Faculty Perceptions of Political Science PhD Career Training

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ABSTRACT In face of the ongoing discrepancy between the number of political science PhD graduates and the availability of permanent academic positions, in this article we consider attitudes of faculty members towards options to address this issue. Based on a survey of faculty members in PhD-granting political science programs at English-speaking Canadian universities, we find considerable support for both reducing the number of PhD students admitted and reforming curriculum to ensure graduates cultivate skills transferable to non-academic environments. At the same time, faculty members are inclined to believe that PhD students themselves should shoulder the greatest responsibility for career preparation.

here are more political science PhD graduates than there are permanent academic jobs. We ask political science faculty members about this issue, and how it should be solved. We find that many support reducing the number of students, but also that they think we should change the PhD curriculum to help PhD graduates find jobs related to their studies outside universities and colleges.

In 2017-18, APSA's annual placement survey found that, for the first time, a majority (52%) of those on the job market were placed in positions other than tenure-track academic positions (APSA 2019). As the economic impact of the COVID-19 crisis affects university finances, this situation is likely to worsen significantly. Even before this shock to the academic job market, recent political science PhD graduates have increasingly pursued careers outside the academy. For some this is by choice, and for others by necessity. Canada does not have equivalent national disciplinary data, but existing research finds broadly similar trends (Jonker 2016).

Writing in this journal over 40 years ago, Robert S. Friedman (1977, 14) observed that "We are hearing a great deal these days about a declining marketplace for our Ph.D.s. The evidence collected by the American Political Science Association and many of its sister disciplines is clear: The number of academic jobs is declining." He goes on to suggest alternatives: reduce the number of graduates (close several PhD programs and/or reduce

enrolments in existing PhD programs), or seek alternative employment options for political science PhDs.

The persistence of this issue and the growing number of students affected warrants serious conversation within the discipline. And faculty perspectives are key to identifying central issues and challenges. In their role as supervisors, faculty provide career mentorship and guidance and contribute to the development of professional identity. As department members, they shape, deliver and initiate changes to curriculum. Within the discipline, they contribute to norms, practices, and expectations of the purpose and nature of the PhD. Their attitudes toward the ideas of reducing graduate numbers or adapting doctoral programs to prepare graduates for nonacademic careers will shape any response to the problem.

To advance understanding in this area, we conducted an original survey of political science faculty members in Englishspeaking Canadian PhD-granting universities, where both the structure of the PhD and the magnitude of the post-PhD employment question are similar to the United States. We find that faculty members are aware of the often precarious employment outcomes of graduates of their doctoral programs, and that faculty employed outside the most prestigious universities perceive the problem to be more acute. Across all institutions, faculty believe that PhD students both want academic careers and are aware of the realities of the academic job market. When asked to identify the primary purpose of the PhD, a large majority of faculty select 'to train future researchers, some of whom will go on to academic careers;' the idea that the purpose of the PhD is to train future professors is in the minority, although it is more prevalent in elite institutions.

With respect to the two possible responses to the issue of PhD graduates' employment, we find considerable support both for

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reducing the number of PhD students and for revising the curriculum. Not surprisingly, those who believe the primary purpose of the PhD is to train future faculty are much more disposed departmental survey (2017) of PhD-granting institutions found that over 80% offered pedagogical training for graduate students, with the training being mandatory in over 40% of programs. This

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toward the idea of reducing the number of students, while those who believe the PhD trains researchers are more supportive of the idea of reforming the doctoral curriculum. At the same time, and regardless of the prestige of their institution or their perception of the purpose of the doctorate, political science faculty members are inclined to believe that PhD students themselves should shoulder the greatest responsibility for career preparation, and they continue to see academic employment as the more desirable outcome for their PhD students. This suggests that while faculty are aware and open to possible changes, their commitment is tepid.

POLICY RESPONSES

An academic career is not a certain outcome of a PhD program in political science in North America. Aside from maintaining the status quo, the two possible responses to a mismatch between graduates and tenure-stream academic job numbers are to reduce PhD enrolments and/or to adapt curriculum so that programs are not focused solely on preparation for academic employment. Despite decades of concern about the mismatch, limited progress has been made on either alternative.

Reduce: Enrolment Management

There is no national-level coordination mechanism for managing doctoral enrolment targets in either the United States or Canada. Any effort to reduce the number of political science PhD graduates would necessarily be voluntary and poses a collective action problem. Institutions are deeply invested in maintaining doctoral programs and enrolments as markers of research intensivity in highly competitive settings. Individual faculty seek the prestige of doctoral supervision and value graduate students as assistants and collaborators for their own research programs. Thus, the optimal strategy for individual departments and faculty is obvious: maintain doctoral enrolments while encouraging other institutions to reduce theirs. There are few or no incentives to be the institution to lead the way in reducing PhD numbers.

Adapt: Curriculum Change

Over the past decade, there have been significant calls for the reform of graduate education in the social sciences and humanities, including political science (for example IPLAI 2013), similar to those in the STEM fields (National Academies 2018). Institutions have made some changes to doctoral education, focusing on preparation for undergraduate teaching and skill development outside the academic curriculum.

Changes are less evident at the unit level. There is little evidence that US and Canadian political science programs have undertaken widespread reforms of curriculum and program structures to equip graduates to pursue non-academic careers. APSA's is reflective of a focus on the PhD as preparation for future faculty. The closest proxy for offering preparation for non-academic careers was a mentorship program aside from formal academic supervision; less than one-third of programs offered this (APSA 2017). Studies of PhD students and graduates in cognate disciplines indicate that many believe their doctoral education did not adequately prepare them for careers outside the academy (McAlpine and Austin 2018). Overall, a lack of alignment persists between the traditional, implicit purpose of doctoral education as preparation for an academic career and the realities of students' careers post-graduation.

FACULTY AS CRITICAL ACTORS

Despite considerable discussion about non-academic career preparation for PhD students, the role of doctoral supervisors and individual faculty warrants closer attention, both generally and specifically in the discipline of political science. There is limited empirical research on doctoral supervisor attitudes generally in any discipline (Jones 2013), particularly quantitative survey research (though see Ali, Watson, and Dhingra 2016). The literature that does exist has little or no examination of attitudes toward career outcomes, especially non-academic career outcomes. This gap is surprising, since PhD supervisors are a central conduit for the transmission of disciplinary norms and skills.

Our survey examines an entire comprehensive system: all political science PhD programs in English-speaking Canada. The results provide a broad understanding of an overall disciplinary doctoral system of training and hiring that present lessons for the American system and doctoral training in other contexts. Canadian doctoral education and academic hiring practices follow similar models to the United States. Like their American counterparts, Canadian doctoral programs require coursework, candidacy/qualifying exams, and a dissertation that makes an original research contribution and is examined by a committee. The structure of academic employment and hiring processes in Canada is similar to that in the United States. The organization and structures of universities are also similar, although all major Canadian universities are public institutions. While Canada does not have a formal classification system of university research intensivity, the most research-intensive Medical-Doctoral universities form the "U15"; 11 of these offer English-language political science PhD programs. In most international rankings, three Canadian institutions form the "top three": University of Toronto, University of British Columbia, and McGill University.

Immigration requirements shape the academic hiring market, making it primarily domestic. Canadian citizens and permanent residents are treated preferentially in hiring decisions, regardless of where they earned their PhD. Consequently, most Canadian academic hiring is from Canadian PhD programs or the small number of Canadians acquiring PhDs abroad, including in the and in other positions. Figure 1 shows that faculty at the 'top three' institutions estimate a higher tenure-stream employment rate. The same is true of faculty at U15 institutions (though not

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US. Overall there are a number of similarities between the American and Canadian systems that make the Canadian results informative to American and international discussions of PhD careers.

DATA AND FINDINGS

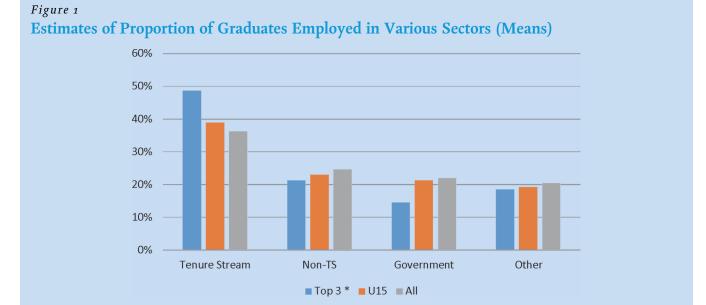
In September-October 2018, we sent an online survey to tenure stream faculty members in all 17 PhD granting political science departments at English-speaking Canadian universities. As with all surveys, there is the possibility of response bias; in particular, responses may over-represent faculty members who are concerned about PhD career outcomes and favor reform to address it. The survey had 167 respondents. Just over 78% reported having supervised at least one PhD student. The median number of supervisions was 3 and the mean 2.7. Appendix A provides details on the survey population and sample, including response rates by institution and faculty rank, and appendix B contains the full survey instrument.

Faculty Perceptions of Doctoral Employment Outcomes

We asked respondents to estimate the percentages of PhD graduates from their program who pursued tenure-stream academic, non-tenure stream academic, government employment and other employment. On average, respondents estimate that 36% of graduates are employed in tenure stream academic positions, a quarter in non-tenure stream positions, and about 20% in government, statistically significant). This pattern likely reflects a higher placement rate at more prestigious institutions. In responses to an open-ended question about career outcomes, typical responses were the following: "The majority of students who complete a PhD will not be employed as tenured university academics" and "Face reality: we produce more PhDs than available academic jobs and the problem is getting worse."

A substantial number (close to 40%) of respondents did not respond to this question or indicated they did not know, reflective of the fact that relatively few Canadian PhD programs publicly report their placement statistics, even if they track them. This points to the need for better program-level data to inform the conversation about career outcomes.

Faculty across all types of institutions share a common belief that doctoral students in their program want to become professors: almost nine in ten agree with the statement "PhD students in our program are primarily interested in pursuing academic careers." Faculty do not perceive this as naiveté about the job market: almost two-thirds believe that students were aware of the limited prospects when they began, and less than 40% of the respondents agreed that students "are convinced that they will be successful in the job market." Putting these responses together, it appears that many supervisors believe that students are making informed and calculated risks in pursuing a PhD and hoping it leads to an academic job. These perceptions did not vary across different institution type.



Question: "In your estimation, in what positions do graduates of your department's doctoral program end up employed within five years of graduation? Tenure-stream academia (e.g. Assistant Professor, tenure stream teaching positions), Non-tenure stream academic, Government, Other. *Difference between Top 3 and non-Top 3 statistically significant at p=0.05 Faculty members' beliefs that doctoral students want academic careers, are aware of the odds, and are making a calculated risk are important to understanding the kinds of responses that are likely (see table 1). If students want academic careers, then there is a logic to maintaining a program that maximizes their chance of pursuing that career. If students are informed of the odds, then they are assuming the risk, rather than being lured into graduate school with false promises of career outcomes, thereby absolving departments of responsibility for these choices.

Faculty Attitudes Toward the Purpose of PhD

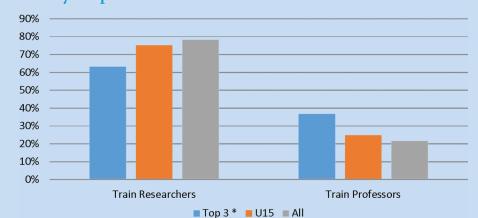
To understand faculty members' views of what measures, if any, should be adopted to address the employment of PhDs, it is first necessary to understand their conception of the purpose of the PhD. Just as Bøgelund (2015) found that attitudes toward the

Table 1

Faculty Attitudes about Students' Orientations Toward Academic Careers (Percentages)

	Agree	Neither Agree Nor Disagree	Disagree
PhD students in our program are primarily interested in pursuing academic careers.	Strongly 33.9 Somewhat 53.3	9.1	Strongly 0.0 Somewhat 3.6
PhD students in our program were aware of limited academic job prospects before they begin their doctoral program.	Strongly 24.8 Somewhat 39.4	20.0	Strongly 3.0 Somewhat 12.7
PhD students in our program are convinced that they will be successful in the academic job market.	Strongly 4.8 Somewhat 32.1	31.5	Strongly 3.6 Somewhat 27.9

Figure 2 Perception of Primary Purpose of PhD



Question: Which of the following statements best describes your thoughts of the purpose of a political science PhD? The primary purpose of the Political Science PhD is to train researchers, some of whom will go on to academic careers or The primary purpose of the Political Science PhD is to train the next cohort of tenure stream university/college professors. *Difference between Top 3 and non-Top 3 statistically significant at p=0.05

purpose of the university shape individual supervisors' approach to supervision, we posit that faculty members' attitudes toward the purpose of the PhD will shape faculty preferences about whether or how to address the employment outcomes of PhD graduates.

Figure 2 shows that, when forced to choose whether the primary purpose of the political science PhD is "to train the next cohort of tenure stream university/college professors" or "to train researchers, some of whom will go on to academic careers," threequarters endorsed the broader response of training of researchers as the primary purpose. Faculty at the top three institutions were more likely than others to view the primary purpose as preparing future faculty (statistically significant at p=0.05). It is likely that faculty at less prestigious institutions are more likely to see their students pursue non-academic careers and have adopted a more favorable stance toward that outcome. Although not statistically significant, there were modest differences between sub-fields in the discipline, with political theorists less supportive of the idea that the PhD trains researchers (68% agreement, versus over 85% for faculty specializing in Canadian politics or public administration). Similarly, faculty members who had received their PhD more recently were more likely to agree with the statement.

Even though the majority of respondents selected 'training researchers' over 'training professors,' responses to other items in the survey lead us to consider their support for non-academic careers to be tepid. Fully 55% of respondents agreed with the statement that "academic jobs should be 'Plan A' and other jobs 'Plan B,''' and close to one-third agreed that "I measure a student's success in terms of attaining an academic career."

Faculty Attitudes towards Enrolment Management and Curricular Change

Having established an understanding of how faculty view the purpose of the PhD, we consider attitudes regarding the possible responses of enrolment management and curricular change. We assign faculty to one of four categories based on their responses to two separate statements: "If PhDs in Political Science are not getting tenure-track jobs, we should reduce the number of students we accept into our PhD programs" ("Decrease") and "Departments should explicitly build the development of skills transferable to non-academic careers, such as professional writing and project management, into the PhD curriculum" ("Adapt"). Neutral responses are reported as not supportive. The results show that for many respondents, the two approaches are not mutually exclusive (see table 2). The plurality of respondents (roughly one

Regardless of institutional type, most faculty do not feel personally equipped to offer preparation for non-academic careers.

Table 2

Faculty Attitudes Toward Decreasing Enrolment and Adapting the PhD

	Adapt	Do Not Adapt
Decrease	31%	26%
Do Not Decrease	28%	15%

Table 3

Faculty Attitudes Toward Decreasing Enrolment and Adapting the PhD, by Attitudes Toward the Primary Purpose of the PhD

	Primary Purpose of PhD is to:		
Attitude toward Decreasing Enrolment and Adapting the PhD	Train Researchers	Train Professors	
Decrease and Adapt	29.8%	36.1%	
Decrease ONLY	22.9%	38.9%	
Adapt ONLY	32.8%	8.3%	
Neither and Neutral	14.5%	16.7%	

Difference statistically significant at p=0.05.

third) agreed with both statements, while roughly one quarter agreed with only one statement. Only 15% fell into the neutral/ neither category. There were no statistically significant differences among institution types on these measures.

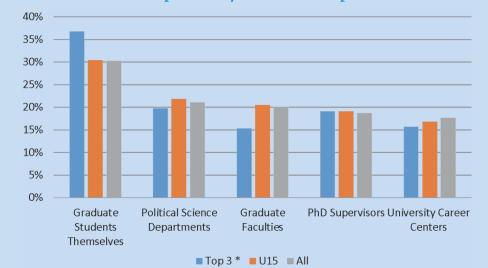
As anticipated, attitudes toward the purpose of the PhD are relevant here (table 3). Those who see the purpose of the PhD as training professors were much more likely to favour decreasing enrolments, while those who see the purpose as training researchers are more likely to favour adapting the degree.

Adaptation: Whose Job Is It?

Although many political science faculty members believe that doctoral numbers should be reduced, they also believe that students are making an informed choice to pursue a doctoral program. Furthermore, institutional pressures to maintain or grow doctoral enrolments mean that any reductions in the number of doctoral students enrolled is likely to be driven by forces outside the discipline.

This leaves us with adapting and reforming the PhD curriculum and experience in ways that help prepare students for positions outside academe. Our survey asked a series of questions focused on faculty members' assessment of their own capacity to mentor for careers outside the academy, and on their views of who should be responsible for career preparation. Faculty report limitations in being able to mentor students for non-academic careers. When asked to rate their agreement with the statement, "I feel well-equipped to help PhD students pursue non-academic career

Figure 3 Faculty Attitudes: How Should Responsibility for Career Preparation be Distributed (Means)



Question: Please indicate the percentage of responsibility that you feel each of the following units and groups should assume to help PhD students develop skills that can be used in nonacademic careers. *Difference between Top 3 and non-Top 3 statistically significant at p=0.05 paths," 50% disagreed and 15% were neutral, with only 35% of respondents agreeing. The lack of personal capacity or agency also came out in open-ended responses. Said one; "I am not sure it is the role of a supervisor to serve as a career counsellor. It is particularly hard to give advice to people who aspire [to] nonacademic careers." Another said, "Most academics have never worked professionally outside the university, so [they] have only a relatively abstract understanding of the skills required for jobs in other sectors."

If many faculty members feel unprepared for career mentorship, where should responsibility lie? When asked to assign responsibility for career preparation in percentage terms, faculty assigned the greatest responsibility to the students themselves. This was followed by departments, graduate faculties, supervisors, and then university career centers (see figure 3). This highly distributed responsibility indicates that they feel that all parties have a role to play, and their individual roles as supervisors, while important, is part of a larger picture.

The heavy emphasis faculty members assign to students themselves in undertaking career preparation, together with the expectation that university-level organizations will play a significant role, suggests that willingness to adapt the PhD may be a relatively weak force. Faculty members do not see their departments or themselves as being the central players in career preparation, even if they do agree with the general principle of adapting the PhD.

CONCLUSION

Faculty attitudes are a crucial and largely missing part of the conversation on PhD career outcomes. This article addresses the gap through an original survey of a comprehensive national system. We find that faculty are aware of the problem of a mismatch between the number of PhD graduates and the number of jobs, and a majority believe the purpose of the PhD is to train researchers and not only tenure-stream faculty. Faculty at elite universities are less inclined to perceive a concern, and more inclined to maintain the view that they are training the next generation of professors.

Drawing from Friedman (1977), we identified two solutions to the issue: reducing enrolments, or adapting programs and curriculum. Faculty support for one or both varies, and is influenced by overall attitudes toward the purpose of the PhD. However, as noted, voluntary action on enrolment management, especially at the institutional level, is unlikely. And while there is some support for adaptation, it is lukewarm. Regardless of institutional type, most faculty do not feel personally equipped to offer preparation for non-academic careers. They also generally perceive that students want to become academics and are making an informed choice when they start a graduate program, again regardless of institutional type. Finally, faculty see responsibility as distributed throughout the university and resting primarily on students themselves. This suggests that as a discipline, political science has not progressed far beyond the state described by Friedman in 1977.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/S1049096520000839.

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