two sectors particularly hard in the US: housing and higher education. The fact the gap did not close at all over the course of the 2000s may indicate the longevity of studentification in neighborhoods.

Table 3: Studentification Inverse Probability Weighting Specification Coefficients

First Observation Period Following Treatment	Average Treatment Effects[1] (std err)	Average Treatment Effects[2] (std err)
1980	-.30* (.15)	-.23 (.16)
1990	.05 (.05)	.02 (.05)
2000	.12*** (.03)	.08*** (.03)
2010	.01 (.03)	.02 (.03)
Overall ATT	.07*** (.02)	.05** (.02)

Notes: Coefficients[1] exclude all covariates. Coefficients[2] include the entire set of covariates. * $p \leq .1$, ** $p \leq .05$, *** $p \leq .01$

Figure 1: Trends in Mean Studentification by Treatment Group



The two-way fixed effects difference-in-differences specifications are presented in Table 4. The initial specification only included the difference-in-differences estimate and the unit and year fixed effects. The model as a whole was statistically significant with $F(5, 74)=24.05$, $p\leq .00$, and an adjusted $R^2=.14$. The coefficient of interest is the difference-in-differences estimate. The coefficient is .07, indicating being targeted by an anchor institution initiatives tends to increase the studentification index by approximately .07 points, perfectly matching the inverse probability weighting model's overall ATT with no covariates. The second specification with the included covariates supports this same conclusion. The model is again statistically significant with $F(11, 74)=27.21$, $p\leq .00$, and the adjusted R^2 increased to .21. This is a statistically significant change in R^2 with a formal F test. While the model as a whole better captures the variance in the studentification index, the difference-in-difference estimate remains relatively stable. The coefficient changed by less than a hundredth of a point, and the robust standard error remained virtually identical. The stability of the estimates across all 4 of these specifications serve as evidence the difference-in-differences model is robust and is presenting reliable estimates of the effect on studentification in these cases.

Table 4: Studentification Two-way Fixed Effects Specification Coefficients

	Coefficients[1] (std err)	Coefficients [2] (std err)
Difference-in-Differences	.07** (.03)	.06** (.03)
1980	.11*** (.02)	.16*** (.05)
1990	.17*** (.03)	.30*** (.08)
2000	.15*** (.03)	.31*** (.11)
2010	.29*** (.05)	.50*** (.14)
Log Population Density	--	-.20*** (.04)
Log Median Rent	--	-.06 (.06)
Log Median Home Value	--	-.06* (.03)
Proportion White	--	-.08 (.07)
Proportion Structures >30 Years Old	--	.01 (.12)
Proportion Structures <10 Years Old	--	-.03 (.16)
Adjusted R^2	.14	.21

Notes: Coefficients[1] exclude all covariates but the difference-in-differences estimate and unit and year fixed effects. Coefficients[2] include the entire set of covariates. All standard errors are robust and clustered at the city-level.
* $p \leq .1$, ** $p \leq .05$, *** $p \leq .01$

The final analysis builds upon these results by regressing the natural logarithm of median rent on the studentification index and a similar set of covariates. I use a random effects model here because I am no longer differentiating between census tracts that are targeted by anchor initiatives or not. Rather, I am looking at the relationship between studentification and rent across time, regardless of university initiatives to direct growth. As I am now treating census tracts as a random sample rather than a comprehensive categorization, I use a random effects Generalized Least Squares model. There are also two changes to the covariates. First, I excluded median home value as this serves as a collider variable between studentification and rent prices. Rent and home value are connected in mechanical ways. As rents increase, home values necessarily increase, and vice versa. Second, I included distance to the nearest university as a control. Distance is a constant across time, thus was inappropriate for the fixed effects models but can be included in the random effects model. The results are presented in Table 5. The outcome variable is a log variable to normalize the distribution, so interpretation is not immediately intuitive. After transforming the model to be more easily interpreted, an increase in the studentification index of one standard deviation is roughly associated with a 2.57% increase in median rent. Notably, distance to the nearest university is also positively associated with an increase in rent, with each additional mile closer to a university being associated with an increase in rent comparable to the increase associated with studentification.

Table 5: Log Median Rent and Studentification Random Effects Model

	Coefficient (std err)
Studentification Index	.05*** (.02)
Log Population Density	.02*** (.01)
Proportion White	.04* (.02)
Proportion Structures >30 Years Old	.19*** (.03)
Proportion Structures <10 Years Old	.44*** (.05)
Distance to Nearest University	.04*** (.00)

Note: * $p \leq .1$, ** $p \leq .05$, *** $p \leq .01$

DISCUSSION

Anchor Initiatives and Neighborhood Change

The first main result from the preceding analyses is there is evidence anchor institution initiatives have a positive effect on studentification of .05 - .07 points, meaning they increase studentification. With some back-of-the-envelope calculations, the studentification index increases by approximately .08 points per decade, with the control group mean increasing by .07 points per decade. Thus, assuming steady change, being targeted by an anchor institution initiative roughly doubles the rate of studentification the tract would see regardless. The estimates presented here can be interpreted to be causal, though with caution. The precise estimates are potentially biased by some unobserved confounder, but there is likely some positive effect of the anchor initiatives.

This lends credence to the argument universities are intentionally using anchor institution initiatives to reshape neighborhoods to attract students. Concerns about safety in surrounding neighborhoods were explicitly part of the rationale for launching anchor initiatives in New Haven, Cincinnati, and West Philadelphia (Hodges & Dubb, 2012), using “Conrad-esque rhetoric of the scary urban jungle” (Jackson, 2014, para. 21). The evidence here points to the potential success of these projects in reshaping these neighborhoods in ways that the universities saw fit. Rather than working with communities to develop local wealth, these initiatives may be driving out past residents with an in-migration of students. Baldwin (2021) also makes this argument with case studies, looking more specifically at prestigious universities in cities and the changes forced upon surrounding neighborhoods by domineering universities.

Anchor initiatives are thus part of longstanding racialized geographies of urban development. Universities often target neighborhoods historically framed as blighted (Ilano, 2020), and perceptions of blight are based in legacies of racism and disinvestment in urban planning (Herscher, 2020). Redevelopment can alter land use, increase exposure to displacement pressures, and reproduce inequities under the guise of revitalization. Universities have been critiqued elsewhere for functioning as colonial institutions, consolidating resources and prestige built on historical exploitation and present marginalization (Stein, 2020). Engaging these perspectives underscores anchor initiatives are not value neutral. They operate within racialized and colonial logics that shape urban space and university-community relations.

This is not an argument that studentification is inherently undesirable. The current place-based model of postsecondary education across most of the world requires student housing in neighborhoods off-campus. These neighborhoods come with their own characteristics, economic contributions, and feelings of affinity among students, other residents, and alumni (Sage et al., 2013; Wiewel & Perry, 2008). Studentification becomes more problematic when universities are intentionally directing studentification toward neighborhoods that have been historically marginalized and exploited through so-called urban renewal or urban revitalization initiatives (Goode & Schneider, 1994) to benefit their own recruiting strategies for the sake of tuition dollars and prestige. In this way, anchor institution initiatives can be conceptualized as participating in the centuries-long project of reproducing informal residential segregation in US cities.

Student Housing Affordability

The second main result is the positive relationship between studentification and log median rent in the random effects model. After transforming the studentification index scale for ease of interpretation, moving one standard deviation up the distribution is associated with a 2.57% increase in median rent. This increase may appear modest, but the increase is above and beyond any increases associated with consumer price index inflation and any additional increases in the housing markets. As demand rises for housing relatively near college campuses, students begin to pay higher costs.

Nearly 10% of college students in the US are either homeless or at risk of homelessness, and nearly 45% of college students experience some form of housing insecurity (Broton, 2020). The association between studentification and rent could explain part of this steep housing insecurity. Particularly in cities where space is at a premium, housing near campus becomes valuable for students who do not have an easy form of transportation to campus or for students who want a more residential, walkable lifestyle. Neighborhoods experiencing studentification then become especially attractive as they are designed specifically for students. As demand increases for these neighborhoods, rent increases accordingly.

While this article does not have the data to make this claim, the credit line available through student loans in the US could also be a factor in the higher rents associated with studentification. Whereas loans for rent payments are not standard, student loans can be used for housing costs with a relatively high cap. Private developers can then charge above what would otherwise be market rates. Universities set the estimates for off-campus room and board that is used to set the loan caps for their students. Setting the estimate too low could cause students to be housing insecure, but setting it too high can result in massive debt and inflated housing prices. Housing affordability for students as well as non-student residents should be a factor universities consider when engaging with surrounding communities.

Implications

There are several implications for research and practice following from this study. In terms of research, more work should apply the concept of studentification to examine neighborhood change in college towns and university districts. Qualitative case studies already offer rich contributions to our understanding of student residential patterns off-campus, but more should explicitly consider the role of direct university intervention in planning and development. This would deepen conceptualizations of town-gown relations and further inform engaged universities to ensure their work is equitable and mutually beneficial as opposed to exploitative and domineering. Quantitatively, studies of studentification that directly measure what proportion of residents are students would enhance the precision. These would likely need to be original surveys on a relatively small scale given the complexities of identifying which houses have residents who are enrolled.

Globally, as higher education participation expands rapidly across Africa and Asia (UNESCO Institute for Statistics, 2024), students will need places to live. Concurrently, the vast majority of urban growth over the next century is predicted to occur within these same regions (UN Human Settlements Programme, 2022). Scholars of higher education and urban studies should collaborate to more fully understand how off-campus housing shapes neighborhoods and in turn how neighborhoods where students reside shape academic outcomes. The relationship between rent and studentification in the US also warrants further study, both on its own terms and to the degree it applies in other policy settings. The Bennet hypothesis claims Federal student loans are passed through students to universities in the form of higher tuition. A similar hypothesis could be tested that Federal student loans are passed through to private housing developers in the form of higher rents. National higher education systems with similar loans available to be used to pay for private housing should also be analyzed to test whether these payments are increasing market price for students.

In terms of practice, universities must be cautious and strategic in their use of anchor initiatives to develop neighborhoods near campus. Studentification may be a concern in vulnerable neighborhoods with low-income residents. Rather than imposing development plans, universities should work with marginalized communities and local community organizers to make plans to provide affordable housing and safe experiences for students. This offers an interesting problem for universities, particularly universities in dense cities. Students require affordable housing and should be protected from exploitative housing developers, but it must be offered in such a way that protects other vulnerable communities as well. One example is the College Housing Assistance Program by Tacoma Community College and the Tacoma Housing Authority (Goldrick-Rab et al., 2021). This program uses Federal money from the Department of Housing and Urban Development (HUD) to offer vouchers to homeless students. These types of programs could be scaled through HUD or implemented at a state or municipal level to provide a source of housing funds with more control over rent prices than are offered by Federal student loans.

Another potential way forward is currently being pioneered by South Africa's Department of Higher Education and Training (DHET) in collaboration with the Department of Public Works and Infrastructure. First, DHET developed an accreditation process for private housing based on safety and affordability. Accreditation status is incorporated in the loan disbursement formula to encourage students to live either in university-owned or accredited housing (National Student Financial Aid Scheme, 2024). Second, DHET is spearheading a massive building project to add 300,000 beds through new and expanded housing units at universities and technical schools across South Africa in a decade (Development Bank of South Africa, 2024). Such large-scale projects also allow planning agencies to partner with universities to coordinate new builds and student movement in a way that maximizes environmental sustainability. Ensuring that students are either within walking distance of campus or have clear lines of accessible transportation, that buildings are meeting environmental sustainability standards, and that the footprint of expanding enrollment will have minimal impact on natural habitats becomes more plausible with coordinated development. The contexts of studentification may be highly local, but the policy implications exist at the national and the municipal level.

There are also grassroots approaches to housing insecurity that could be adopted by students. Housing cooperatives offer a more affordable and secure option than renting. There are multiple models, though generally members of the cooperative pay a down payment to gain partial ownership of the building in which they live, then a smaller monthly or annual fee for property maintenance (Bangs, 2018). Such a model is not exceptionally new to higher education as it is similar to the model used by Greek life organizations with houses. Rather than paying dues to a national organization to live in a privately owned home, students would buy into a cooperative and build some degree of equity. Universities could provide technical assistance to students looking to form or join cooperatives, much as they provide assistance to Greek organizations.

Studentification is not necessarily a process to be avoided. As long as postsecondary education remains place-based and students remain mobile, there must be housing available near campus, and there will be demand for amenities tailored to students. When universities intentionally target specific neighborhoods for development based on heavily racialized perceptions of danger and blight, however, studentification can become a tool for exploitation and domination. Additionally, private developers can exploit student needs by charging exorbitant rents. Universities have levers they can pull to direct development, so these levers should be pulled in conjunction with local communities.

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Political Participation and Research Motivation of Iran Specialists in American Academia: How an Academic Community Responds to Events in the U.S. and Iran

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ABSTRACT

We report initial results from a longitudinal study of political participation among Iranian Studies scholars working in U.S. academia. Qualtrics surveys of Iranian Studies specialists were conducted in 2016 and 2023, the surveys featuring questions about reported political activities such as voting, contacting public officials, signing petitions, and participating in demonstrations. The surveys also included questions about media outreach and interactions with journalists. Iranian Studies scholars reported very high – in some cases, astonishingly high – levels of political activity, exceeding those found in previous studies of political participation among academics. Moreover, in several instances participation levels increased from 2016 to 2023. We believe these high levels of political participation are not just a function of high levels of education but are a response to political developments in Iran and the United States, including *Women, Life, Freedom*, the Trump travel ban, and ongoing tensions in US-Iran relations. Our findings suggest that studies of academic political behavior should account for the political pressures that can influence specific subfields in distinctive ways.

Keywords: Iranian studies, American academia, political participation, engaged scholarship, *Women, Life, Freedom*

On September 13th, 2022, a young Kurdish Iranian woman, Zhina (Mahsa) Amini, was arrested in Tehran, accused of not wearing the hijab correctly. She died in a hospital three days later. The official explanation was that Amini died from a heart attack and brain seizure, but eyewitness accounts pointed to police brutality shortly after her arrest. Amini's death sparked a large-scale protest movement in Iran, *Women, Life, Freedom*, as well as global outrage. It also inspired activism on U.S. university campuses, which took the form of student demonstrations, teach-ins and public discussions, and activism by faculty, including those with heritage connections to Iran.[1] Iran specialists in the diaspora also authored traditional peer-reviewed scholarship (Bayat, 2023; Karimi, 2023; Kazemi, 2023; Khajehi et al. 2023) and engaged scholarship from which we might infer an enhanced level of civic engagement.

Faculty political activity is the focus of this paper. We report some initial results from a longitudinal study of Iranian Studies scholars working in U.S. academia, with an aim of learning more about the political participation of this academic community. Qualtrics surveys of Iranian Studies specialists were conducted in fall 2016 and spring 2023. The surveys featured questions about reported political activities such as voting, contacting public officials, signing petitions, and participating in demonstrations. The surveys also included questions about media outreach and interactions with journalists.

The results we share here highlight three important points. First, Iranian Studies specialists in American academia report higher levels of political activity than seen in other studies of academicians or Americans generally. Moreover, participation levels for some activities increased dramatically between 2016 and 2023. Second, factors that are associated with academics' assessments of their professional life, such as academic rank, gender, and social identity, appear to have little connection to levels of political participation. Third, an important predictor of political engagement was a stated desire for research activity to contribute to social change. This is a factor that has received little attention in previous studies of academic political activity, but it appears to be a telling one for Iranian Studies specialists. There are some nuances within these results (for example, ambivalence about lending one's professional standing to public political debates). Because of the nuances, along with qualitative results shared in the comment section of the survey, we are conducting focus groups with survey respondents and are planning a survey in the course of the next academic

[1] For examples of student demonstrations, see McDonald (2022), McKenzie (2022), and Rusting (2023). Examples of teach-ins and panels events include Community Engagement, Design and Research Center (2022), Columbia Climate School (2022), and Kohout (2023). Instances of faculty activism include Boise State University (2023) and University of Southern Maine (2023).

year to explore further how political and civic life intersect with the professional and personal lives of this community of scholars in American academia.

LITERATURE REVIEW: CONNECTING STUDIES OF AMERICAN FACULTY POLITICAL ACTIVITY AND IRANIAN DIASPORA STUDIES

There has been a vigorous academic debate about the political *orientations* of academics, especially ideology and partisanship (e.g., Gross & Simmons, 2014; Mariani & Hewitt, 2008; Whittington, 2021), but there has been very little research documenting the extent of political *participation* among academics. Like other highly educated individuals, faculty across the academy tend to be politically active (Abrams, 2018). Our findings confirm this, but we also add some important detail and elaboration. Our study focuses on a specific community of scholars, Iranian Studies specialists, who work in an environment that is politically charged and that poses a distinct set of challenges and pressures that we anticipate will be associated with elevated levels of political engagement.

As a field of academic endeavor, Iranian Studies in the U.S., like many other area studies fields, has some expressly political origins, owing in part to federal government support after World War II (Szanton, 2004; Tari, 2015). Marandi and Tari (2018) contend that Iranian Studies cannot be divorced from larger political developments, namely Iran-U.S. relations. As one example, the 1979 Iranian Islamic Revolution was a seismic event for Iranian Studies in the U.S., shaping academic research agendas and creating political factions among scholars in the field.

More recent political developments contribute to continued political sensitivity. *Women, Life, Freedom* is part of that context, along with Trump-era policies such as the Muslim ban and the termination of the Iran nuclear agreement (JCPOA). The tumultuous political environment received ample news coverage, and it was also on display at conferences and other academic settings, with its impact felt both on and off campus. There has been considerable thought and discussion about the implications that *Women, Life, Freedom* might, or should, have on research and writing in Iranian Studies (Hamidi, 2023; Rahbari, 2024), and public discussions of *Women, Life, Freedom* have created tense and nervous moments at academic panels (Razavi, 2023). The toll that the polarized responses of the diaspora to *Women, Life, Freedom* was taking on US based Iran specialists - especially those with heritage ties to Iran – was evident to one of the present authors who was able to attend several academic events in North America that either focused on *Women, Life, Freedom* or pivoted to accommodate discussions of responses to unfolding events in Iran. There was a rapid shift in the tenor of these conference-based discussions over the course of the first half of 2023. A January 14th Persian-language hybrid symposium on imagining Iran's "democratic future" was hosted by the University of Toronto.[2] But, by the one of time our team member attended a conference on the Iranian Diaspora

[2] For official notes and YouTube archive of the event, please see: https://iranianstudies.utoronto.ca/event/women-life-liberty-irans-democratic-future/

at UCLA in on February 16th and 17th, not only were there presentations oriented to the issue but also expressions of dismay at the response of the diaspora in which scholars who did not clamor for more aggressive or even militarized regime change in Iran were attacked as regime collaborators in social media and sometimes in person.[3]

The 2016 and 2023 surveys cover a pivotal period, with a chain of events that was highly salient, highly relevant, and for some Iranian Studies specialists, highly threatening. These kinds of circumstances, although perhaps not unique to Iranian Studies, are nevertheless distinctive. They are the kinds of circumstances that scholars in most other fields do not have to worry about. And they are the kinds of circumstances that should motivate high levels of political activity.

Research on political participation in the United States has always pointed to formal education as a primary driver of political activity (Persson, 2013). From voting to signing petitions to engaging in protests, participation increases with formal education. Education is thought to provide individuals with the capacity to digest and assess political information, to navigate and engage the political process, and a sense of efficacy and civic duty that fosters political involvement (Rosenstone & Hansen, 1993; Verba & Nie, 1972).

Academics should be well-equipped to engage in political activity. But surprisingly little is known about levels of political participation. Much more attention has been paid to the partisan and ideological orientations of university professors, leaving unanswered questions of what actions academics actually take. Studies of political activity in US academia have been sporadic and much of the research is quite dated. There was a spurt of research during the Vietnam War, which found anti-war sentiment to be common among college faculty, but anti-war political action such as protest and demonstrations to be much less prevalent (Faia, 1974; Ladd, 1969; Lipset & Ladd, 1971).

The most comprehensive recent study of political activity among US academics is Abrams' 2016-2017 survey of over 900 university professors (Abrams, 2018). Respondents were asked about their involvement in seven different political activities, such as attending a rally, contacting an elected official, or engaging in social media. Not surprisingly, for every activity, academics were more active than the general public, confirming the well-known connection between formal education and political involvement. However, US academics did not appear to be appreciably more active than other well-educated Americans. Nor were there notable differences in participation across academic disciplines.

[3] *The Iranian Diaspora in Global Perspective* Feb. 16th-17th, 2023 (https://www.international.ucla.edu/cnes/event/15895). Dr. Nasrin Rahimieh's presentation, for example, focused on hostility in the diaspora and even by some anti-Islamic Republic activists in Iran against NIAC (National Iran American Council, see: https://www.niacouncil.org/mission-and-vision/) for being "pro-regime" because they do advocate against US Sanctions on Iran and were supportive of the JCPOA. Diaspora-based monarchists and supporters of the Mujahedin-e Khalq (MEK) and other groups lobby the US for a much more aggressive "regime-change" posture towards the Islamic Republic.

Scholarship on political participation, in the US and in democratic politics more generally, has noted shifts in the focus of political activity, with an expansion and diversification of citizens' participation "toolbox" (Harris & Gillion, 2010) and a broader shift from "allegiant" citizenship, with a focus on electoral participation, toward more "assertive" citizenship, which includes protest and other non-electoral activities (Dalton & Welzel, 2014). This shift toward more assertive political engagement, and a fuller repertoire of political activity, has been most apparent among younger citizens (Dalton, 2020) and among highly educated and more highly politicized citizens (Dalton, 2017).

Our study of Iranian Studies scholars covers a tumultuous period for politics in both the United States and Iran. Donald Trump's 2016 and 2020 presidential campaigns were defined by divisive rhetoric that targeted and marginalized non-native, non-white, non-Judeo-Christian populations, as well as by controversial policy initiatives, including a travel ban that applied to Iran, among other countries (Abramowitz, 2017; Sides et al., 2018). While the Trump campaigns succeeded in mobilizing white racial resentment (Abramowitz, 2017; Schaffner et al., 2018; Sides et al., 2018; Sides et al., 2022), Trump's 2016 run also inspired a "resistance" movement that began to take root soon after his election (Gose & Skocpol, 2019; Meyer &Tarrow, 2018).

That resistance took multiple forms. Most visible were large-scale demonstrations such as the Women's March in Washington DC (M. Berry & Chenowith, 2018; Martin & Smith, 2020; Tambe, 2017). Another important component included efforts by professional and academic groups to express opposition and provide services in response to Trump administration actions. For example, lawyers organized, often at airports, to help individuals cope with the travel ban and more broadly voiced opposition to the policy (Dorf & Chu, 2018), while scientists mobilized against Trump administration climate proposals (Fisher, 2018). Some 150 academic associations issued statements or organized petition drives criticizing the travel ban (Olson Beal et al., 2018), including the Association for Iranian Studies and the Middle Studies Association, both US-based professional societies with international membership.

SURVEY METHODOLOGY

Iranian Studies scholars constitute a "low incidence population" (J. Berry et al., 2018). It is a small community of academics, scattered across many academic disciplines, making it difficult to locate with sampling procedures developed for general population surveys. So, a critical task for our survey was to identify and contact the appropriate pool of respondents. We employed a *list sampling* approach in which a targeted list of individuals was assembled from multiple sources (J. Berry et al., 2018). We sought to construct lists that included all individuals who fit a broad definition of Iranian Studies, including Iranian American studies and Iranian diaspora studies.

This task was complicated by the fact that Iranian Studies is a broad interdisciplinary field without clear boundaries; we ultimately contacted scholars from disciplines ranging from history to literature to political economy to cinema studies. Very few colleges and universities have dedicated Iranian Studies or Persian Studies departments, programs, or centers. Middle Eastern Studies and Arab-American Studies programs, while more common, are a less than perfect fit with the scope of Iranian Studies as an academic field. These circumstances made it more difficult to determine just who should be contacted and invited to participate in the survey.

We assembled respondent lists by drawing on three core databases. Two important sources were the membership directories for the Middle East Studies Association and the Association for Iranian Studies; from these lists we selected individuals whose subfields/specialties appeared to fit a broad conception of Iranian Studies. These searches were supplemented by a search in JSTOR for peer-reviewed publications since 2000 that appeared to fall into the realm of Iranian Studies; the authors of those articles were added to the list.[4] The lists were cross checked to avoid duplicate names. This effort produced a roster of 262 Iranian Studies specialists in 2016 and 365 scholars in 2023. We included all academic ranks from advanced graduate students to emeritus professors. Because these were small respondent pools, we did not draw samples but instead attempted to obtain information from every individual we identified.

The respondent pools were contacted by email with links to a Qualtrics survey.[5] The survey windows ran October- early December in 2016 and February-March in 2023. Prospective respondents were offered a chance to win Amazon gift cards and received multiple follow up emails. We collected 99 complete interviews in 2016 (37.3% response rate) and 123 complete interviews in 2023 (33.6% response rate).[6] Although some individuals participated in both the 2016 and 2023 surveys, this was not constructed as a panel survey, and in the analysis that follows, we treat the 2016 and 2023 surveys as separate cross-sections.

The questionnaire consisted primarily of closed-ended questions, though respondents were occasionally invited to provide open-ended comments to elaborate on their answers, some of which we share in our analysis below. In addition to questions about political activity, the questionnaire also featured items about various aspects of academic and professional life, as well as attitudes toward the field of Iranian Studies. Prior to launching the 2016 survey, we had no specific expectation

[4] A similar list approach was taken in a 2013 survey of Iranian American physicians in California. In that study, respondents were identified from several medical directories and professional association membership lists (Rashidian et al., 2016).

[5] The 2016 respondent pool received an initial contact by hardcopy mail in September 2016 notifying them that they would be receiving an email request and encouraging them to respond to the survey. Experiments conducted in conjunction with surveys of faculty have shown that initial hardcopy mail contact can improve response rate as much as 10% over surveys that rely only on email contact (Tourangeau et al., 2013). Budget constraints prevented us from sending out the initial hardcopy contact in 2023.

[6] These response rates are in line with those for web surveys of this kind (Tourangeau et al., 2013; Wu et al., 2022).

that the looming US presidential election would break through into responses or that the JCPOA was anything but a durable, multilateral attempt to reduce tensions between the Islamic Republic and the United States. But, in open-ended comments it was clear that anxiety about the 2016 election and its results which, for some respondents, were known before they completed the survey, was on the minds of this community of scholars. A series of events following the 2016 survey - the Muslim Ban, the US pullout of the JCPOA and, of course, the effects of the pandemic - led us to undertake a follow-up survey. In the 2023 survey, we added some more specific questions about media contacts and outreach, as well as the impacts of the pandemic, to better capture the effects of those environmental factors on the subfield. The complete text of survey questions used in this paper is included in Appendix A.

RESULTS

Political Participation in 2016 and 2023

In 2016 and 2023, respondents were shown a list of political activities and asked if they had engaged in any of them over the respective past 12 months for each year surveyed. This list covered a broad array of political activities, including voting and other election-related activities, protest activities, and newer forms of digital political activity. The activities encompass both allegiant and assertive behavior.

Table 1: Political Activities, 2016 and 2023 Percentage of Respondents When Engaged in Each Activity

Political Activity	2016 (%)	2023 (%)
Voted in election	72.7	67.5
Written a letter to a public official	32.3	34.1
Worn a political button, sign, or bumper sticker	15.2	33.3
Signed a petition circulated by a candidate, party, or political organization	52.5	52.0
Attended a campaign rally or speech	25.3	26.8
Contributed money to a political organization or candidate	37.3	44.7
Worked for a political organization or candidate	4.0	4.1
Participated in a lawful demonstration	31.3	53.7
Participated in an act of civil disobedience	6.1	12.2
Visited a campaign or candidate-sponsored website	33.3	31.7
Forwarded an online campaign commercial or news story	32.3	29.3
Blogged about politics or a campaign	6.1	11.4
Voiced or shared thoughts on social media	36.4	46.3

Note. Percentages represent respondents who reported engaging in each activity during the past year. Sample sizes were $n = 99$ (2016) and $n = 123$ (2023).

Table 1 displays the percentages of Iranian Studies specialists who reported participating in each activity in 2016 and 2023. Given the educational attainment of these respondents, it is not surprising to see that this is a politically active group. But there are two striking features to these results: (1) just how active respondents are, especially on some of the more assertive activities, and (2) the increases in participation in 2023, often from already high levels.

Reported voter turnout was impressive in both 2016 (72.7%) and 2023 (67.5%), and in line with other results for highly educated individuals (Leighly & Nagler, 2013). Roughly a quarter of respondents attended a campaign rally in both years, comparable to the results reported by Abrams. The percentages of respondents contributing money to candidates – 37.3% in 2016 and 44.7% in 2023 – were a bit higher than the figures reported by Abrams (2018). And these figures comfortably exceed those found by the National Election Study (NES) in their 2016 and 2020 surveys of the overall US electorate (ANES Guide to Public Opinion, electionstudies .org).

When it comes to election-related political activities, our portrait of academics is similar to the one reported by Abrams. Iranian Studies specialists are clearly more involved than the general public, but more similar to other well-educated citizens. That characterization changes when we examine more assertive non-election political activity. Just over 50% of Iranian Studies scholars signed a petition in 2016 or 2023; general population figures for signing a petition are typically in the low to mid 20% range (Verba et al., 1995; Zukin et al., 2006).

Perhaps the most striking figures in Table 1 are those for participating in a lawful demonstration and engaging in civil disobedience. Over 30% of Iranian Studies scholars reported participating in a lawful demonstration in 2016. That is indeed impressive, considering that reported levels in the general public are usually in single digits (Verba et al., 1995; Zukin et al., 2006). In 2023, over 50% of Iranian Studies specialists reported participating in a lawful demonstration, a remarkable increase from an already high rate of activity.

At first glance, reported participation in civil disobedience is less eye-catching at 6.1% in 2016 and 12.2% in 2023. But civil disobedience is by definition illegal, it requires considerable commitment, and it is potentially dangerous, so these participation rates might actually be pretty high. It is hard to find benchmarks for assessing our results; in a 2022 survey conducted by the Yale Program on Climate Change Communication, less than one percent of registered voters reported engaging in civil disobedience "against corporate or government activities that make global warming worse" (Leiserowitz et al., 2023). Although this is admittedly an imperfect comparison, the figures for Iranian Studies scholars, especially the double-digit percentage in 2023, are genuinely striking.

Finally, we note that in both 2016 and 2023, roughly one-third of all respondents reported engaging in various digital forms of participation, such as visiting campaign websites, forwarding online content, and voicing or sharing thoughts on social media. By 2023, nearly half (46.3%) of Iranian Studies specialists shared thoughts on social media, a ten-point increase from the 2016 survey. As a basis for comparison, Pew Research surveys in 2016 and 2020 found that almost one-third of social media users posted about politics and government either "often" or "sometimes" (Duggan & Smith, 2016; McClain, 2021). Pew's baseline – social media users – was different from ours; we included all of our Iranian Studies scholars. With that in mind, the level of online activity in our sample probably surpasses that reported by Pew.

Subgroup Differences in Political Participation

Because formal education is such a driver of political participation, it is not surprising to see these high levels of activity in a survey of academics. But in a survey of academics, the range of educational attainment will be quite limited. All of our respondents have bachelor's degrees, and nearly all of them either have an advanced degree or are working toward one. Limited variability in this key explanatory variable likely contributed to limited impact of other explanatory factors in our study. We looked at several subgroup breakdowns in reported political activity in 2016 and 2023, and we found few consistent, discernable differences. Full tables for these subgroup analyses are not shown here, but the asterisks in Table 2 indicate those instances where there were statistically significant differences in political participation within subgroups.

The high levels of political participation are most consistently connected to a value we observed across different subgroups within this scholarly community: the desire to have one's research has a social impact. That said, we did probe for differences among a variety of subgroups. Some research on gender differences in political participation suggests that women are more likely to favor electoral participation while men are more apt to engage in protest or other forms of direct activism (Coffé & Bolzendahl, 2010). But by and large, studies in the United States point to only a modest gender gap in participation, one that vanishes once education is held constant (Carreras, 2018). That is confirmed in our survey of Iranian Studies specialists. There are very few asterisks in the gender columns of Table 2, indicating that gender differences in participation are sporadic, with no clear pattern as to form of political activity.

We also compared participation by self-described heritage identity, specifically whether respondents described themselves as Iranian, American, or Iranian-American. These self-descriptions have been found to differentiate respondents' perceptions about academic and professional experiences and assessments of the state of Iranian Studies as a subfield (Borquez & Amin, 2022), but they tend not to be related to levels of political activity. When distinctions arise, self-described Iranian respondents tend to be less active than others. But as seen in the heritage identity column of Tabe 2, those instances are infrequent.

Academic rank has also produced differences in perceptions concerning academic and professional experiences (Borquez & Amin, 2022), but rank is only weakly related to participation in 2023. The most noticeable split is between non-tenured (adjunct faculty and graduate students) and tenure-track faculty. Differences are more common for election related activities, with the tenure-track faculty more likely to take part. But these differences are generally of a small magnitude, and most are significant only at a .10 level, so these distinctions should be treated with caution and some healthy skepticism.

Table 2: Political Activities by Selected Respondent Attributes, 2016 and 2023

Political Activity	Heritage	Gender Identity	Academic Rank	Professional Activity	Research Impact
Voted in election	**	*	**	**	—
Written to public official	**	*	—	**	*
Worn button/sign	—	—	—	—	*
Signed petition	—	*	**	**	**
Attended rally	**	*	*	**	—
Contributed money	*	**	**	*	**
Worked for candidate	—	—	—	—	—
Lawful demonstration	—	—	—	**	**
Civil disobedience	—	*	**	*	**
Visited campaign website	—	*	—	*	*
Forwarded online content	*	—	**	**	*
Blogged about politics	—	—	**	—	**
Shared thoughts on social media	—	*	**	**	**

Note. This table is based on crosstabulations between each political activity and the five respondent attributes shown. Asterisks indicate statistically significant differences in participation across categories of each attribute.
$p < .10$. ** $p < .05$.
A full set of crosstabulations, including percentages, is available from the corresponding author upon request.

Another comparison that we examined was based on professional activity. In both 2016 and 2023, we asked respondents if they had served as an officer in a professional association, if they had served on the editorial board of a journal, or if they had helped organize a conference. Involvement in professional associations or journals reflects a degree of professional commitment, but it also suggests ongoing communication and relationships with others in the subfield. In other words, this professional activity might be taken as a rough indicator of connection to a social network. Since connection to social networks has been associated with higher levels of political participation (Campbell, 2013; McClurg, 2003), we compared reported political activity among the more professionally involved to the less professionally involved. There was evidence of a relationship in 2016; more professionally active respondents were more likely to engage in a range of political activities, including voting, contributing money to candidates, and digital participation. Curiously, few of those differences were found in 2023. One possibility is that the statistically significant differences in 2016 were something of a fluke, perhaps a function of the small respondent pool in 2016. But the fact that differences were seen across a range of activities seems to argue against that interpretation. Another possibility is that events and developments between 2016 and 2023 – the travel ban, *Women, Life, Freedom*, etc. – created a sense of urgency, if not threat, that coursed throughout the Iranian Studies community, crossing gender lines, identity lines, and the boundaries of existing networks within the subfield. Thus, professional activity would become less of a differentiating factor.

The final subgroup breakdown in Table 2 is based on a survey question that asked Iranian Studies scholars to identify factors that have influenced their current research agenda. About one-third of respondents cited social impact (2016) or social change (2023) as a motivator for their research. We compared reported levels of political activity between those who mentioned social impact/social change and those who did not. The abundance of asterisks in the rightmost columns of Table 2 indicate that research motivation was related to a variety of political activities in both 2016 and 2023. We turn to a more detailed discussion of these relationships.

Research Motivation and Political Participation

A notable feature in both the 2016 and 2023 surveys is the extent to which Iranian Studies specialists express a connection between their research endeavors and their political engagement. This connection was apparent in two different survey questions. As previously explained, respondents were shown a list of considerations that might influence their current research. That list included such things as gender identity, ethnic identity, intellectual interests, and a desire to have a social impact or pursue social change..[7] In both 2016 and 2023, intellectual interest was the most frequently mentioned motivator, but social impact/social change was mentioned by about 30% of respondents in both years, a figure that easily surpassed mentions of gender identity, ethnic identity or religious identity.

A different survey question took a *reverse angle* approach to the connection between research agendas and political participation. That question asked respondents about various considerations that might influence their political activity, such as ethnic identity, gender identity, religious identity, academic position, and research interests. Sixty-one percent of respondents in 2016 and 57% of respondents in 2023 said that research interests had a "great deal" or "a lot" of influence on their

[7] In both 2016 and 2023, respondents were asked "Which factors influenced your research interest?," and they were provided a list of items to select. In 2016, one of the items was "desire to have social impact," and in 2023 one of the items was "to foster social change." The modification in 2023 was made in response to open-ended comments from respondents as well as more informal feedback from survey respondents.

political activities. These percentages were 20-25 points higher than those for any of the other factors included in the survey question.

Table 3: Political Activities by Social Impact/Social Change as a Motivator for Research

Political Activity	2016: Mention (%)	2016: No Mention (%)	2023: Mention (%)	2023: No Mention (%)
Voted in election	87.9	65.2**	68.4	67.1
Written a letter to a public official	39.4	28.8	42.1	30.6
Worn button/sign	18.2	13.6	44.7	28.2*
Signed petition	66.7	45.5**	65.8	45.9**
Attended rally	30.3	22.7	26.3	27.1
Contributed money	48.5	31.8*	47.4	43.5
Worked for candidate	0.0	6.1	2.6	4.7
Lawful demonstration	48.5	22.7**	65.8	48.2*
Civil disobedience	12.1	3.0*	26.3	5.9**
Visited campaign website	45.5	27.3*	42.1	27.1*
Forwarded online content	54.5	21.2**	39.5	24.7*
Blogged about politics	12.1	3.0*	15.8	9.4
Shared thoughts on social media	45.5	31.8	63.2	38.8**

Note. In each year, the left column shows the percentage of respondents who mentioned social impact/social change as a motivator for research; the right column shows those who did not. Sample sizes were $n = 33$ (mention) and $n = 66$ (no mention) in 2016, and $n = 38$ (mention) and $n = 85$ (no mention) in 2023.
$p \leq .10$. ** $p \leq .05$.

Many Iranian Studies scholars appear to see a connection between their research endeavors and their political engagement, and the connection is seen in two different question formats. For a more detailed look at the relationship between research motivations and political activity, we focus on a comparison of reported political activity between those who mentioned social impact/social change as a research motivation and those who did not. These comparisons for both 2016 and 2023 are displayed in Table 3. For just about every activity covered in the questionnaire, reported participation was higher among those motivated by social impact/social change. In some cases, the differences were considerable, in the neighborhood of twenty percentage points. This included voting in elections in 2016, signing a petition in both 2016 and 2023, participating in a lawful demonstration in both 2016 and 2023, civil disobedience in 2023, and sharing thoughts on social media in 2023.

Once again, some of the percentages in Table 3, especially for those motivated by social impact/social change, are extraordinarily high. For instance, about two-thirds of respondents motivated by impact/change signed petitions in 2016 and 2023, with a similar proportion participating in a lawful demonstration in 2023. Over 25% of scholars motivated by impact/change reported taking part in civil disobedience in 2023, and over 60% reported sharing thoughts on social media in 2023. These percentages easily eclipse available baselines, either for general populations or for highly educated populations.

Note that the relationship between prioritizing social impact/social change and levels of participation applies to a range of activities, from the "conventional" or "institutional" (Harris & Gillion, 2010) such as voting, to the more "unconventional" or "non-institutional" such as participating in a lawful demonstration, as well as digital forms of participation such as sharing thoughts on social media. Conservative critics might see this as an inappropriate politicization of academic life (Maranto et al., 2009), while others might see it as a healthy striving for relevance in academic endeavors (Rojas, 2014). Either way, the connection between scholarly motivations and political participation merits additional investigation.

Public Outreach and Media Interactions

The connection between research motivation and political activity suggests that many Iranian Studies specialists see a public facing element in their academic lives, and they want their scholarship to make a difference outside traditional academic settings. One such effort is the Iran 1400 Project (iran1400.org), a platform that produces commentary and videos academic specialists, including an interview series with Iranian Studies scholars on the impact of *Women, Life, Freedom* (see https://www.youtube.com/@Iran1400Project/videos). Across academia, there is growing range of digital platforms for public outreach, and there is also an increasing recognition of the value and importance of the "public scholar" role, sharing expertise and commentary with audiences outside the academy (Cann & DeMeulenaere, 2020; Hoffman, 2021; Jones, 2022). These kinds of activities are not covered in traditional research on political participation in the general public. But in a study of academics, outreach efforts such as using social media or speaking to journalists can be considered political to the extent that they involve efforts to reach out and inform the public and influence the focus and direction of policy discourse.

Our questionnaire was not intended to capture the full breadth of activities that can comprise "engaged" or "public" scholarship, but some questions do touch upon aspects of public outreach and contact with the media.

As noted in Table 1, it is not unusual for Iranian Studies specialists to share thoughts on social media; nearly half (46.3%) of our respondents reported doing this in 2023, and that figure hit 63.2% among scholars whose research was motivated by a desire to encourage social change (see Table 3).

Another set of questions asked Iran specialists how they reacted to news about Iran. The 2016 questionnaire featured separate questions about reactions to positive news and negative news, but in 2023 there was a single item inquiring about reactions to news about Iran. Respondents were presented a list of possible reactions and asked to select any that applied to them. The results for 2016 and 2023 are shown in Table 4. In both 2016 and 2023, Iran specialists most commonly reported that they reflected alone about news, discussed news with family or friends, or discussed news with colleagues. The percentages were by and large consistent between 2016 and 2023, and there were negligible differences in reaction to positive news or negative news in 2016.

Table 4: Reactions to News About Iran, 2016 and 2023

Reaction	2016 Positive (%)	2016 Negative (%)	2023 (%)
Reflect alone	45.5	45.5	48.8
Discuss with family or friends	65.7	67.7	74.8
Discuss with colleagues	47.5	49.5	53.7
Protest	4.0	9.0	25.2
Contact officials	5.1	14.1	11.4
Contact community leaders	2.0	2.0	5.7
Contact advocacy group	3.0	6.0	11.4
Contact media	9.0	14.1	16.3
Outreach	25.3	27.3	43.9

Note. Respondents could select more than one reaction; therefore, percentages do not sum to 100%. The 2016 survey included separate questions for reactions to positive and negative news, whereas the 2023 survey included a single question about news in general. Sample sizes were $n = 99$ (2016) and $n = 123$ (2023).

Of special note are the percentages for several of the more public facing reactions. In 2023, 25.2% responded to news about Iran by participating in a protest or demonstration. That one in four academics would react to news with such direct political action is truly striking. A substantial proportion of Iran scholars also reported that they responded to news about Iran by engaging in outreach efforts such as public lectures and panels; about a quarter of respondents did this in 2016 (responding similarly to good news and bad news), with the percentage increasing to 43.9% in 2023. We cannot say how Iran Studies scholars compare to other academics, but it is clear that public engagement is a priority for many individuals in the subfield.

In 2023 we asked respondents if they had been contacted by a journalist or news organization in the past year and asked to comment on current events or issues, and we asked about the topic of those media requests. Nearly half of the Iranian Studies scholars (48.0%) reported such contacts. Given the timing of the 2023 survey, it is not surprising that media inquiries were most frequently about the *Women, Life, Freedom* protests following the death of Mahsa Amini in September 2022, as well as women's issues more generally; this was the focus of 58% of the reported media exchanges. A smaller percentage (17%) of inquiries were about JCPOA and US-Iran relations in general.

Insights from Open-Ended Survey Comments

Both the 2016 and 2023 questionnaires included some open-ended prompts that invited respondents to share insights on various aspects of working in U.S. academia. These open-ended comments reflect the striking results we have reported and add nuance to the results regarding the political involvement of Iranian scholars and enhancing our understanding of challenges. Observations from the comment sections of the surveys suggest that Iranian Studies scholars are motivated by an awareness of political currents affecting them and by a sense of obligation to be active and vocal. However, they are also sensitive to the risks involved in public commentary or advocacy.

Comments from Iran specialists in the 2016 and 2023 surveys illustrate their awareness of the difficult professional and political environment in which they operate. Some observations reflect the issues and challenges facing many area studies subfields, but others speak specifically to political developments in the U.S. and Iran during the time of our study.

In 2016, one respondent highlighted the awareness among Iranian scholars of their marginalized roles within American institutions, noting,

> As a non-tenure track associate professor on a long-term contract, my position is tenuous. Whenever I have directed interdisciplinary programs, my views are generally respected by colleagues and administrators, and I have had a major impact on programming at the college during those periods.

However, the respondent also emphasized marginalization within their area of specialty, stating,

> Otherwise, my views and role are marginalized despite my professional activities and publications. I am the only person doing Iranian Studies at my institution, and the marginality of my position reflects the (lack of) importance given to this field of study.

The respondents' contrasting experiences of respect in interdisciplinary settings and marginalization within their specialized field highlight the precarious nature of their professional existence and the broader implications of their political engagement. The same anti-Iran bias was echoed in 2023 by another participant, who stated,

> I suspect that I have been denied sabbatical twice (without explanation) because I work on Iran…There is very little interest in Iran among my colleagues or the university administration (although the students are interested), and very little support for work in this area.

These comments point to the difficulty and vulnerability of working and conducting research as an Iranian specialist scholar in American academia.

However, to add more nuance to the above mentioned comments, it is important to note that for some of our respondents the obstacles were caused by the lack of support from within the community of Iranian scholars. As another 2023 respondents noted, "The difficulty or tension is relevant on this campus due to the presence of Iranians (mostly graduate students), rather than due to possible hostility from non-Iranian students or faculty." Part of this tension may arise from the fact that Iranian American opinion on the question of "regime change" (which would necessitate a more aggressive and even a militarized response to Iran) has shifted. As the executive summary of the 2023 Public Affairs Alliance of Iranian American survey noted, support for regime change was up 16 points from a previous survey in 2020 (from 25% to 41%, the highest jump since 2018, Zogby Research Services and PAAIA, 2023, p. 12). Sometimes the tension was caused by lack of communication among scholars as another participant highlighted, "We own this failure due to not communicating and sharing ideas and wanting to do things alone and not as a team." These comments reveal many layers of nuance that can be explored in more detail in a focus group study, including the political and professional dynamics experienced by Iranian Studies scholars in American academia, the intersection of political and civic life with the professional and personal lives of this community, and the dynamics within the Iranian Studies specialist community. Understanding the impact of political events on professional lives emphasizes the potential value of focus group work in this ongoing project.

Turning more specifically to matters of political engagement, some respondents expressed concerns regarding their roles as Iran Studies specialists, navigating the intricate landscape of political involvement and public/media interactions. These comments add depth to our quantitative findings, highlighting the desire for research activity to contribute to social change. In the 2023 survey, one participant elaborated on the difficulty of engaging with social media on political matters: "The toxic climate on social media, particularly attacks on academics and journalists with ideas that do not squarely fit those of the Islamic Republic and its diaspora opponents, has made academic contributions to public debates very hard." This comment underlines the tension and challenges faced when engaging politically. Another respondent noted, "There are new and more intense tensions between Iranians (Iranian-Americans) due to the fallout from the killing of Mahsa Zina Amini and the subsequent protests. There is a polarization in the discourse and a climate of intimidation if one points out US policy, criticizes sanctions, or raises doubts about the possibility of the success of the 'revolution.'" In contrast, some respondents highlighted the positive aspects of this struggle. One remarked,

> Current conditions in Iran have brought in the perspective that reveals the realities of the lives of Iranians every day and the struggles they face. Having the people's voices be amplified has brought more support for Iranians who are fighting for their basic human rights. In the US, people are recognizing the brutalities of the Islamic-Iranian regime and are shifting their perspectives and becoming more supportive of the Iranian people. I personally feel proud to be Iranian at this time.

This clearly speaks to the role personal identity plays in shaping how Iran specialists in American academia are experiencing their professional and civic lives.

CONCLUDING NOTES AND FUTURE PLANS

The results from our 2016 and 2023 surveys of Iranian Studies scholars portray a very politically engaged community, with reported levels of participation easily exceeding available benchmarks for academics or other highly educated Americans. It is telling that reported participation for several activities increased between 2016 and 2023. Increases in "assertive" activities such as demonstrations and civil disobedience are especially noteworthy. We believe the increases between 2016 and 2023 are driven in an important way by political developments in the U.S. and in Iran that spurred political engagement. Our findings call for a modification of the view that high levels of political participation among academics is primarily a function of high educational attainment. Some scholars, such as Iranian Studies specialists, work in environments that are politically fraught and that motivate political action. Moreover, many Iran Studies scholars see connections between political action and their research agendas, expressing a goal that their research contributes to social change. A large proportion of Iran Studies scholars also see a public-facing component to their professional lives, taking the form of public outreach and media interactions. This is an aspect of political engagement that has been outside the realm of traditional research on political participation, but that should be included in studies of academic communities.

Our findings, based as they are on a single subfield, naturally raise questions about their broader applicability. These questions point to promising avenues for further inquiry.

We have argued that the high levels of political participation among Iranian Studies scholars are driven in part by political developments in the U.S. and Iran. We believe that many Iranian Studies scholars are conscious of these developments and that they motivate political action. We also recognize that this might not be unique to Iranian Studies. Other area studies fields have their own expressly political beginnings, and scholars in these fields have had to contend with the vagaries of U.S. government policy and international political events. We encourage other area studies academics to explore some of the questions we have addressed and see if similar findings and parallel storylines emerge.

Iranian Studies, like most other area studies fields, is rooted primarily in the humanities and social sciences. Our survey did not reach out to U.S. academics with heritage ties to Iran working in engineering or the sciences. A useful future step would be to expand our research beyond Iranian Studies per se and to collect data from Iranian diaspora scholars in other academic fields. That would allow us to see if, or how, that broader set of academics perceive political pressures or embrace a public facing aspect to their work.

The signals we picked up in the survey data, especially the comments some respondents shared and the informal conversations the authors had with colleagues in a variety of professional settings, have convinced us of the value of having direct conversations with willing members of our respondent pool. To that end, we are currently arranging focus group sessions with 2023 survey respondents. In addition to the nuance one can more easily obtain in a confidential focus group conversation, we expect to gain insights into how we might refine future iterations of our survey. The other opportunity post-survey focus groups will provide is to give a sense of how Iran specialists in American academia are processing the heightened tensions on American campuses in relation to the events since October 7th, 2023. The way the Palestinian-Israeli conflict has become fully integrated into Iran's proxy war with Israel and the first instances of direct military confrontation between the Islamic Republic and Iran has changed the stakes of professional engagement in policy debates. Plans are also underway for a third online survey to capture the impacts of the 2024 Iranian and American presidential elections, both of which are perceived as being high stakes political developments.

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APPENDIX A

Text of Survey Questions Used in Analysis

[2016, 2023] Thinking back over the past year, please select the following political activities you have done. (select all that apply)

- Voted in an election
- Written a letter to a public official
- Worn a political button or displayed a political sign or bumper sticker
- Signed a petition being circulated by a candidate, party, or political organization
- Attended a campaign rally or speech given by a candidate for political office
- Contributed money to a political organization or candidate for office
- Participated in a lawful demonstration
- Participated in an act of civil disobedience
- Visited a campaign or candidate-sponsored website
- Forwarded an online campaign commercial or news story to a friend or family member

- Blogged about politics or a campaign
- Shared thoughts on social media (e.g. Facebook, Twitter)
- Other

[2016] What is your typical response to *positive* news regarding Iran? (select all that apply)

- Reflect on it alone
- Discuss it with family and close friends
- Discuss it with work colleagues
- Participate in protest or demonstration
- Contact elected officials
- Contact community leaders
- Contact advocacy group
- Contact media (letter to the editor, post comment on the internet, etc.)
- Engage in outreach (public lectures, panels, etc.)

[2016] What is your typical response to *negative* news regarding Iran? (select all that apply)

- Reflect on it alone
- Discuss it with family and close friends
- Discuss it with work colleagues
- Participate in protest or demonstration
- Contact elected officials
- Contact community leaders
- Contact advocacy group
- Contact media (letter to the editor, post comment on the internet, etc.)
- Engage in outreach (public lectures, panels, etc.)

[2023] What is your typical response to news regarding Iran? (select all that apply)

- Reflect on it alone
- Discuss it with family and close friends
- Discuss it with work colleagues
- Participate in protest or demonstration
- Contact elected officials
- Contact community leaders
- Contact advocacy group
- Contact media (letter to the editor, post comment on the internet, etc.)
- Engage in outreach (public lectures, panels, etc.)

[2023] Thinking back over the past year, have you ever been contacted by a journalist or news organization and asked to comment on current events or issues? If yes: What issues were you asked for input on?)

[2016] Which factors influenced your current research interest? (select all that apply)

- Previous Research
- Funding Opportunities
- Ethnic Identity
- Gender Identity
- Religious Identity
- Desire to Have Social Impact
- Other (specify)

[2023] Which factors influenced current research? (select all that apply)

- Gender Identity
- Religious Tradition
- Intellectual Interest
- Ethnic or National Heritage
- Race
- Previous Study
- Economic Opportunity
- Professional Aspirations
- To Foster Social Change
- Other (specify)

[2016, 2023] What influence do you think the following factors have had on your political activity?
(response options: a great deal, a lot, a moderate amount, a little, none at all)

- Research Interests
- Ethnic Identity
- Gender Identity
- Religious Identity
- Stage in Academic Career

[2016] To which gender identity do you most identify?

- Male
- Female
- Transgender Male
- Transgender Female
- Gender Variant/Non-Conforming
- Other
- Prefer Not to Answer

[2023] How would you describe yourself? (check all that apply)

- Male
- Female
- Transgender Male

- Transgender Female
- Gender Fluid
- Gender Non-Binary
- Gender Non-Conforming
- Other
- Prefer Not to Answer

[2016] Please select the single ethnic heritage that best describes you.

- Iranian
- American
- Iranian-American
- Other (specify)

[2023] How would you describe yourself? (check all that apply)

- Iranian
- American
- Iranian-American
- Middle Eastern
- Southwest Asian
- White
- Non-White
- Multi-Racial
- Other (please specify)

[2016, 2023] What is your current academic rank?

- Non-Tenured Instructor/Adjunct Professor
- Tenure-Stream Assistant Professor (or equivalent)
- Tenured Associate Professor
- Tenured Professor
- Research Faculty (Non-Tenured)
- Academic Staff (e.g. Library)
- Graduate Instructor or Teaching Assistant
- Other
- Retired

[2016, 2023] Have you been an officer in a professional society? (please indicate organization and years of service)

- President
- President-Elect
- Member of Advisory Board (or equivalent)
- Member of Executive Committee (or equivalent)
- Editor of Journal
- Member of Journal Editorial Board

- Conference Committee
- Other

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