

# The Politics of the Professoriate: A Social Media Approach

## An Investigation Into Faculty Members and Their Politics

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This report details the preliminary findings of a larger study of the politics of the professoriate. The dataset presented in this report is added to daily. Any questions regarding this study, or the dataset, should be directed to [nfh@g.ucla.edu](mailto:nfh@g.ucla.edu).

### Introduction

American higher education has long been considered a politically progressive space and for good reason: college students and professors have been at the vanguard of many progressive social and political campaigns throughout the last century and much of the scholarly and policy work supporting these movements originates in academe (Rhoads, 1998; Thelin, 2011). This perception that American colleges and universities are progressive and thus inherently liberal has, however, made them a consistent target of conservatives on and off campuses, who have alleged discrimination against conservative students and faculty members and who have argued that campuses have become spaces of indoctrination, not education (d'Souza, 1991; Horowitz, 2009; Shapiro, 2010).

Progressive and conservative researchers have explored both phenomena (discrimination against conservatives, Klein & Stern, 2005; Maranto & Woessner, 2012; Rothman et al., 2005; and liberal indoctrination; Dey, 1997; Havey, 2023; Havey & Schalewski, 2022; Hunt & Davignon, 2016) and identified no evidence that conservative students or faculty are discriminated against in college (Musgrave & Rom, 2015; Rothman et al., 2010; Shields & Dunn, 2016). The idea that liberal faculty are indoctrinating students has been similarly debunked, though many college experiences and behaviors, particularly peer interactions, have been associated with students becoming more liberal, while other experiences, like faculty interaction, have a moderating effect on students' political positions (Dey, 1997; Mariani & Hewitt, 2008; Havey, 2023; Havey & Schalewski, 2022). This lack of evidence, however, has not stopped the publication of many books (*Illiberal Education*, *Brainwashed*, *Indoctrination U*) and the careers of many conservative commentators and politicians who continue to advance the belief in liberal indoctrination and discrimination against conservatives without support.

The idea that liberals dominate academia and conservatives are thus unwelcome has become a readily identifiable straw man that has made productive and respectful discourse around important and actionable topics, such as the management of a pandemic, increasingly sensitive, tenuous, and partisan. This polarization, driven largely by the anecdotal experiences of conservative students (Havey, 2020, 2021), faculty, and politicians like Betsy DeVos, has led to allegations that free speech for conservatives is under attack in the

American university and resulted in calls for affirmative action for conservatives and quotas on liberal faculty to stem perceived liberal indoctrination (Gross, 2013; Klein & Stern, 2005; Shields & Dunn, 2016). This polarization has simultaneously resulted in nearly insurmountable barriers to productive and civil discourse and informed civic engagement and is evident in state policy decisions and litigation that specifically target progressive aspects of higher education, such as affirmative action.

While it is historically true that liberals outnumber both conservatives in the professoriate and in most student bodies, moderates comprise the majority of both populations. Unfortunately, the most consistently cited data regarding the political diversity of the professoriate is more than a decade old (2007), not nationally representative, and relies upon the self-reported identities of faculty members (Gross & Simmons, 2014). While Gross and Simmons, in their Politics of the Professoriate (PAP) Survey, also considered faculty members' views on political topics (i.e., support for marriage equality, affirmative action, etc.) and conducted follow up interviews with a small subset of the faculty surveyed (Gross, 2013), their data are both dated and reliant upon self-perception. The political diversity of the professoriate is currently based on assumptions.

The goal of this research study is to provide a comprehensive, accurate, and contemporary assessment of the political diversity of the professoriate by creating a nationally representative dataset of faculty members across institutional types, regions, fields, and tenure status and matching that data with in situ point estimates of each professor's political ideology based on their publicly available social media activity. Estimating professor's political ideologies along a continuous scale that is standardized and relational can offer greater nuance than self-reported survey items and resolves several of the design and bias issues inherent to survey research that I describe in greater detail in the next section of this paper.

## Literature Review

Politics, and the social and political decisions that spring from them, are one of the consistent subtexts within discussions of higher education (Gross & Simmons, 2014). National discussions about higher education, such as rising tuition costs, the objectives of institutions of higher education (i.e. career preparation, development of people, democratic and civic goals, etc.), and who gets admitted into the nation's most prestigious schools have persisted since the start of higher education in the United States of America (Thelin, 2011). The professoriate has been a regular proxy target of the generalized discontent with higher education that is the result of changing social and economic conditions (Altbach, 2016), with critique centered on the institution of tenure (Gross, 2013), what some refer to as professorial activism in the classroom (Horowitz, 2009), and claims of liberal indoctrination (Shapiro, 2015). In response to these discontent and criticism, and the subsequent targeting of professors individually and collectively, the politics of professors have been a consistent subject of scholarly research and public debate.

Some of the earliest work on the subject of professors and their politics was Lazarsfeld and Thielens' (1958) *The Academic Mind*. In a sweeping study of the professoriate, Lazarsfeld and Thielens surveyed 2,451 social scientists regarding their political positions, among other topics, and recorded that 67% identified as more liberal than the average person (Lazarsfeld & Thielens, 1958). Following the Civil Rights movements of the 1960s and the growing belief that "politically liberal professors dominate the academic world today" (Anderson & Murray, 1971; p. 138), additional efforts to examine the politics of the professoriate were undertaken. Subsequent work expanded upon Lazarsfeld and Thielens' 1958 findings. In *The Divided Academy* (1975), Ladd

and Lipset surveyed over 60,000 faculty across a variety of disciplines and found a similar liberal skew. In their larger sample, Ladd and Lipset found that 46% of professors identified as liberal, 27% as middle of the road, and 28% as conservative. The authors also noted that 45% of students at this time also identified as liberal (Ladd & Lipset, 1975). Again the authors found that the professors surveyed were more liberal than the public. Later work by Lipset (1982), which focused specifically on faculty at elite institutions, held similar findings. Work after Lipset's 1982 study (Hamilton & Hargens, 1993), however, suffered from limited data and narrowed survey instrumentation (i.e., a reduction in questions focused on politics resulting in a singular item on a five-point scale asking professors to rate themselves very liberal, liberal, moderate, conservative, or very conservative; Gross, 2013).

Within the last two decades, there has been a resurgence of research focused on the politics of the professoriate and the causes, and outcomes, of the relative overrepresentation of liberals in academe found in previous studies. In 2007, Gross and Simmons embarked on an ambitious study using a survey they titled the Politics of the Professoriate (PAP). The authors randomly sampled 1400 professors for this survey, interviewed a smaller subset (~70), and compared their results to the general public using the General Social Survey (Gross & Simmons, 2014). Like previous researchers (Lazarsfeld & Thielens, 1958), they found that professors, and social scientists in particular, were far to the left of the general public (51% identifying as Democrats versus 35% of the voting-age public; Gross, 2013, p. 6) and that "the professoriate is less than half as Republican as the country as a whole" (Gross, 2013, p. 7). Using latent attribute analysis—a strategy designed to extract a conclusion from a handful of datapoints; here, identifying a respondent as liberal, for instance, if they mostly supported liberal policies such as affirmative action—the authors reviewed professors' support for various topics. These topics included government spending and waste, gender and sexuality, affirmative action (which just over 50% of professors support; Gross & Simmons, 2014, p. 38), foreign policy (87% of professors describe themselves as 'dovish', p. 41), and whether politics should influence the classroom. Using professors' responses to questions on these topics, and their own political self-identification, Gross & Simmons (2014) found that 44% of professors identified as liberal, 46% as moderates, and 9% as conservatives. They also found that younger professors, measured through tenure status, tended to be more liberal (Gross & Simmons, 2014). Through these findings, they advanced the claim that much of the previous research on professors' politics exaggerates professorial liberalism and understates a mostly-center bloc, composed of moderate professors who lean one way or the other (Gross & Simmons, 2014). The radical left faculty members identified as problems earlier on, they note, are not that prominent, and, the authors claim, "there is more heterogeneity of political opinion among the professoriate than recent studies have recognized" (Gross & Simmons, 2014; p. 48). Gross (2013), individually asserted that he believes 54% of the professoriate in the United States of America belongs to the left, and guesses that, based on data collected by the Higher Education Research Institute which reported just over 50% of professors self-identifying as liberal or center-left in 2005, that a reasonable estimate of the percentage of liberals in the professoriate at any time is 50-60% (p. 56).

More recent work has explored professors' politics at a much smaller scale. A 2020 study (Peters et al., 2020) surveyed 700 philosophers regarding their political views and reported a majority of liberals, but failed to account for sampling issues (a nonrepresentative sample of institutions, one field), instrumentation (the study asked respondents to identify politically in relation to their peers while simultaneously asking whether they

felt discriminated against by those same peers), and did nothing to account for response bias (i.e., wanting to be perceived as something). An informal survey conducted by student reporters at the Harvard Crimson (Kahn, 2022) found that just 0.4% of surveyed faculty (~250) identified as very conservative, 2.5% as conservative, 19.5% as moderate, 47.9% as liberal, and 29.7% as very liberal. This study similarly failed to address response bias, did not expand sampling to more than the Faculty of the Arts and Sciences, and relied on a single-item question regarding self-identified political orientation. Further, the article containing the results of the survey, which quotes Harvey C. Mansfield, a far right conservative government professor who has worked at Harvard for several decades, saying “what we need is more conservative faculty appointments. There hasn’t been a conservative appointed as a Harvard faculty member for the last 10 years, as far as I know,” describes conservative faculty members as an ‘endangered’ species.

These studies all paint a picture of a liberal professoriate. They also share some methodological limitations that cannot be overlooked. First, with the exception of Ladd and Lipset’s massive 1975 study, nearly all of the extent research on professors’ politics draws on small, nonrepresentative samples (Kahn, 2022; Peters et al., 2020), single-item questions regarding political orientation, or is simply dated (Gross, 2013; Gross & Simmons, 2014). Regardless of the expiration date of survey-based data, the findings drawn from which can fluctuate between each administration of the survey, particularly if the survey is annual, these studies are limited by their focus on a singular field or institution and reliance on self-report survey data. These limitations, particularly with respect to finite instrumentation on a survey and narrow sampling, are a major concern.

Educational researchers have questioned, and assessed, the legitimacy and consistency with which college survey respondents are able to accurately evaluate, and report, their own identities, political positions, and relationships to others (Bowman & Seifert, 2011; Herzog & Bowman, Eds., 2011; Porter, 2011). While Gross (2013) has argued that professors specifically are more likely to respond thoughtfully and in a way that demonstrates the integration of their beliefs (i.e., espousing support for policy positions that align with their political self-identification), concerns with respect to self-report survey data should not be overlooked. These concerns typically center on four interlocking factors: social desirability (wanting to be seen as something you are not), formatting of items (and subsequent respondent confusion around them), halo effects (response inflation consistent with social acceptability or peer expectations; Pike, 1999), and clarity of measures (Dugan, 2015). Plainly, survey data is inherently limited by nature of asking respondents to report on themselves, their identities and their beliefs with any degree of objectivity and truth. As Gross (2013) pointed out, in interviewing faculty respondents to the Politics of the Professoriate Survey, many professors were quick to identify themselves, their politics, and their fields as objective while criticizing others, and entire disciplines, as wantonly subjective and political without much self-reflection or sense of irony. As all of the data described in this review draws on self-report survey data, the serious concerns with the validity of that data cannot be ignored.

Building on the decades of previous research conducted on the politics of the professoriate, this study was designed to provide a contemporary assessment of professors’ political leanings using a dynamic datasource that overcomes many of the methodological issues inherent to the studies described above: digital trace data, specifically, professors’ social media presences on Twitter.

## Why Twitter?

I chose to use digital trace data, specifically data from Twitter, for this study because Twitter is increasingly a major social and information network used by large swathes of the population and is one of many venues used by contemporary faculty members seeking to broaden their reach (Pennycook & Rand, 2019). Twitter's user interface allows its users to curate their feeds, interact with whomever they choose, and find new accounts to follow based on a proprietary algorithm designed to direct users towards content that align well with their interests (Noble, 2018; Steinert-Threlkeld, 2018). In practice, this results in an environment which supports the cultivation of social and professional networks. On Twitter, these networks can be codified through Twitter lists, or banks of users that have either added themselves or been added to a list based on descriptive modifiers (e.g., 'Black Women in STEM,' 'UCLA Faculty').

Research indicates that political ideology is one organizing identity which drives network construction, particularly on Twitter (Colleoni et al., 2014). Twitter users are more likely to follow political elites and peers that align with their ideological positions (Weeks et al., 2019) and to interact with like-minded accounts (Barberá, 2015; Himelboim et al., 2013). Studying online behavior that is mirrored offline, such as political affiliation, through digital trace data can result in more nuanced findings than a single-item survey, such as 'how do you identify politically?' Digital trace data was thus chosen as the primary data source for this study.

Digital trace data can reference anything from emails, comments, and cookies left behind by browsers to more specific things like Tweets and the connections between accounts on social networking sites. As I described in the review of the literature, all of the prior research on professors' politics is drawn from survey data. While useful in context, survey data presents challenges such as self-selection, response bias, and interpretation bias (Sax et al., 2003). Inconsistent interpretation of a single-item question centered on political ideology, for instance, may result in responses that less than accurately reflect reality, particularly if respondents are driven by comparison to their peers (i.e., identifying as liberal because you are the sole moderate in a group of staunch conservatives and thus, by comparison, quite liberal). Digital trace data, like that collected from Twitter, is thus ideal for this study, as it provides participant-level data that is a function of people's choices and online behavior. By calculating estimates for professors' ideological positions using comparisons to standardized data (i.e., politicians and political elites with established voting records and policy stances who can be assigned a clear ideological position), this study responds to the issues introduced by survey data and described above with respect to understanding professors' ideological positions and the potential skew of the academy. The study is guided by the following research questions:

**To what extent is the political ideology of professors active on Twitter skewed towards liberalism?**

**How do individual-level variables, such as tenure status and academic field, relate to the political ideology of professors active on Twitter?**

## Methods

To answer this study's research questions, I engaged in a quantitative design that draws from multiple data sources and utilizes basic descriptive statistics. The data collection and analysis for this study, described in

more detail below, proceeded in three steps. First, I identified faculty members with active Twitter accounts. Next, I calculated an estimated political ideology for each professor based on their digital trace data and online behavior and then coded their tenure status, field, and subfield, and also recorded their institution and merged in relevant data from the Integrated Postsecondary Education Data System to get a better understanding of who was in the dataset, described below. Finally, I descriptively analyzed the estimated political ideologies of the entire dataset and investigated how the ideological distribution changed with respect to individual- and institution-level variables.

In the following sections I describe how I identified faculty members, assigned those faculty members individual- and institution-level variables, and analyzed the dataset. Following the presentation of my methodological approach, I describe relevant limitations and considerations for the study and close with a positionality statement which describes my own estimated political ideology and the digital trace data used to calculate it.

## Data Collection

Data collection for this study was driven by efforts to avoid the limitations of previous work and was specifically focused on national representativeness, institutional diversity, and diversity with respect to the fields and disciplines of the professors under examination. I began data collection by creating a list of the institutions of higher education with the largest enrollments, and thus largest faculties, in each state, and included smaller institutions where appropriate to include diversity of institutional types (community colleges, religious institutions, private institutions, etc.). Following the selection of these schools, I searched each school's name on Twitter (i.e., "University of California, Los Angeles") and identified and recorded accounts who listed themselves as faculty at the school ("assistant professor @UCLA public policy"). To expand sampling for each school, I also looked at the followers of accounts associated with the institution (like the student newspaper, and departmental accounts, such as the Twitter account for UCLA's Public Policy department), who faculty members followed and were followed by (many faculty followed and were followed by the other faculty members in their department or discipline), and reviewed the lists faculty had created and were on (for instance, "Women in Computing," "Bryn Mawr Faculty"). I manually reviewed accounts in this manner until I could no longer identify new faculty profiles (I kept seeing the same people and reached saturation) or simply came to the end of a list. I proceeded with data collection until I had adequate representation for each school (variable by the total number of faculty at that school), each field (humanities, STEM, etc.), each subfield (law, English, chemistry, etc.), and tenure status. Only faculty members whose accounts were public (i.e., they have not chosen to restrict access to who can view and interact with them on Twitter) were included in the final dataset.

## The Data

The primary data used in this study was drawn from professors' Twitter accounts. Professors' Twitter accounts were identified systematically through the manual review of Twitter users described above. After identifying each professor's Twitter User ID (an alphanumeric code unique to their account that does not change even if they alter their username), I calculated their estimated political ideologies using Barberá's (2015) tweetscores R package. The tweetscores R package utilizes a Bayesian ideal point estimation approach to categorize users in comparison to a training set of political elites (Barack Obama, Hillary Clinton, Bernie Sanders, Glenn Beck, Ted

Cruz, etc.) and assigns them an estimated political ideology score based on their association with these elites and non-elites who they associate with online who may have stronger relationships to the training set of political elites (i.e., a political ideology can be estimated for an account that only associates with peers if those peers have readily identifiable political positions). The estimated political ideologies for the professors in the dataset ranged from -2.5, very liberal, to 2.5, very conservative. The full distribution is described in the results section of this paper, but the range and cutoffs for categorical descriptions (i.e., far right, moderate) are consistent with previous research (Barberá, 2015; Havey, 2020b).

The tweetscores R package was validated on a dataset comprised of millions of tweets and users discussing a handful of extremely political and polarizing topics (i.e., elections, abortion) and more apolitical ones (the Super Bowl) and has been validated by other researchers, including myself (Havey, 2020b). Though I did not engage in successive validation within this study, I did manually review the estimated political ideologies of users I was familiar with (faculty who I know well and interact with regularly) to ensure the quality of the data. I found no discrepancies and, where possible, asked a small number of individual faculty members to self-identify politically. While this validation of the data was informal, the estimated political ideologies of the faculty members I spoke to personally matched how they self-identified after I recalculated the continuous estimated political ideologies (i.e., a -1.5 on a scale of -2.5:2.5) to categorical options such as liberal and conservative. While at least one of these professors was slightly less liberal in comparison to their peers than they thought they were, they were still well within the boundaries of the camp they self-selected.

Where I could not estimate the political ideology of a particular user (i.e., a professor had an account but barely used that account and a secondary estimation through correspondence analysis— looking at their peers and their interactions with those peers— failed to produce an estimate), I removed that user from the sample. This resulted in a sample reduction of 4% across the board. Once I had a stable sample of professors, I incorporated data from IPEDS.

The Integrated Postsecondary Educational Data System (IPEDS) is a product of the United States Department of Education's commitment to collecting and recording institution-level data on every accredited institution of higher education in the country. This data includes a variety of interesting variables, such as the control of a school, measured as a proportion of the number of admitted students against the number of students who applied, the overall enrollment of a school, and that school's 4, 6, and 8-year completion rates. I incorporated institution-level data to better understand which faculty comprised the dataset and what the institutions they work at look like in relation to each other.

## Analysis

Data analysis was conducted in line with the research questions. Following the creation of the dataset, I conducted aggregated analyses of the variable of interest, estimated political ideology, with respect to the entire sample and the key covariates of interest: tenure status, field, and subfield. The results of these analyses, as well as descriptive statistics with respect to the dataset and the variables of interest, are presented below.

To answer the first research question, regarding the possibility of ideological skew among professors active on Twitter, I analyzed professor-level data in the aggregate. Specifically, I analyzed the distribution of the point

estimation of political ideology for all faculty present in the dataset. This analysis included identifying the distribution (the mean and standard deviation) of the estimated political ideology of all professors in the dataset. To more readily compare the data in this study to data in previous studies which included categorical representations of political ideology, I calculated cutoffs within the continuous data (ranging from -2.5 to 2.5) to create categories of far left, liberal, moderate, conservative, and far right. I then presented the findings reflected through these categorical subgroups.

To answer the second research question, regarding the relationships between individual-level variables and professors' estimated political ideologies, I performed additional descriptive analyses which separated individual professors into subgroups based on a particular variable, such as tenure status, to demonstrate differences within and across those subgroups with respect to estimated political ideology.

## Limitations

There are some key limitations to the data utilized in this study. First, not everyone is on Twitter. While many faculty members utilize Twitter as a way to share their work and learn from their peers, Twitter skews young and white (Kwak et al., 2010; Steinert-Threlkeld, 2018). This is consistent with my manual review of the data as, while some older professors are represented within the dataset, there are many notable scholars in my own field who simply have no online presence. In addition to this sampling limitation, many of the faculty members with active Twitter presences have private accounts, which may result in a final sample which leaves out professors who are less comfortable sharing their views publicly or who simply do not want to engage with everyone online. Similarly, this sample may overrepresent faculty members who are particularly outspoken or public facing, given the utility of Twitter in advancing their careers.

A second limitation of this work is its relative depth, which is more shallow than a large-scale qualitative study but significantly more nuanced than the single-item survey work I described earlier in this paper. Put plainly, while the estimated political ideology calculated for each professor in the dataset used for this paper is a dynamic and nuanced representation of their social and political behavior, this data cannot be used to answer more specific questions about their support for certain political issues or to describe how their politics influence their professional behavior. Follow up qualitative work, could, however, explore these issues.

A third limitation of this study is sampling. Specifically, I could not feasibly sample every institution of higher education within the United States of America nor could I identify every faculty member present on Twitter. While I did manually verify that every professor included in the dataset is actively employed where they say they are, and at the tenure level they claim, the dataset cannot realistically ever cover the full range of people within the contemporary professoriate. As a result, the dataset used within this study is inherently biased towards faculty with more heightened degrees of institutional or occupational pride. That being said, data collection was designed to ensure representativeness and was performed systematically.

## A Note on Ethics and Data Protections

The data used in this study were publicly available and identified manually by me, the researcher. While this data was public (and where private, not included), publicly accessible data is not always ethical to share, analyze, or use. Simply, the data in this study are people, and people can be harmed by their inclusion in academic research (boyd & Crawford, 2012; Zook et al., 2017). To protect the faculty included in this dataset, I



have disidentified the data and ensured that the analyses are presented in the aggregate where possible, negating the identification of specific faculty members by virtue of their uniqueness (i.e., a very liberal, untenured person in a highly conservative field). Similarly, the estimations calculated using the Tweetscores R package are marginally and negligibly different each time they are run. While a user is likely to be within 0.001 of their estimated political ideology regardless of when the analysis is run, this data cannot be retroactively used to calculate their identity, as it is variable. Additionally, the dataset used in this study is kept in a password-protected spreadsheet and, in the interest of ethical data sharing, will only be available in a deidentified and un-reidentifiable format (Zook et al., 2017). Finally, I acknowledge that the choices I made with respect to data collection and analysis were subjective and influenced by my positionality as a researcher, which I describe more thoroughly in the following section (Boyd & Crawford, 2012).

## Positionality of the Researcher

I close this section with a positionality statement. Positionality statements are more common in qualitative work, but I believe acknowledging my own position to the faculty comprising this dataset and my position to the research in general is critical in understanding my approach, my biases, and my rationale (Hope et al., 2019). In my effort to present a critical quantitative positionality statement, I have extracted my own digital trace data indicating my own estimated political ideology, which is -1.435039195. I follow a number of political elites and, in comparison to the average Twitter user, am solidly liberal. Some of the accounts contributing to this score include The New York Times, Alexandria Ocasio-Cortez, Elizabeth Warren, Teen Vogue, The Associated Press, NPR, Jezebel, and a handful of progressive nonprofit organizations. Put plainly, if you look at my Twitter account and who I follow, am followed by, and interact with regularly, I appear to be fairly liberal. With respect to this study, I endeavored to be cognizant in my positionality as a liberal Twitter user and aimed to honor the data I collected and analyzed in a way that reflects the reality of that data.

## Results

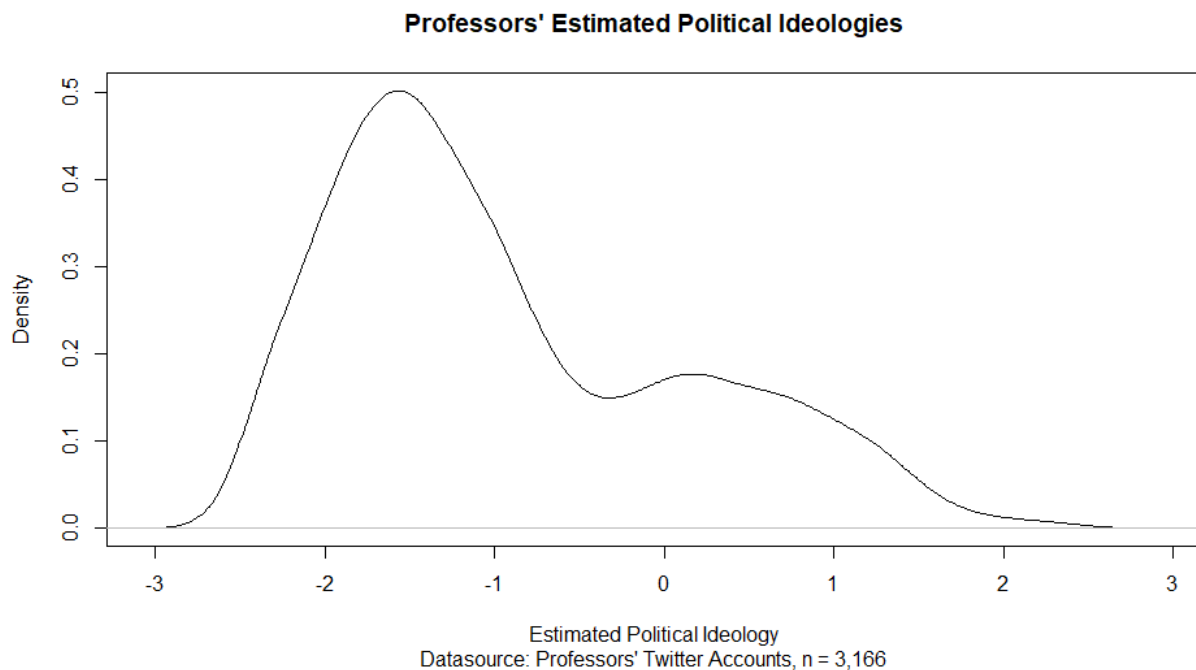
The dataset used for the analyses presented in this section contains data collected from 3,166 faculty members representing 440 schools across 50 states and the District of Columbia. The average number of faculty representing each school in the dataset was 7.19, with the smallest number of faculty (1) representing several schools in the dataset and the largest number (129) representing Columbia University. Because the range of faculty members at each individual school was large (128), I conducted sensitivity analyses to determine whether including professors from institutions with smaller subsamples influenced the overall distribution of the data. To do this, I removed observations when individual schools had fewer than 20 faculty, fewer than 10 faculty, and fewer than 5 faculty contributing to the overall dataset and performed t-tests to assess whether the removal of these schools altered the distribution of the estimated political ideology. After removing schools with fewer than 20 faculty ( $n = 1,592$ ), there was no significant difference in means ( $t = 0.7189$ ). After removing schools with fewer than 10 faculty ( $n = 2,164$ ), there was no significant difference in means ( $t = 0.7018$ ). Finally, after removing schools with fewer than 5 faculty ( $n = 2,571$ ), there was still no significant difference in means ( $t = 0.4284$ ). As a result, I kept all of the observations. Keeping these observations in the dataset allowed for a greater overall diversity with respect to institution, tenure status, field, and subfield.

The average number of faculty representing each state in the dataset was 62, with the smallest number of faculty (2) representing Montana and the largest number (346) representing New York. The average selectivity of the institutions in the dataset, measured as a percent of students admitted versus those who applied, was 46.46%, with a minimum of 4% and a maximum of 100%. With respect to institutional control, 46.4% of professors worked at private institutions whereas 52.8% worked at public institutions. Finally, 96% of the sample worked at four year institutions whereas less than 3% worked at 2 year institutions.

## Estimated Professor Political Ideology

The full dataset of 3,166 professors representing 440 unique schools and 50 unique states (and the District of Columbia) had an average estimated political ideology of -0.9145, a minimum value of -2.479, a maximum value of 2.375, and a standard deviation of 1.05. This distribution is visually represented in Figure 1.

**Figure 1: Distribution of Professors' Estimated Political Ideologies**



In the interest of more stable comparisons to previous, survey-based work that asked professors to identify themselves politically on a scale including static positions (i.e., conservative, very conservative, very liberal, etc.), and in the interest of more easily interpretable data, I have converted the continuous variable I calculated for professor estimated political ideology into a categorical variable with five, evenly spaced categories. After examining the distribution of the continuous values of professors' estimated political ideologies, I created quintile cutoffs for each categorical value: far left, liberal, moderate, conservative, and far right. The cutoffs for each valuation were: far left (-2.48,-1.51], liberal (-1.51,-0.545], moderate (-0.545,0.423], conservative

(0.423,1.39], and far right (1.39,2.36]. The percentage representation and number of professors for each subgroup is presented below.

Far Left: 1129 (35.7%)

Liberal: 1070 (33.8%)

Moderate: 493 (15.6%)

Conservative: 410 (13%)

Far Right: 64 (0.2%)

## Faculty Profiles

To better understand what representation in each of these subgroups means, I have selected individual faculty members, provided them pseudonyms, and presented their estimated political ideology, tenure status, institution, field, and subfield below alongside contextualizing information that describes why their estimated political ideology is what it is.

### Far Left

An example of a professor categorized as Far Left is Dr. Critical Film. Dr. Film teaches at Columbia University, is a tenured associate professor, and tweets regularly about issues affecting Black people and the working class. She regularly interacts with other faculty members in her field and is connected to people like Eboni Williams, a Black news host, Jelani Cobb, a staff writer for *The New Yorker*, and a handful of reporters covering topics like inequality, race, and labor organizing for a variety of outlets. With an estimated political ideology of -2.399, Dr. Film is significantly to the left, more than two standard deviations away in fact, of the average professor in the dataset used for this study (-0.9145).

### Liberal

An example of a professor categorized as a Liberal is Dr. Feminist Lit. Dr. Lit teaches at the University of California, Los Angeles, is a tenure-track assistant professor, and mostly tweets about what she is watching and reading. She regularly interacts with other faculty members in her field but, in contrast to Dr. Film, Dr. Lit discusses political topics less frequently on her account. She is connected to a variety of cultural and news outlets that would be considered left of center, such as *The New Yorker*, *Jacobin*, and *The New York Times Book Review*. At a value of -1.376, Dr. Lit is half a standard deviation away from the average estimated political ideology of professors in the dataset (-0.9145).

### Moderate

An example of a professor categorized as Moderate in the dataset is Dr. Behavioral Economist. Dr. Economist is an endowed full professor at Harvard University and has served in a variety of advisory positions at the White House. He is regularly interviewed and quoted in major news publications such as *Foreign Affairs* and *The*

Washington Post and his politics, and the politics of the people he interacts with on Twitter, reflect the center to center-right politics of those outlets. Dr. Economist has a sizable following (more than 100,000 unique users) and, with an estimated political ideology of 0.058, he is nearly one standard deviation to the right of the average professor in the dataset used for this study (-0.9145).

## Conservative

An example of a professor categorized as Conservative in the dataset is Dr. Religious Liberty. Dr. Liberty is a tenured full professor of law at Pepperdine University and has served as an expert and consultant to a handful of religious activist groups in the United States. Dr. Liberty predominantly tweets about religious liberty and the First Amendment. He is quoted regularly in outlets like The Wall Street Journal and is regularly cited by conservative think tanks like the Manhattan Institute. He is connected with many peers in his field (law) and mostly interacts with journalists and news outlets which reflect his religious conservative politics. With an estimated political ideology of 1.213, Dr. Liberty is more than two standard deviations to the right of the average professor in the dataset used for this study (-0.9145).

## Far Right

Finally, an example of a professor categorized as Far Right in the dataset is Dr. Constitutional Law. Dr. Law is a tenured associate professor of law at Liberty University and has held a handful of elected and appointed legal positions in state government. Dr. Law tweets consistently about the 'stolen' 2020 election, his efforts to inspect voting machines, and the (il)legitimacy of President Biden's electoral victory. His Twitter profile prominently features his numerous appearances on Fox News, and he exclusively follows and interacts with news and entertainment outlets that would be classified as far right or extremely conservative (i.e., Breitbart, The Epoch Times), as well as conservative politicians and think tanks such as the Conservative Partnership Institute. Dr. Law does not follow or interact with many of his peers in the field of law and, with an estimated political ideology of 2.013, is more than three standard deviations to the right of the average professor in the dataset used for this study (-0.9145).

## Comparisons to Previous Studies

The average estimated political ideology of the professors in this dataset, at -0.9145, lies to the left of center. While the majority of professors in the dataset were estimated as solidly liberal (69.5%), higher than Gross's (2013) estimate of 50-60%, a large section of this liberal base could more realistically be categorized as center-left or moderate. Similarly, while the 13.2% of professors categorized as conservative or far right is higher than the percentages recorded in previous studies (9%, Gross, 2013; Gross & Simmons, 2014), the relative liberal skew of the dataset and the resulting higher cutoffs for the conservative subgroups may underestimate the percentage of faculty members in the moderate subgroup that could be categorized as center-right or conservative. Visual inspection of the distribution indicates identifiable values for professors whose political positions are at either political extreme. The largest density is, however, solidly liberal with a clear peak at a value of -1.5. The second largest density is to the right of center, at a value of 0.50. Overall, the professors in this dataset are both more liberal and conservative than professors in previous, survey-based studies, with the moderate core (46% in Gross and Simmons' 2014 study) shrinking to a third (15.6%).

While the sample populations in this study and previous studies are not the same and should thus not be statistically compared, the data analyzed within this study make clear that liberals do indeed hold a majority of positions within the professoriate, though previous estimations of the number of conservative faculty members may undercount conservatives. In comparison to college students whose political ideologies were calculated using their own digital trace data, which I explored in another study (Havey, 2022), the professors in this dataset are, on average (-0.9145), more liberal than the students they are teaching (a mean of -0.3340, and 69.5% liberal with respect to faculty compared to 47.1% for students). Professors also have a smaller share of moderates than students (15.6% versus 24.4%) and are less conservative than students (13.2% versus 28.5%). To ascertain whether there are any differences among professorial subgroups (by field, by tenure status, etc.), I explore how the distribution presented in Figure 1 changes with respect to other variables.

### Estimated Professor Political Ideology by Covariates

To better understand the relationships between my variable of interest, estimated political ideology, and covariates of interest, tenure status, field, subfield, and institutional control, I identified each professors' values for each covariate and separated them into subgroups based on the distributions of the covariates. I present the overall distribution of each covariate below before presenting the distributions of estimated professor political ideology by subgroup. I begin with tenure status.

Previous studies of faculty politics have identified a relationship between professors' age and time spent in academia, measured through their tenure status, with younger and untenured professors tending to be more liberal than their tenured peers (Gross, 2013; Gross & Simmons, 2014). To ascertain whether there was a difference in the distribution of estimated political ideology for professors at different tenure levels in this study, I separated each faculty member into a subgroup based on their tenure status. These subgroups, and the percentage of faculty in the dataset belonging to them, are presented below.

Non-tenure track (Visiting Assistant Professor, etc.): 4%

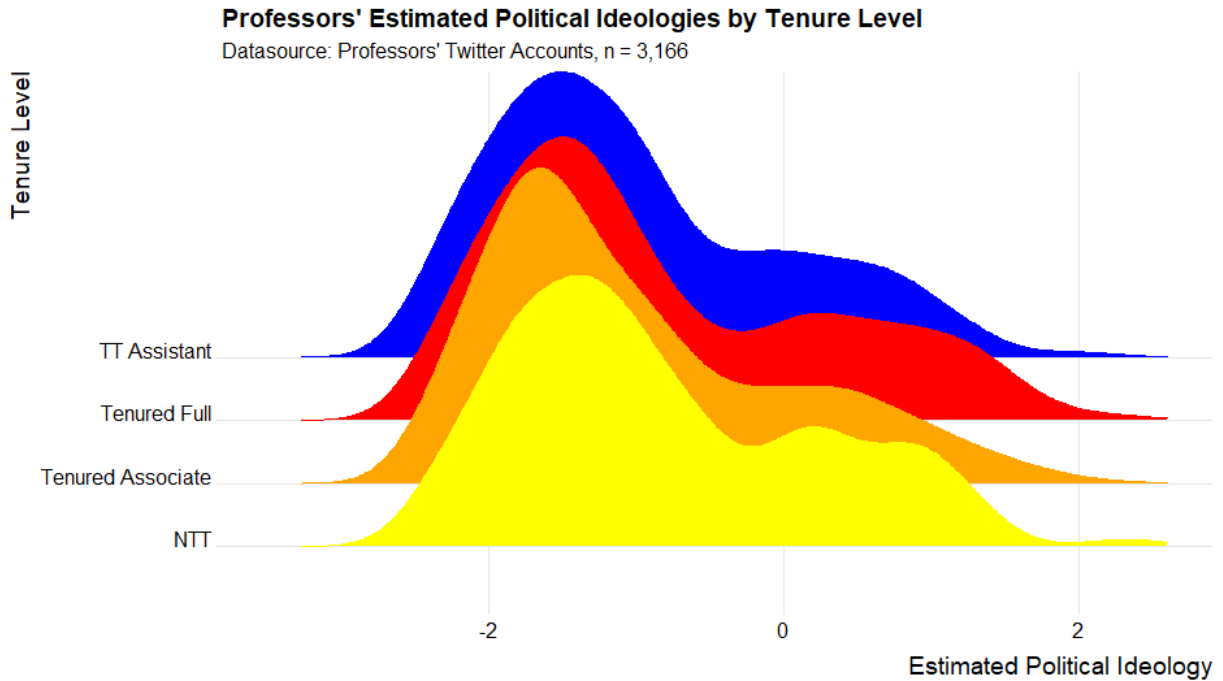
Tenure Track Assistant Professor: 28.9%

Tenured Associate Professor: 25.7%

Tenured Full Professor: 41.3%

Figure 2 visually depicts the distributions of estimated political ideology by tenure status.

**Figure 2: Estimated Professor Political Ideology by Tenure Status**



As Figure 2 shows, there is significant overlap with respect to estimated professor political ideology by tenure status, though, consistent with Gross (2013) and Gross and Simmons (2014), there is a higher density of conservative faculty among professors who have achieved tenure and promotion. To determine if there was a statistically significant difference between tenured and untenured faculty, I also conducted a t-test, which indicated that tenured professors were less liberal than untenured professors ( $t = 1.90, p < 0.05$ ). That being said, the majority of professors within this dataset are liberal.

In addition to tenure status, previous studies of faculty politics have identified relationships between professors' fields, such as the sciences and the humanities, and their political orientations (Gross, 2013; Gross & Simmons, 2014). To ascertain whether there was a difference in the distribution of estimated political ideology for professors in different fields, I separated each faculty member into a subgroup based on their academic field. These subgroups, and the percentage of faculty in the dataset belonging to them, are presented below.

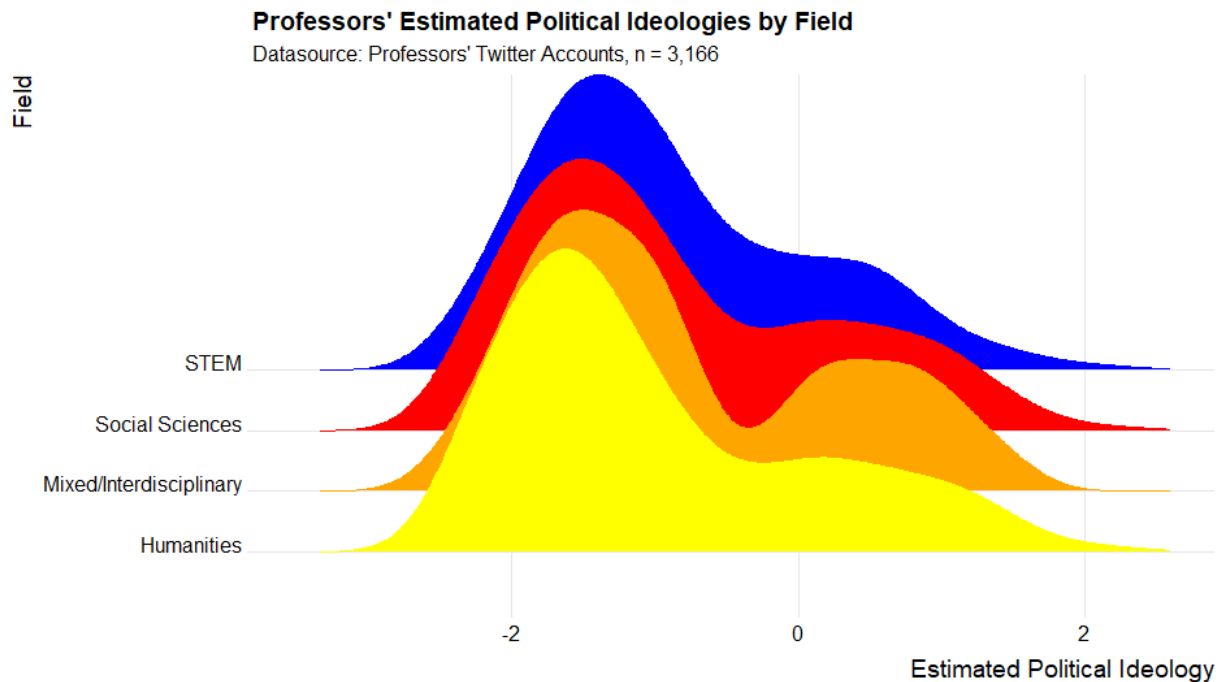
STEM: 16%

Social Sciences: 37.6%

Humanities: 44.8%

Mixed / Interdisciplinary: 1.5%

Figure 3 visually depicts the distributions of estimated political ideology by field. I also conducted an analysis of variance test to determine if there were statistically significant differences between the average estimated political ideology of each subgroup, which indicated that there was a statistically significant difference across fields ( $f = 6.299, p < 0.01$ ). This difference is visually identifiable in Figure 3.

**Figure 3: Estimated Professor Political Ideology by Field**

As Figure 3 shows, there is again significant overlap with respect to estimated professor political ideology by field. The majority of professors in this dataset, and in each field, are liberal, though there appear to be significantly more conservative professors in STEM fields, some of the social sciences, and mixed and interdisciplinary fields than there are in the humanities, which is consistent with previous studies of the politics of the professoriate (Gross, 2013; Gross & Simmons, 2014). To explore these differences further, I also reviewed the distribution of estimated professor political ideology by subfield (Economics versus Social Science, for instance).

In the interest of concision, I compressed 32 originally coded subfields into 13, combining similar fields like medicine, nursing, and public health, for instance, under the umbrella category of Natural & Health Sciences. The 13 categories, as well as the percentage of professors representing each of those categories, is listed below.

Education & Information Studies: 10.8%

Natural & Health Sciences: 8.7%

Psychology: 5.6%

Sociology & General Social Sciences: 11.1%

Law & Criminal Justice: 20%

History: 5.3%

Public Policy & Political Science: 9.4%

Fine Arts: 2%

Engineering & Applied Mathematics: 4.3%

Applied Sciences: 3.6%

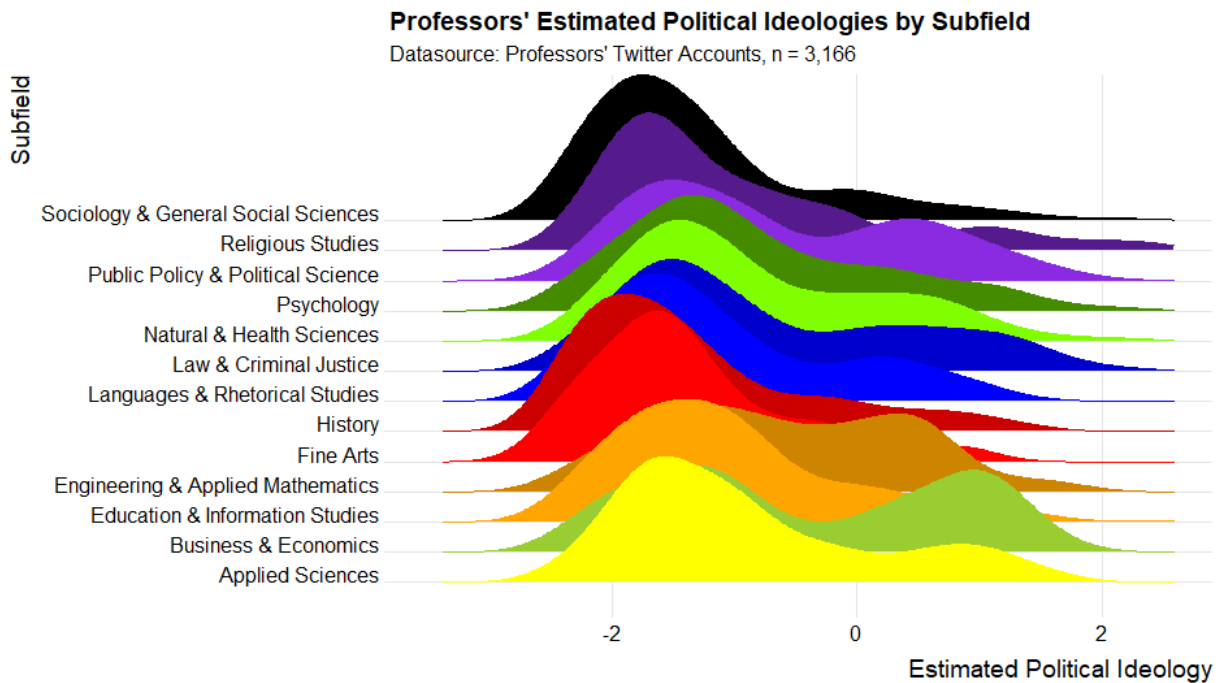
Business & Economics: 4.9%

Religious Studies: 1.4%

Languages & Rhetorical Studies: 12%

Figure 4 visually depicts the distributions of estimated political ideology by subfield. I also conducted an analysis of variance test to determine if there were statistically significant differences between the average estimated political ideology of each subfield, which indicated that there was a statistically significant difference across subfields ( $f=17.3$ ,  $p < 0.0001$ ). This difference is visually identifiable in Figure 4 and is consistent with previous studies of the politics of the professoriate (Gross, 2013; Gross & Simmons, 2014).

**Figure 4: Estimated Professor Political Ideology by Subfield**



As Figure 4 demonstrates, there is a great degree of overlap across subfields and the majority of the faculty members in this dataset remain liberal. That being said, there are some clear differences among fields. Starting from the top of Figure 4, Sociology and General Social Sciences, such as Anthropology and Ethnic studies, are decidedly liberal subfields. Religious Studies is slightly more moderate. Public Policy and Political Science, however, boast far more faculty who are right of center. Psychology, the Natural & Health Sciences, and Law & Criminal Justice have slightly more moderate and center-right faculty than other subfields, but their



distributions are consistent with the overall distribution of the faculty. Languages & Rhetorical Studies, such as Communication and Media Studies, as well as History, and the Fine Arts are all more liberal subfields. Engineering and Applied Mathematics (i.e., Statistics, Computer Science), are markedly moderate and lean to the right, whereas Education and Information Studies lean to the left. Business & Economics professors boast the highest density of conservatives among their ranks, consistent with previous studies of professors' politics (Gross, 2013; Gross & Simmons, 2014). Finally, the Applied Sciences (Geosciences, Agricultural Sciences, etc.) are well-aligned with the overall distribution of the dataset.

## Discussion and Implications for Future Research & Practice

With respect to the politics of the professoriate, this study presented findings that are fairly consistent with past, survey-based studies of professors' politics (Gross, 2013; Gross & Simmons, 2014; Ladd & Lipset, 1975; Lazarsfeld & Thielens, 1958). The majority of professors are, it seems, liberal, though the data presented in this study suggests that a formerly moderate majority has become increasingly polarized in both directions of the political spectrum and the contemporary professoriate is markedly more liberal than the professoriate studied in the 50s, 70s, and early 2000s. Given the restructuring of academia described by Schuster and Finkelstein (2006), and the higher proportion of women, people of color, and queer people—all historically marginalized from the professoriate—it is unsurprising that the professoriate is diversifying with respect to political ideology. While conservatives still remain a minority both on and off college campuses, there are certainly more conservative faculty members than there were 15 years ago, at least with respect to documented studies of professors' politics (Gross, 2013).

This matters, of course, because the relative overrepresentation of liberals within the professoriate comes under constant scrutiny and is regularly used as *prima facie* evidence of liberal indoctrination (Horowitz, 2009) and discrimination against conservatives (Klein & Stern, 2005; Shields & Dunn, 2016). This close scrutiny has resulted in calls for 'affirmative action for conservatives' (Shields & Dunn, 2016), extramural efforts to criticize and weaken higher education (Gross, 2013; Horowitz, 2009), and legislation explicitly targeting sections of academia perceived as overly progressive (scholars and scholarship of and on race, gender, sexuality, etc.). These efforts are not without consequence, as compliance with legislation mandating an annual survey of political ideology and tolerance, for instance, has been tied to state funding. The politics of the professoriate have tangible and dangerous outcomes.

Regardless of the fact that researchers, both conservative and progressive, have failed to identify evidence of liberal indoctrination or discrimination against conservatives in higher education, the sheer perception of ideological skew—and the resultant 'lack of ideological diversity' (Shields & Dunn, 2016)—is a necessary consideration for contemporary conversations around higher education and the influence politics has on institutions.

This study did, of course, empirically document an ideological skew. The professoriate, at least with respect to the members documented within this dataset, is liberal. As other researchers have described, this is largely the result of liberal self-selection into graduate school (Gross, 2013; Gross & Simmons, 2014) and persistent conservative attacks on higher education that have slowed the development of a more conservative academe

(Shields & Dunn, 2016). While this study does not make the case that a liberal ideological skew within the professoriate is necessarily negative, the data herein can support future research into the political diversity I described. If, as so much of the legislation and political discourse focused on this topic states, a lack of ideological diversity is a serious issue facing higher education, what is there to be done, if anything, to resolve this ideological imbalance?

First, conservatives must make a greater effort to work within academia rather than working outside of it as “insurgents” (Shields & Dunn, 2016, p. 8). As Medvetz (2014) describes, conservatives have cultivated sizable and well-funded ‘outposts at the university’s edge’ (p. 295). Relying on the notoriety and fame derived from their relative distance from (liberal) academic institutions, conservative academics have embraced the ‘merits of marginality,’ and the subsequent benefits (greater access to extramural funding, easier exposure to nonacademic audiences, etc.) while stereotyping academia as a place unsafe for conservatives. If their absence “deprives students of perspectives and conservative mentors” (Shields & Dunn, 2016, p. 9), conservatives should spend less time, energy, and resources criticizing academia and divert those resources to cultivating future conservative academics, beginning with undergraduate and graduate students.

Second, conservative academics should divest from advancing narratives centered on marginality, particularly those that coopt the language of historically marginalized groups like racial minorities and sex and gender minorities (Havey, 2020a; Maranto & Woessner, 2012; Shields & Dunn, 2016), and follow Maranto and Woessner’s (2012) advice to focus on collegiality, scholarship, and teaching. While researchers have not found any discrimination against conservatives at the hands of their liberal peers, they have found that conservatives are far more likely to consider a peer or potential colleague’s work as lower quality or less important if it is politically dissonant and are more likely to recommend against hiring someone whose politics disagree with theirs (Gross & Simmons, 2014, p. 197).

Future research focused on the politics of the professoriate should specifically consider these interventions. For instance, future work could explore whether there is any political insularity with respect to faculty social organization (who interacts with who, who publishes with who). Similarly, qualitative work could explore the professional trajectories of conservative professors to identify potential pathways for mentorship and the cultivation of a more diverse graduate student population and, subsequently, a more diverse professoriate.

## Conclusion

This study utilized innovative digital trace data and computational methods to assess the politics of the contemporary professoriate. Across a sample of 3,166 faculty members, I demonstrated that professors are, indeed, skewed towards the liberal end of the political spectrum and that, contrasting past work (Gross, 2013; Gross & Simmons, 2014), the moderate core of the professoriate seems to have shifted towards the poles. I also identified statistically significant differences in professors’ estimated political ideologies with respect to their tenure status, field, and academic subfield.

As an endnote, this study will be updated as I continue to add to the dataset which was used for the analyses central to this study, and the results presented herein should be considered tentative.

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