DISPARITIES IN TENURE AND PROMOTION IN CANADIAN UNIVERSITIES

DISPARITIES IN TENURE AND PROMOTION OUTCOMES AMONG RACIALIZED AND FEMALE FACULTY IN CANADIAN UNIVERSITIES

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ABSTRACT

Universities are often seen as inclusive and liberal spaces where equity and social justice prevail. Despite this ideal image, racial and gender disparities continue to persist and have been documented. Racialized faculty are less likely to be university professors (Ramos, 2012) and have lower earnings (Li, 2012). Similarly, female professors are less likely to be promoted (Nakhaie, 2007; Stewart, Ornstein & Drakich, 2009) and experience significant wage gaps compared to their male colleagues (Momani, Dreher & Williams, 2019). Drawing on original survey data from the University, Tenure, Promotion and Hiring (UTPH) survey, this dissertation examines inequities in promotion for racialized and female Canadian faculty at different stages of their career (e.g., tenure, promotion to associate professor, promotion to full professor). It also looks at commonly-cited explanations such as human capital theory, cultural or identity taxation, and glass ceiling theory to see if they can be used to adequately explain the disparities in promotion that exist. Finally, this dissertation examines perceptions of the factors that influence tenure, promotion, and hiring to examine whether racialized faculty see the academy differently from their non-racialized counterparts. When examining the chapters in this dissertation collectively, it is clear that there are systemic inequalities that exist within universities that affect the career trajectories of racialized and female faculty in Canada. This dissertation concludes with a critical examination of various institutional responses in recent times and future directions for research.

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I would sincerely like to thank Dr. Howard Ramos for being my mentor, role model and my unofficial graduate supervisor. You always told me that people do not need a mentor, what they need is a champion. You have been that champion for me throughout this Ph.D and I am forever grateful for all your help in making me the researcher that I am today.

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venturing into the unknown so that I can have a brighter future. I hope I have made you proud. Lastly but not least, I want to thank the loves of my life my husband Keron and my two babies, Kianna and Kehlani. You have been my driving motivation to finish so we all can move on to the next chapter of our lives. Finally.

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CHAPTER 1

INTRODUCTION

Universities are often regarded as inclusive and liberal spaces, but despite this image, there are often racial and gender disparities that persist. For example, in Canada, racialized people earn doctorates at higher rates than the national average and yet are less likely to be university professors, and this relationship has worsened over time (Ramos, 2012). When it comes to earnings, a similar picture arises. Racialized faculty earn significantly less than their White counterparts even after controlling for key factors such as field of study, immigrant status, province, age, and whether the individual has a Ph.D. (Li, 2012). Similarly, a pay gap between men and women in Canadian universities has been widely documented and exists across every university (apart from three) (Cummings, 2020) and widens further as women move up the ladder in seniority (Momani, Dreher & Williams, 2019).

Looking at rates of tenure and promotion in Canada, women were significantly less likely to have tenure and be promoted compared to men (Canadian Association of University Teachers, 2010; Nakhaie, 2007; Stewart, Ornstein & Drakich, 2009). Women were also less likely to be full professors in Canada compared to men (Counter et al., 2020; Millar & Barker, 2020, Nakhaie, 2007; Ornstein, Stewart & Drakich, 2007) and this finding has been replicated in disciplines such as radiology (Qamar et al., 2020), obstetrics and gynaecology (Wise et al., 2004), psychology (Carleton, Parkerson, & Horswill, 2012), orthopedic surgery (Yue & Khosa, 2020), and general surgery (Gawad et al., 2020).

There is a lack of statistical data on the proportion of racialized faculty in Canada by rank. With the exception of Nakhaie (2007), there is no research on tenure and promotion (to associate professor and to full professor) among racialized faculty in Canada. Qualitative research in Canada, based on limited samples, has shown that racialized faculty face a number of barriers to promotion and tenure. Some barriers include a lack of recognition of community and applied research work in the tenure and promotion process, subjective evaluation criteria, and substantial service loads that takes away from research productivity (Henry & Kobayashi, 2017; Henry & Tator, 2012).

The purpose of this dissertation is to examine whether disparities in promotions exist for racialized and female Canadian faculty at different stages of their career (e.g. tenure, promotion to associate professor, promotion to full professor). This dissertation also aims to examine whether commonly-cited explanations such as human capital theory, cultural or identity taxation, and glass ceiling theory can adequately explain the disparities that exist. Finally, this dissertation examines perceptions of the factors that influence tenure, promotion, and hiring to examine whether racialized faculty see the academy differently from their non-racialized counterparts.

Theoretical Perspectives

There are a number of theoretical perspectives that have been used to explain the inequities racialized and female faculty face in the academy. In this dissertation, three

main theoretical frameworks were tested empirically and will be discussed in this section: human capital theory, cultural taxation theory, and the glass ceiling theory.

Human Capital Theory

Human capital has been described as "any stock of knowledge or characteristics the worker has (either innate or acquired) that contributes to his or her 'productivity'" (Acemoglu & Autor, 2011, p.3). Human capital theory is the view that human capital increases a person's productivity, thereby leading to greater economic rewards. When applying this context to tenure and promotion disparities, the idea behind human capital theory explanations are that racialized and female faculty are less productive or possess less human capital than their non-racialized and male counterparts and thereby, have lower rates of tenure and promotion. Productivity in academia is measured by research output which often takes the form of publications and grants (Chen & Ferris, 1999; Cora-Bramble, Zhang & Castillo-Page, 2010; Perna, 2001). Research on productivity differences between racialized and non-racialized faculty have not been examined in Canada. However, scholars in the U.S. have found mixed results with some studies finding that racialized faculty have lower research productivity compared to their non-racialized counterparts (Bellas & Toutkoushian, 1999; Jackson, 2008). Looking at gender differences in productivity in Canada, Nakhaie (2002) found that female faculty publish less than male faculty across all six of the measures of publications. Research in the US (Bornmann, Mutz, Daniel, 2007) and Canada (Larivière et al., 2011) has shown that female faculty tend to be less successful in acquiring grant funding and less likely to be

the principal investigator. Human capital can also be conceptualized by considering years of experience on the job (Li, 2012). The idea is that the longer an individual works in a specific job, the more skills they acquire which then increases their productivity. Nakhaie (2007) found that years of service matter more than publications when it comes to promotion.

Cultural Taxation

Tenure and promotion are highly linked to research productivity. Research in Canada and the US show that racialized faculty are spending a lot of their time sitting on committees, doing community-based service, teaching more courses, educating their colleagues on race and racism, and being a mentor to racialized and Indigenous graduate students (Gewan, 2020; Griffin & Reddick, 2011; Henry & Kobayashi, 2017; Henry & Tator, 2009; James, 2017; Rideau, 2019; Social Sciences Feminist Network Research Interest Group, 2017). This leaves racialized faculty with constrained time to publish. Racialized faculty feel pressured into doing such invisible, undervalued and uncompensated work for their personal advancement but also for the advancement of diversity and inclusivity in the academy -- but then are penalized for it when it comes to tenure and promotion. This idea is referred to as “cultural taxation”, a term coined by Padilla (1994), which has been widely used to explain tenure and promotion disparities between racialized and non-racialized faculty. Cultural taxation is the added “tax” that racialized faculty face because they represent a limited number of individuals who embody diversity within their university (Padilla, 1994). Therefore, racialized faculty are asked to sit on a number of

committees to increase racial representation or are often called on as experts on issues related to equity, diversity and inclusion. Female faculty also face a similar "tax" related to their gender which scholars have labelled "identity taxation" (Hirshfield & Joseph, 2012). Research in the U.S. has shown that female faculty face heavier teaching loads, spend more time on service and mentoring than male faculty and are asked to sit on a number of committees to represent diversity (Guarino & Borden, 2017; Hirshfield & Joseph, 2012; Misra, Lundquist, Holmes, & Agiomavritis, 2011; Rideau, 2019). This can hinder productivity and result in lower rates of promotion. The research on cultural or identity taxation in Canada is entirely qualitative in nature and based on small samples and therefore, it is important to examine the generalizability of these processes of cultural or identity taxation on tenure and promotion using a larger sample of faculty.

Glass Ceiling

The "Glass Ceiling" has been used to describe the lack of women and racialized minorities in senior-level positions and was originally coined by feminists to describe the challenges that women faced in the business sector. The glass is indicative of the idea that women and racialized persons can see the other side of the "ceiling" but are obstructed from reaching the other side (Boyd, 2008). In the corporate world Canada ranks fourth among the G7 countries with regards to the proportion of CEOs and second last with regards to CFOs (Macdonald, 2019). The lack of women in senior level and executive positions in corporate Canada is not due to merit but rather due to the discrimination women face from the time of hire (Macdonald, 2019). Similarly, racialized immigrants

make up four percent of executives in the Greater Toronto Area and the situation is even bleaker for racialized immigrant women who make up one percent of corporate executives (Toronto Region Immigrant Employment Council, 2019). Implicit bias and discriminatory practices have been cited as a major barrier for immigrant professionals climbing the corporate ladder (Toronto Region Immigrant Employment Council, 2019). In the context of higher education, Stewart, Ornstein and Drakich (2009) found that the median time for promotion for women is a year longer than for men going from associate to full professor and that this relationship remains even after controlling for discipline and institution. Moreover, studies examining senior leadership compositions in Canadian universities have found that senior leaders tend to be mostly White males (Smith, 2019; Universities Canada, 2019).

Data Source

Data for this dissertation comes from the University, Tenure, Promotion and Hiring (UTPH) survey. The survey was designed to fill the existing data gaps on equity-seeking groups working in Canadian universities. The lack of comprehensive race-based data in Canada has been an ongoing conversation, one that is not unique to higher education. Existing datasets on equity-seeking groups in the Academy such as the University and College Academic Staff System (UCASS) survey and the Canadian Census all have limitations. For example, the UCASS and the Census do not differentiate between disciplines or faculties. Moreover, they do not collect data on human capital measures such as publications or grants. Nor do these data sources ask questions about perceptions

or experiences of tenure, promotion or hiring. The UTPH survey was created to address the limitations of other datasets.

The sampling frame of the UTPH was collected between February and August 2013 and was based on publicly available emails listed on University websites. Eight Canadian universities were selected to represent English speaking universities differing in size and encompassing teaching and research-focused institutions. Three of the universities included represented large universities, two represented smaller universities and five were U15[1] members. The process of building the sampling frame included going to each university's website and then building a list of each of the faculties in the university. From the faculty list, another list was obtained for each department and unit under each faculty. From these departmental websites, information was collected including faculty, department or program name, first and last name, job title and e-mail. The raw sampling frame file contained 26,467 cases which was reduced to a final sampling frame of 15,571 individuals after cleaning for duplicates and missing information. The sample consisted of faculty in eight Canadian universities irrespective of rank or type of academic affiliation or position.

The survey consisted of 77 questions on participants' experiences with tenure, promotion and hiring, human capital measures, their perceptions of workload and responsibilities, and demographic traits. The survey tool Opinio was used to administer the survey online

[1] U15 members are considered the most research-intensive universities in Canada.

in Fall 2013. The response rate for the survey was 16%. See Chapter 3 and 4 for details on the representativeness of the sample. Participation in the survey was voluntary and the study received ethics clearance from Dalhousie University's Research Ethics Board (REB).

Overview of the Dissertation

Each of the core chapters in this work examine inequities experienced during promotion for Canadian university faculty through different phases of their academic career. These core chapters (2-4) stand as separate papers but taken together demonstrate a grim picture for racialized and female faculty in Canada. Chapter 2 examines differences in career outcomes among racialized and non-racialized faculty and examines the variations among these groups with regards to the factors that influence tenure, promotion, administrative and committee appointments, and hiring. This chapter was published in the book *The Equity Myth: Racialization and Indigeneity at Canadian Universities* with Dr. Howard Ramos. In Chapter 3, the UTPH survey was used to examine disparities in being tenured and promoted to associate professor for racialized and female faculty. It also examines the extent to which human capital theory and cultural or identity taxation account for these differences. This chapter was published in the *Canadian Journal of Higher Education* with Dr. Howard Ramos. Chapter 4 examines the correlates of being promoted to full professor and how they differ by gender, race and immigrant status. This chapter was submitted for peer-review with Dr. Karen Robson. Chapter 5 concludes the dissertation by summarizing the general findings of each of the chapters, examining the main themes

and institutional responses, followed by the data limitations and a commentary on future directions for research.

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CHAPTER 2

ACADEMIC PRODUCTION, REWARD, AND PERCEPTIONS OF RACIALIZED FACULTY MEMBERS

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Western SocialScience

Department of Sociology

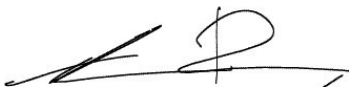
March 9, 2021

To Whom it May Concern,

This brief letter offers an overview of the contribution that Rochelle Wijesingha offered to the chapter on "Academic Production, Reward, and Perceptions of Racialized Faculty Members" in the *Equity Myth* (2017) published by UBC Press. The chapter is co-authored with myself as a part of a larger research project. Rochelle was a 50% co-author playing a key role in all part of the project and more specifically the analytic strategy and design of the survey as well as writing and drafting of the chapter. She should be considered a co-author with names listed alphabetically.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,



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In Chapter 3, we found that racialized professors are underrepresented among the professoriate and earn lower wages. Comparison over time, moreover, shows that the degree of underrepresentation of racialized minorities among the professoriate has not improved; in fact, it has gotten even worse. The earnings of racialized professors are on the whole lower than those of their nonracialized counterparts, despite controlling for variations in other factors. The findings raise a series of additional questions that we aim to discuss in this chapter. Why are they underrepresented and why do they receive lower wages? Are there explanations other than discrimination? We explore these questions with original survey data collected from academics affiliated with eight English-speaking Canadian universities. This survey is one of the first of its kind to look at the outputs, outcomes, and perceptions of Canadian academics.

Human capital theory (Li 1992, 2001, 2012; Pendakur and Pendakur 2002; Galabuzi 2006) argues that the differences found in the representation of racialized faculty shown in Chapter 3 are a result of whether racialized faculty have gained adequate credentials to pursue given jobs. On that front, we found that underrepresentation occurs even when credentials are considered, and earnings of racialized faculty were lower than those of their nonracialized counterparts – a finding in line with other research in this area (Li 1992, 2001, 2012; Pendakur and Pendakur 2002; Galabuzi 2006). Human capital theory would also argue that differences in outcomes should be the result of differences in performance in a given job. If racialized faculty, for

instance, produce less academic output (e.g., publishing journal articles or winning grants), then they should gain less reward, such as tenure, promotion, or even being hired. As a result, it is important to see whether differences in outcomes are the result of differences in performance. If racialized faculty are "playing the game" of pursuing such metrics of performance and not being rewarded for it, then there is evidence of discrimination.

Others might argue that it is not just a matter of playing the game, but how one plays the game in an increasingly neoliberal academic setting that affects whether one receives reward and success (Kurasawa 2002; Mahtani 2004; Griffin 2013; Griffin, Bennett, and Harris 2013; Giroux 2014). In the academic setting then, it is important to also understand how racialized faculty perceive the factors that are associated with academic outcomes such as tenure, promotion, or being hired. For instance, if the old adage of "publish or perish" is true, then to gain successful academic outcomes one must recognize that it is important to publish in order to gain reward. The same might be said of teaching, service, personality, and collegiality, as well as the role of equity considerations, all of which might affect how and whether outcomes are gained. If racialized faculty perceive "playing the game" differently from their non- racialized colleagues, it might account for differences in outcomes. If there is no difference in perception, then this again might reflect evidence of discrimination.

Yet others argue that it is not just a matter of "playing the game" and perceiving how to navigate it but also having the opportunity to do so. Take, for instance, the ability to publish articles or win grants. To be successful at either, one needs to have time and space away from mentoring students, teaching, or offering service to the university or the broader community. Studies of racialized faculty time and time again find that racialized professors have multiple draws on their time and can be taxed with extra duties because they may be part of a limited pool of people who represent diversity within an academic faculty (Padilla 1994; Joseph and Hirshfield 2011; Odhiambo and Charoenpanitkul 2011; Henry and Tator 2012).

Our aim is to examine each of these possibilities – that is, the lack of production and output or differences in perception – with new survey data and to offer a macro picture of experiences of racialized faculty in Canadian universities. We proceed by introducing our survey and methods, then present our findings, and then offer a conclusion and interpretation.

Survey and Methods

We constructed a survey consisting of seventy-seven questions focusing on perceptions of tenure, hiring, and promotion of faculty at universities. Most questions consisted of level-of-agreement scales to various statements as well as questions on career achievements and demographic characteristics.

The survey was emailed to all publicly listed faculty members (irrespective of rank or type of academic affiliation) at eight Canadian universities. It was Internet-based and self-completed using the Opinio survey platform. Participants were enumerated during the fall of 2013. The universities included in the sample represent English Canadian universities from Western Canada, the Prairies, Ontario, and Atlantic Canada. Three of the schools represent large institutions, two represent smaller schools, and five are members of the U15, considered to be the most research-intensive schools in Canada.

The response rate for the survey was 16 percent (n = 2,436), which is in line with other Internet-based surveys. Of those respondents, there was a 66 percent full completion rate and 1,580 answered questions on identification as visible minority and/or Aboriginal. Note that the sample includes participants who do not identify as either. This number comprises our analytic sample and we have combined those who are visible minority and/or Aboriginal into a single category of "racialized" for our analysis. We have done this for a number of reasons. As noted in Chapter 3, both groups face similar trends and both groups represent a small number of academics in Canadian universities. We acknowledge that Indigenous peoples experience colonization in addition to racialization, but to maximize our ability to analyze the outputs, outcomes, and perceptions of both groups, we have combined the two to treat them as racialized faculty.

We focus on the experiences of racialized faculty and look at their professional output and career outcomes. As pointed out in Chapter 5, Canadian universities are increasingly driven by neoliberal policies, built around the ethos of individualism, colour blindness, merit, competition, and entrepreneurship (see also Kurasawa 2002; Mahtani 2004; Griffin, Bennett, and Harris 2013; Giroux 2014). The same principles are the foundation of human capital theory. If such is the case, it is important to understand how racialized academics perform in such an environment. According to both perspectives, if racialized academics produce less, then a lack of reward or hiring is not discrimination; rather, it is poor performance in a so-called meritocratic market (Duchesne 2010; Eisenkraft 2010). Current Statistics Canada data do not allow for an analysis of such academic output and career outcomes. As a result, we specifically asked about how many articles, book chapters, books, and edited books academics have published, as well as how many tri-council research grants they have received, in order to capture outputs.

We also examine rewards in the academic setting by looking at career outcomes. Here we asked whether professors are tenured, the years it took to achieve tenure, whether they have been promoted to associate and full professor status, and the number of years it took to gain such recognition. We have included measures of reward because previous analyses of racialized faculty have shown that they are often overlooked or not considered for career advancement (Nakhaie 2007; Henry 2012; Henry and Tator 2012).

In addition to output and career outcomes, we also focus on perception of the factors that influence tenure, promotion, administrative and committee appointments, and hiring to examine whether racialized and nonracialized faculty see the academy differently. Some argue that part of the reason people do not climb the academic ladder is because they "don't know how to play the game"; others argue that visible minorities find the criteria inappropriate or unrealistic (Aguirre 2000; Williams and Williams 2006; Boyd, Cintron, and Alexander-Snow 2010). To examine perceptions of the criteria that affect tenure, promotion, and hiring, we looked at mentoring of students, teaching effectiveness, rates of publication, quality of publication, research funds, administrative service, service to the nonacademic community, personality, collegiality, equity considerations, teaching and mentoring load, and administrative duties. A number of studies have shown that racialized faculty have higher teaching loads than nonracialized faculty (Jackson 2004; Hesli and Lee 2011). Other studies suggest that racialized faculty experience a double burden, with expectations to mentor more students and, because of the relatively small number of racialized faculty in Canadian universities, frequent requests to sit on a large number of committees to promote symbolic representation (Joseph and Hirshfield 2011; Odhiambo and Charoenpanitkul 2011; Henry and Tator 2012).

To make the data accessible to the widest audience, we present basic cross-tabulations and tests of statistical significance. We also note that the data set is unbalanced – that is, for some variables, such as identification as a woman or an

immigrant to Canada, fewer people responded to those questions than responded to questions on racialization, leading to a smaller sample for some cross-comparisons. More detailed analysis, including regression, is available upon request. Let us now turn to our findings.

Findings

Tables 4.1 and 4.2 present some information on the participants, whether they identify as racialized or as female, and the faculties in which they work. Fifteen percent of individuals in the survey are racialized. This proportion is similar to the percent of professors who identified as visible minorities in the 2006 Census of Canada, about 16 percent (Li 2012; Ramos 2012). In 2011, the National Household Survey reports that about 19 percent of the population identified as visible minority. Unfortunately those data do not allow us to disaggregate the proportion of professors who identify as such.

Those who identify as women made up just under half of the survey participants (46 percent). As reported in Table 4.1, among racialized professors, 41 percent identified themselves as women, or about 6 percent fewer than among nonracialized. In an attempt to be inclusive of faculty who do not identify with heteronormative gender labels, we asked participants whether they identified with a given gender label using a yes/ no question, allowing them to identify with either both normative gender labels or neither. This approach is rightly not without its

critics; a number of participants wrote to us arguing that it did not capture genders or the experiences of LGBTQ participants. Others, who subscribed to a heteronormative definition, felt that the question was overly complicated. As a result, in future research we will ask about gender with an open-ended question.

Just under half (40 percent) participants identify as an immigrant. The majority of racialized faculty in the sample were also immigrants (74.2 percent). This figure is strikingly different (almost a 40 percentage point difference) from the proportion of nonracialized faculty identifying as an immigrant.

TABLE 4.1 Racialized and nonracialized faculty members by gender and immigration status (%)

	Racialized	Nonracialized	Difference (racialized – nonracialized)
Female	41.0	46.9	−5.9
Not female	59.0	53.1	5.9
Immigrant***	74.2	34.3	39.9
Not immigrant***	25.8	65.7	−39.9

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Many argue that racialized faculty tend to be overrepresented in some faculties, such as medicine, sciences, engineering, and computer sciences, compared with the liberal arts or social sciences (Stewart 2009; Dua and Bhanji 2012; Henry and Tator 2012; Henry, Choi, and Kobayashi 2012). Table 4.2 shows participants' faculties. To ensure confidentiality, we report findings only if cell counts are more than ten cases. For this reason, we have aggregated faculties. Among all participants, the top three

faculties named are medicine/dentistry, arts/humanities, and science/ computer science. Among racialized participants, however, the top three are medicine/dentistry (24 percent), engineering (13 percent), and science/computer science (12 percent).

TABLE 4.2 Racialized and nonracialized faculty members by field (%)

Faculty	Racialized	Nonracialized	Difference (racialized – nonracialized)
Science/computer science***	12.0	14.7	−2.7
Engineering***	13.3	5.0	8.3
Business/management/ public administration***	6.0	3.8	2.2
Medicine/dentistry***	23.6	19.8	3.8
Health sciences***	4.7	7.3	−2.6
Social science***	11.6	7.8	3.8
Arts/humanities***	11.6	18.0	−6.4
Education***	3.4	3.1	0.3
Law***	3.0	5.6	−2.6
Other***	10.7	14.8	−4.1
Average years of service***	12.3	17.7	−5.4

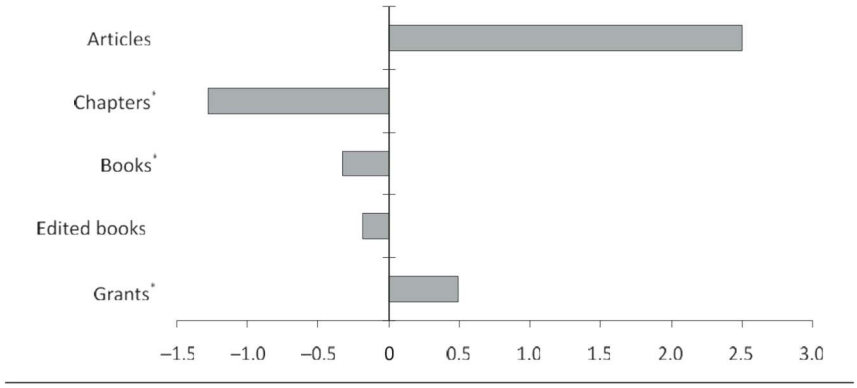
* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

About 8 percent more racialized faculty who participated in the survey were working in Engineering compared with their nonracialized counterparts, and about 6 percent fewer were working in the Arts and Humanities. When these differences are tested statistically with a $\chi 2$ test, they are significant. There appears, therefore, to be evidence of a racialized, segmented academic labour market, at least in terms of those who participated in our survey, thus agreeing with others who have studied the broader Canadian labour market (Galabuzi 2001; Block and Galabuzi 2011). Table 4.2 also looks at years of service. On average, racialized faculty in the sample

had worked in the academy about five years less than nonracialized faculty, suggesting that they were academically younger and more junior. When the difference is tested, this time with a t-test of mean difference, it is statistically significant.

The analysis of academic outputs and outcomes of participants in our survey focuses on differences between racialized and nonracialized faculty. We do not examine intersections with other identity markers because of the unbalanced nature of our data set and to ensure that we have a large enough sample of cases to offer meaningful analysis and to ensure confidentiality. Figure 4.1 compares mean differences in the number of journal articles written, as well as book chapters, books, edited books, and number of tri-council research grants won. On average, racialized faculty publish more journal articles and acquire more grants than those who are nonracialized. In fact, they publish over two more articles than nonracialized faculty and win slightly more grants. In other words, on these metrics, racialized faculty outperform their nonracialized counterparts. At the same time, however, they publish fewer book chapters, books, and edited books. These data may reflect the distribution of faculties in which racialized faculty are found. Recall that they dis- proportionately work in engineering and other disciplines that value the publication of peer-reviewed journal articles over other outputs.

FIGURE 4.1 Mean differences in professional output (racialized – nonracialized faculty)

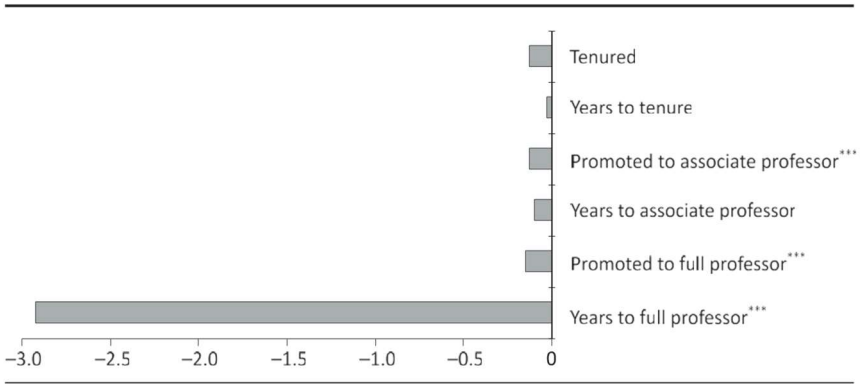


* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Next we look at academic outcomes in Figure 4.2, showing mean differences in whether professors are tenured, or promoted to associate professor and full professor, and the years it took to achieve each. We acknowledge that our estimates are likely conservative because we miss those who have left universities after not receiving tenure or promotion. Racialized faculty in the sample are less likely to gain tenure and less likely to be promoted to associate and full professor compared with nonracialized participants. These differences are statistically significant using a t-test of mean differences. There is only a slight difference (−0.03) in years to achieve tenure, and the same is true for years to achieve promotion to associate professor (−0.10). There is also no statistically significant difference between racialized and nonracialized faculty in these outcomes. Promotion to full professor, however, is a slightly different story. It takes racialized faculty about three years more on average to achieve this promotion and the difference is statistically significant. The issue to

focus on for those seeking equity is not whether racialized faculty take longer to achieve tenure and promotion, but rather whether they gain it at all. For those who are tenured and promoted to associate professor, the differences in the time to achieve them are marginal. The potential obstacle faced by racialized faculty is especially important to consider given that evidence presented in Figure 4.1 suggests that they outperform other faculty on two key metrics.

FIGURE 4.2 Mean differences in professional outcomes (racialized – nonracialized faculty)



* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 4.3 examines how racialized and nonracialized faculty perceive metrics for achieving tenure, focusing on the differences in the proportions of faculty that agree with statements on what tenure decisions are based on. The differences in agreement on mentoring students and teaching effectiveness between racialized and nonracialized faculty are marginal, with less than 1 percentage point difference for both factors. In contrast, we find remarkably less agreement among racialized faculty compared with nonracialized faculty when we look at agreement with

statements on the rate of publication, quality of publication, and research funds obtained. In fact, there is between 6 and 9 percentage points less agreement on these factors by racialized faculty. This finding is quite remarkable when contrasted with the data in Figure 4.1 showing that racialized faculty outperform nonracialized faculty on some key metrics of academic output. There are two potential interpretations for why racialized faculty have less agreement on the importance of these "hard" metrics of tenure. The first is that they are less aware of the importance of these metrics. The second, which is more likely given our other findings, is that they are aware of the importance of these metrics but they have not seen a return on them. This issue is explored in more detail in other chapters in this volume.

TABLE 4.3 Factors affecting tenure, as seen by racialized and nonracialized faculty members (%)

Tenure is granted based on ...	Disagree	Not sure	Agree	Not applicable	Total
Racialized faculty					
Mentoring of students	47.0	14.5	33.3	5.1	100
Teaching effectiveness	28.8	11.2	56.7	3.4	100
Rate of publication***	7.1	6.2	82.7	4.0	100
Quality of publication	15.1	12.5	68.5	3.9	100
Amount of research funds obtained*	14.3	15.6	65.8	4.3	100
Administrative service	42.2	16.8	37.1	3.9	100
Service to the nonacademic Community	65.5	18.1	12.5	3.9	100
Personality***	43.2	28.4	24.5	3.9	100
Collegiality**	32.2	26.2	38.2	3.4	100
Equity considerations	59.8	23.9	12.0	4.3	100
Nonracialized faculty					
Mentoring of students	51.2	12.9	33.6	2.4	100
Teaching effectiveness	33.2	9.0	55.7	2.1	100
Rate of publication***	2.8	3.6	91.5	2.1	100
Quality of publication	12.3	11.1	74.4	2.1	100
Amount of research funds obtained*	15.5	10.1	72.2	2.2	100
Administrative service	45.9	15.7	36.4	2.0	100

Service to the nonacademic Community	69.2	13.9	14.7	2.3	100
Personality***	57.6	18.8	21.2	2.5	100
Collegiality**	45.0	19.1	33.5	2.3	100
Equity considerations	58.3	24.1	14.3	3.4	100
Differences in perceptions (racialized – nonracialized faculty)					
Mentoring of students	−4.2	1.6	−0.3	2.7	0.0
Teaching effectiveness	−4.4	2.2	1.0	1.3	0.0
Rate of publication***	4.3	2.6	−8.8	1.9	0.0
Quality of publication	2.8	1.4	−5.9	1.8	0.0
Amount of research funds obtained*	−1.2	5.5	−6.4	2.1	0.0
Administrative service	−3.7	1.1	0.7	1.9	0.0
Service to the nonacademic Community	−3.7	4.2	−2.2	1.6	0.0
Personality***	−14.4	9.6	3.3	1.4	0.0
Collegiality**	−12.8	7.1	4.7	1.1	0.0
Equity considerations	1.5	−0.2	−2.3	0.9	0.0

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

When it comes to service, both administrative and to the community, there is less than a 2 percentage point difference in agreement between racialized and nonracialized faculty, with racialized participants agreeing with the importance of administrative service slightly more and service to the nonacademic community slightly less. Participants were also asked about "soft" metrics of tenure. We asked participants about the importance of personality and collegiality, which are both more difficult to measure empirically and are factors identified by researchers as leading to discrimination in the labour market. Racialized faculty are between 3 and 5 percentage points more likely to agree. The trend is accentuated when looking at the differences in disagreement, with between 13 and 14 percentage points fewer racialized faculty disagreeing that these are factors. Again, we are presented with two potential interpretations of why these differences are observed. Either

racialized faculty feel that these are more important or, given their returns on performance-based metrics, they recognize that "soft" metrics weigh more heavily in achieving tenure. This issue will also be examined further in other chapters.

The last factor analyzed is equity considerations. Here, slightly fewer, about 2 percentage points less, racialized faculty agree that equity is a factor that influences gaining tenure. When these findings are tested with a $\chi 2$ statistic, the differences in the rate of publication, amount of research funds obtained, personality, and collegiality are all statistically significant.

Table 4.4 shows a similar pattern regarding how participants feel about promotion. There is between 4 and 5 percentage points more agreement among racialized faculty that mentoring students and teaching effectiveness matter for promotion. With respect to "hard" metrics, we again find less agreement on the relevance of the rate of publication, quality of publication, and research funds obtained by racialized faculty compared with nonracialized faculty. Between 2 and 5 percentage points fewer racialized faculty agree that promotion is based on these factors. There is a marginal difference (less than 1 percentage point) in agreement on the role of service in receiving promotion. In contrast, racialized faculty were between 1 and 2 percentage points more likely to agree that "soft" metrics such as personality and collegiality are factors in receiving promotion. With respect to equity, about 3 percentage points fewer racialized faculty agree that it is a factor affecting

promotion. When these results are tested for statistical significance, the differences in the agreement on the rate of publication, personality, and collegiality are all statistically significant.

TABLE 4.4 Factors affecting promotion, as seen by racialized and nonracialized faculty members (%)

Promotion is based on …	Disagree	Not sure	Agree	Not applicable	Total
Racialized faculty					
Mentoring of students	32.9	15.0	51.3	0.9	100
Teaching effectiveness	23.0	9.1	67.4	0.4	100
Rate of publication*	7.0	4.8	88.3	0.0	100
Quality of publication	14.6	9.9	75.5	0.0	100
Amount of research funds obtained	10.4	15.7	73.5	0.4	100
Administrative service	26.4	19.5	53.7	0.4	100
Service to the nonacademic Community	52.8	24.7	21.6	0.9	100
Personality**	43.9	30.4	24.8	0.9	100
Collegiality**	34.2	28.1	37.2	0.4	100
Equity considerations	60.3	27.8	10.7	1.3	100
Nonracialized faculty					
Mentoring of students	37.4	14.9	46.8	0.9	100
Teaching effectiveness	26.4	9.8	63.1	0.8	100
Rate of publication*	3.2	3.2	92.9	0.7	100
Quality of publication	11.1	10.7	77.5	0.7	100
Amount of research funds obtained	10.5	10.2	78.5	0.9	100
Administrative service	29.1	17.2	53.0	0.7	100
Service to the nonacademic Community	56.2	20.8	22.1	0.8	100
Personality**	55.3	19.8	23.8	1.0	100
Collegiality**	44.7	18.9	35.4	1.0	100
Equity considerations	58.0	27.0	13.3	1.7	100
Differences in perceptions (racialized – nonracialized faculty)					
Mentoring of students	−4.5	0.1	4.5	0.0	0.0
Teaching effectiveness	−3.4	−0.7	4.3	−0.3	0.0
Rate of publication*	3.7	1.6	−4.7	−0.7	0.0
Quality of publication	3.5	−0.9	−2.0	−0.7	0.0
Amount of research funds obtained	0.0	5.5	−5.0	−0.5	0.0
Administrative service	−2.7	2.3	0.7	−0.3	0.0
Service to the nonacademic Community	−3.4	3.9	−0.5	0.0	0.0
Personality**	−11.4	10.6	0.9	−0.1	0.0
Collegiality**	−10.5	9.2	1.9	−0.5	0.0

Equity considerations	2.2	0.8	−2.6	−0.4	0.0

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 4.5 explores the perceptions of faculty further by looking at what factors they think affect administrative and committee appointments – key avenues for moving into senior academic positions in a university – which have long been shown to exclude racialized faculty (Porter 1965; Nakhaie 2004). Interestingly there are marginal differences in perceptions of racialized and nonracialized faculty. There is also almost no difference in the proportions of agreement on the role of mentoring students and teaching, not to mention "hard" metrics, service, "soft" metrics, and equity considerations. In fact, there is less than 6 percentage points difference in the proportions of racialized and non-racialized faculty who agree with the role of each factor in committee appointments. This finding runs counter to findings in other areas. We are not sure how to interpret this result, other than noting that clearly something different is at play with perceptions around these committees. When the differences are statistically tested, none is significant.

TABLE 4.5 Factors affecting administrative and committee appointments, as seen by racialized and nonracialized faculty members (%)

Administrative and committee appointments are granted based on ...	Disagree	Not sure	Agree	Not applicable	Total
Racialized faculty					
Mentoring of students	62.7	22.3	11.2	3.9	100
Teaching effectiveness	64.1	19.5	13.0	3.5	100
Rate of publication	57.0	22.8	17.5	2.6	100
Quality of publication	57.3	25.1	15.0	2.6	100
Amount of research funds obtained	52.6	21.1	23.2	3.1	100
Administrative service	14.7	18.7	64.0	2.7	100

Service to the nonacademic community	45.8	27.8	23.8	2.6	100
Personality	14.4	17.0	66.4	2.2	100
Collegiality	13.6	18.9	65.4	2.2	100
Equity considerations	36.4	26.0	35.9	1.7	100
Nonracialized faculty					
Mentoring of students	67.8	18.6	10.9	2.7	100
Teaching effectiveness	66.9	17.8	13.0	2.3	100
Rate of publication	62.6	19.3	15.7	2.5	100
Quality of publication	65.2	20.5	11.7	2.6	100
Amount of research funds obtained	58.6	21.5	17.2	2.7	100
Administrative service	15.1	14.5	68.0	2.4	100
Service to the nonacademic community	50.9	26.5	20.5	2.1	100
Personality	12.7	16.3	69.0	2.1	100
Collegiality	13.6	15.4	69.2	1.9	100
Equity considerations	32.2	26.6	39.2	2.0	100
Differences in perceptions (racialized – nonracialized faculty)					
Mentoring of students	−5.1	3.7	0.2	1.2	0.0
Teaching effectiveness	−2.8	1.7	0.0	1.1	0.0
Rate of publication	−5.5	3.5	1.9	0.1	0.0
Quality of publication	−7.9	4.6	3.3	0.1	0.0
Amount of research funds obtained	−6.0	−0.5	6.1	0.4	0.0
Administrative service	0.5	4.2	−4.0	0.3	0.0
Service to the nonacademic community	−5.1	1.3	3.3	0.5	0.0
Personality	1.8	0.7	−2.6	0.1	0.0
Collegiality	0.0	3.5	−3.8	0.3	0.0
Equity considerations	4.2	−0.6	−3.2	−0.3	0.0

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 4.6 shows perceptions of what affects hiring. When mentoring students and teaching are considered, between 3 and 5 percentage points fewer racialized academics than nonracialized academics agree these are factors in hiring. When "hard" metrics are considered, fewer racialized faculty agree that rate of publication and quality of publication are considerations. The differences with nonracialized faculty are small, however, with less than 3 percentage points fewer racialized faculty agreeing. Interestingly, unlike with tenure and promotion, more racialized

faculty agree that the amount of research funds, another "hard" metric, is a factor in hiring decisions. With respect to service, between 1 and 4 percentage points more racialized faculty agree that this is a consideration. Unlike with tenure and promotion, fewer racialized faculty agree that "soft" metrics, such as personality and collegiality, are factors that influence hiring. This finding is very interesting in that it indicates that racialized faculty perceive "soft" metrics differently before and after entry into the academy. It is also interesting in that it speaks to how racialized and nonracialized faculty perceive the role of "soft" metrics in an academic career. The most striking finding in Table 4.6 is the double-digit difference in agreement, with almost 11 percent fewer racialized faculty agreeing, on the importance of equity considerations. This finding is interesting when compared with the results in Chapter 3 showing that despite decades of employment equity policies, racialized academics are still underrepresented in universities, perhaps even more so than in earlier decades. Racialized participants are either unconvinced of the meritocracy of the Canadian academic system or are skeptical of policies designed to overcome exclusion. This topic is explored in other chapters in this volume, which show that the latter is more likely the case. Yet another interpretation is that nonracialized participants may see the success of racialized colleagues as related to equity policies rather than other metrics.

TABLE 4.6 Factors affecting hiring, as seen by racialized and nonracialized faculty members (%)

Hiring is based on ...	Disagree	Not sure	Agree	Not applicable	Total
Racialized faculty					
Mentoring of students	30.0	12.0	57.1	0.9	100
Teaching effectiveness	15.5	10.3	73.4	0.9	100
Rate of publication	6.9	6.1	86.6	0.4	100
Quality of publication	9.1	8.6	81.9	0.4	100
Amount of research funds obtained	13.5	16.1	68.7	1.7	100
Administrative service*	41.7	24.3	32.6	1.3	100
Service to the nonacademic community	60.2	21.6	16.9	1.3	100
Personality	15.2	19.0	65.4	0.4	100
Collegiality	14.3	18.3	66.5	0.9	100
Equity considerations*	31.3	22.3	45.1	1.3	100
Nonracialized faculty					
Mentoring of students	28.3	11.5	59.7	0.4	100
Teaching effectiveness	14.6	6.4	78.6	0.4	100
Rate of publication	5.5	4.2	89.8	0.5	100
Quality of publication	9.7	7.5	82.2	0.5	100
Amount of research funds obtained	20.1	11.7	66.7	1.4	100
Administrative service*	51.6	19.2	28.6	0.5	100
Service to the nonacademic community	66.1	16.8	16.4	0.7	100
Personality	15.6	13.9	69.6	0.9	100
Collegiality	13.7	13.0	72.7	0.6	100
Equity considerations*	24.1	18.7	56.4	0.8	100
Differences in perceptions (racialized – nonracialized faculty)					
Mentoring of students	1.7	0.5	−2.6	0.4	0.0
Teaching effectiveness	0.8	3.9	−5.2	0.5	0.0
Rate of publication	1.4	1.9	−3.2	−0.1	0.0
Quality of publication	−0.7	1.1	−0.3	−0.1	0.0
Amount of research funds obtained	−6.6	4.3	2.0	0.3	0.0
Administrative service*	−9.9	5.1	4.0	0.8	0.0
Service to the nonacademic community	−6.0	4.8	0.5	0.6	0.0
Personality	−0.4	5.1	−4.3	−0.5	0.0
Collegiality	0.7	5.2	−6.2	0.3	0.0
Equity considerations*	7.2	3.6	−11.3	0.5	0.0

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Before concluding, we examine perceptions of mentoring, teaching load, and administrative duties. We do so because previous research (Joseph and Hirshfield

2011; Odhiambo and Charoenpanitkul 2011; Henry and Tator 2012) has shown that racialized academics are often taxed with additional duties in mentoring racialized students, heavier teaching loads, and nomination to committees to increase representation of racialized faculty and to offer symbolic representation in universities. We asked respondents to compare their annual teaching loads, graduate supervision, and administrative workloads with those of their colleagues. Table 4.7 shows that a small proportion of racialized faculty felt their teaching load was higher or lower than those of their colleagues, 2 percent and 5 percent, respectively. In contrast, almost 2 percentage points more racialized faculty felt they had higher loads of supervision of students, and between 1 and 5 percentage points more felt they had the same or a lower administrative load than their colleagues. When we tested the statistical significance of these differences with a $\chi 2$ statistic, however, we find that none are significant. These results differ from those (e.g., Padilla 1994; Joseph and Hirshfield 2011, among others) who suggest that there is a taxation on the workload of racialized faculty. Instead, the small differences and lack of significance are consistent with the differences reported in Table 4.5 about perceptions of administrative and committee appointments.

TABLE 4.7 Teaching load and administrative duties, as seen by racialized and nonracialized faculty members (%)

Compared with your colleagues, is your ...	Lower	Same	Higher	Not sure	Total
Racialized					
Annual teaching load	16.6	57.2	21.8	4.4	100
Graduate supervision of students	22.1	36.3	32.3	9.3	100
Administrative load	19.7	38.4	37.6	4.4	100
Nonracialized					

Annual teaching load	21.8	50.6	24.0	3.6	100
Graduate supervision of students	26.9	37.6	30.1	5.4	100
Administrative load	18.6	33.6	44.3	3.6	100
Differences in perceptions (racialized – nonracialized faculty)					
Annual teaching load	−5.2	6.6	−2.2	0.8	0.0
Graduate supervision of students	−4.8	−1.3	2.2	3.9	0.0
Administrative load	1.1	4.8	−6.7	0.8	0.0

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Conclusion

What do all these survey results tell us? In general, fewer racialized faculty in our survey sample are women, the vast majority identify as immigrants, they work disproportionately in Medicine/Dentistry, Engineering, and Science/Computer Science and not the Arts and Humanities, and they have worked fewer years in the academy. Racialized respondents also outperform their nonracialized counterparts in winning tri-council research grants and publishing articles, but have fewer book chapters and books. Racialized faculty are less likely to be awarded the benchmarks of tenure and promotion, but if they manage to earn them there is marginal difference in how long it takes them to achieve them. When we compare these findings to perceptions of tenure, promotion, administrative and committee appointments, and hiring, we find interesting results. Generally speaking, more racialized faculty perceive that tenure and promotion are based on "soft" metrics such as personality and collegiality rather than "hard" metrics like publication or winning grants. The opposite pattern is largely found with perceptions about administrative and committee appointments and hiring. Consistently across all measures of perceptions, fewer racialized faculty agreed that equity considerations

are a factor affecting tenure, promotion, administrative and committee appointments, and hiring. This finding likely suggests, as other chapters in this volume show in detail, that policies to promote equity are not working and racialized faculty are aware of that fact. We wrapped up our analysis by looking at perceptions of work load, and here we found marginal differences in perceptions between racialized and nonracialized faculty.

In a nutshell, the experiences of racialized faculty intersect with other identity markers, something we did not explore in this chapter but that other chapters will go into. The fact that more racialized faculty in the sample were men and were overwhelmingly immigrants concentrated in specific disciplines is striking. It shows evidence of a racialized-segmented academic labour market in Canadian universities. We caution that only eight universities comprised our sample, but the trends likely extend more widely. It is clear that far more needs to be done to diversify the entire university and not just a small number of faculties. Canadian universities and their students need more racialized professors who teach english, history, and philosophy, in addition to those already teaching in engineering, medicine/dentistry, and science/computer science faculties. Their perspectives can help change the social and cultural narrative of Canada to one that better reflects its increasingly multiracial, multi-cultural, and multi-ethnic population.

The survey also opens new questions about the fate of the growing number of racialized Canadians gaining doctorates and where they will land in their careers. Recall that almost two-thirds of racialized faculty in our survey were also immigrants. Many could have gained citizenship after attending a Canadian university and before landing their jobs, but many likely migrated to Canada to pursue a job at a Canadian university. There are questions around what is happening to Canadian-born racialized persons with doctorates who do not appear to be transitioning into the academic labour market, a problem seen in other job sectors and one that is raising concern over potential inequality and alienation from Canadian society (Reitz and Banerjee 2007).

Alienation is also potentially seen in the comparisons of results on academic outputs, production, and outcomes. It is clear that racialized faculty are "playing the game," a finding that differs from findings of other research. Racialized faculty in our survey published journal articles at a higher rate than nonracialized faculty and won more tri-council research grants. When it comes to gaining tenure and promotion, it appears that those who achieve both follow a pathway similar to that of nonracialized faculty; however, fewer racialized faculty are achieving either. This finding suggests that researchers concerned with social justice and equity need to concentrate on points of blockage and reasons for failure rather than on the path to success. It is the former that accounts for significant differences, not the latter.

We suspect that tensions between "playing the game" and obstacles in being rewarded for it might explain the differences we found with respect to what factors racialized and nonracialized faculty consider to influence tenure, promotion, administrative and committee appointments, and hiring. When asked about perceptions of tenure and promotion, "hard" metrics of performance appear to be undervalued by racialized faculty, perhaps because of the tensions between high rates of output and lower rates of reward. This pattern is also illustrated by the higher rates of agreement by racialized participants on the importance of "soft" metrics of performance, those that are least quantifiable and observable empirically. In some sense, it appears that racialized faculty recognize that their academic output or production might matter less than who they know and how they get along with them, a pattern that might reflect a pragmatic outlook on the devaluing of their labour and skills.

Differences between racialized and nonracialized perceptions of the role of "hard" and "soft" metrics are also seen in administrative and committee appointments and hiring. For the former, racialized academics appear to prize "hard" metrics more than nonracialized faculty, which might mean they have confidence in the academy once they have broken barriers into it. This tendency is in line with the findings on the pathways of those who have achieved tenure and promotion. In contrast, racialized faculty were far more ambivalent and skeptical of factors that affect hiring, perhaps reflecting a malaise associated with the obstacles we found in other

data reported above. The skepticism of racialized faculty with regard to hiring might be best illustrated by their low level of agreement with the proposition that equity considerations play a role in hiring, despite employment equity policies that shape all Canadian university job ads.

Overall, racialized faculty understand the Canadian academic system and "play the game." They have the human capital and demonstrate a high level of performance on outcomes that should be rewarded by universities. As Chapter 7 illustrates, however, their perceptions of how best to navigate the system are clearly different from those of their non- racialized colleagues. Such differences in perception are very much in line with previous research on perception of discrimination in the Canadian academy (see Nakhaie 2004, 2007; Henry and Tator 2012). We believe that differences found among racialized faculty generally reflect a pragmatic and skeptical view of the Canadian academic system that shows that racialized faculty successfully navigate the system, but perhaps through a solitude of experiences that their colleagues fail to see.

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CHAPTER 3

HUMAN CAPITAL OR CULTURAL TAXATION: WHAT ACCOUNTS FOR DIFFERENCES IN TENURE AND PROMOTION OF RACIALIZED AND FEMALE FACULTY

Wijesingha, Rochelle and Howard Ramos. 2017. "Human Capital or Cultural Taxation: What Accounts for Differences in Tenure and Promotion of Racialized and Female Faculty." *Canadian Journal of Higher Education* 47(3): 54-75.

Human Capital or Cultural Taxation: What Accounts for Differences in Tenure and Promotion of Racialized and Female Faculty?

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Abstract

Achieving tenure and promotion are significant milestones in the career of a university faculty member. However, research indicates that racialized and female faculty do not achieve tenure and promotion at the same rate as their non-racialized and male counterparts. Using new survey data on faculty in eight Canadian universities, this article examines differences in being tenured and promoted between racialized and non-racialized faculty and between female and non-female faculty. It also investigates the extent to which explanations of human capital theory and cultural or identity taxation account for these disparities. Logistic regression confirms that controlling for human capital and cultural or identity taxation washes away the differences between being tenured and promoted for female faculty. Differences for racialized faculty remain, offering evidence of racial discrimination in the academic system.

Résumé

L'obtention de la permanence et la promotion sont des jalons importants de la carrière d'un professeur d'université. Cependant, des recherches scientifiques indiquent que les professeurs racialisés et les femmes n'obtiennent pas de permanence et de promotion au même rythme que leurs homologues non racialisés et de sexe masculin. En utilisant de nouvelles données provenant d'une enquête menée auprès de professeurs dans huit universités canadiennes, cet article scrute les différences entre les taux de permanence et de promotion des professeurs racialisés et non racialisés, ainsi qu'entre femmes et non femmes, afin d'analyser dans quelle mesure la théorie du capital humain ou celle de l'imposition culturelle ou identitaire explique ces disparités. La régression logistique confirme qu'en contrôlant le capital humain ou l'imposition culturelle ou identitaire, les

différences de permanence ou de promotion parmi les femmes disparaissent. Cependant, même avec ce contrôle, les différences demeurent pour les professeurs racialisés, ce qui fournit une preuve que la discrimination raciale existe dans le système universitaire.

Achieving tenure and promotion are significant milestones in the career of a university faculty member. Park (2011) noted that apart from salary, they are the most important and lasting rewards available to academics. However, research shows that racialized faculty do not receive tenure and promotion at the same rate as non-racialized faculty, and women are less likely to gain tenure or be promoted compared to male faculty. Both relationships are evident despite the fact that Canada is becoming increasingly ethnically and racially diverse and an increasing number of university students, graduates, and professors are women.

In this paper, using original survey data on faculty in eight Canadian universities, we examined these trends by looking at two competing explanations offered in the research on tenure and promotion. The first is based on human capital theory, which accounts for disparities in career outcomes through differences in productivity of individual faculty members and years of experience. This perspective argues that if racialized and female faculty are less productive, then their lower rates of professional reward are justified. In contrast, another explanation for differences in tenure and promotion focuses on cultural or identity taxation of racialized and female faculty members. According to this perspective, minority and female faculty are over-burdened with higher teaching loads, mentoring, and service work, which inhibits productivity and ultimately leads to the denial of tenure and promotion. If this is the case, then minority and female faculty face discrimination in two forms: barriers hindering fair competition in the academic field and a lack of recognition of their contributions to the academy.

Unfortunately, most research looking at differences in the rates of tenure and promotion of racialized and female faculty are from the US and this research looks at either one or the other explanation in isolation. In part this is because of methodological differences employed by those examining each theory. Those focusing on human capital theory usually rely on large datasets and use statistical methods, whereas those looking at cultural or identity taxation tend to rely on small sample interview data. To our knowledge, few studies take both into account. For this reason we sought to understand which, if either, of these explanations accounts for differences in the rates of being tenured and promoted for racialized and female faculty in the Canadian context.

Human Capital or Cultural Taxation?

Many researchers have shown that racialized faculty receive tenure and promotion at lower rates than non-racialized faculty (Nakhaie, 2007; Nettles, Perna, Bradburn, & Zimbler, 2000; Perna, 2001a; Ryu, 2008; Weinberg, 2008), and other research also demonstrates that racialized faculty earn less money (Li, 2012). The same can be said of women in the academy (CAUT [Canadian Association of University Teachers], 2008, 2010; Ginther & Hayes, 2003; Harper, Baldwin, Gansneder, & Chronister, 2001; Marschke, Laursen, Mc- Carl Nielsen, & Dunn-Rankin, 2007; Nakhaie, 2007; Ornstein, Stewart, & Drakich, 1998; Perna, 2001a, 2005; Valian, 1998). What remains unanswered is, why is this the case?

Human capital theory offers one possible explanation. It looks at the relationship between productivity, experience, and outcomes. In other words, following neoliberal logic, individuals who work harder and longer gain more benefit. In the world of academia, productivity is usually measured by research output and, as the old adage goes, "publish or perish." In fact, the number of publications and research grants gained by an academic are often used as a measure of research output (Chen & Ferris, 1999; Cora-Bramble, Zhang, & Castillo-Page, 2010; Perna, 2001b), and this is also the primary method used to evaluate faculty for tenure and promotion. As a result, one explanation for differences between racialized and non-racialized faculty and women compared to men is that racialized faculty and women are less productive or possess less human capital than their counterparts. However, with respect to the tenure and promotion of racialized and female faculty, accounting for such measures offers mixed results.

Some US research has shown that controlling for human capital measures of productivity account for much of the racial and gender disparities in the academic reward structure (Perna, 2001; Porter, Toutkoushian, & Moore, 2008; Smart, 1991). For instance, a number of scholars in the US have found that racialized faculty have lower research productivity than non-racialized faculty (Bellas & Toutkoushian, 1999; Jackson, 2008; Long & Fox, 1995; Pearson, 1985; Toutkoushian, 1998). However, productivity differences of racialized faculty have not been examined in Canada. Literature on female faculty show similar patterns. Many studies in the US and Canada demonstrate that on average women often have less research output than male faculty (Evans & Bucy, 2010; Hesli & Lee, 2011; Larivière, Vignola-Gagné, Villeneuve, Gélinas, & Gingras, 2011; Nakhaie, 2002). Nakhaie (2002) showed that Canadian male faculty out-publish female faculty across six measures of publication. Other US studies show female faculty receive fewer research grants (Larivière et al., 2011; Stack, 2004) and when they do receive research grants, they are less likely to be the principal investigator.

Other research coming out of the US, however, finds no difference in levels of research productivity between racialized and non-racialized faculty, and some racialized groups even out-publish White faculty (Bellas & Toutkoushian, 1999; Jackson, 2004; Nettles & Perna, 1995; Toutkoushian, 1998). For instance, Toutkoushian (1998) found that although Black faculty had lower levels of research output in comparison to White faculty, Asian faculty had higher levels of research output. Similarly, Bellas and Toutkoushian (1999) found that Latino faculty had higher levels of research output than White faculty.

With respect to tenure and promotion as specific outcomes, results are equally mixed. Some research in the US has shown that controlling for human capital measures of productivity serves to decrease or eliminate racial or gender disparities in the academic reward structure (Perna, 2001a; Porter, Toutkoushian & Moore III, 2008; Smart, 1991). However, other studies in Canada and the US have shown that accounting for productivity does not adequately explain the racial or gender disparities found in academic reward structures (Nakhaie, 2007; Perna, 2005; Toutkoushian, 1999). That is, despite controlling for human capital, racial and gender differences continue to exist.

In addition to productivity, human capital is also captured through looking at work experience in a job field (Galabuzi, 2006; Li, 1992, 2012; Pendakur & Pendakur, 2002). The logic of looking at experience is that one gains specialized skills and increases productivity the longer they work in a specific job. A new professor has to build new courses and may be less aware of how publications and grants are refereed than a professor who has worked in his or her discipline for many years. This, in turn, means new academics are less likely to be as productive as a more seasoned academic. When years of experience and human capital are taken into account by Nakhaie (2007), he found that promotion to the rank of associate professor in Canada depended more on work experience than the number of publications. Li (2012), however, finds that income differences persist even after controlling for experience, which leads him to conclude that racialized and female faculty in Canada face discrimination after human capital is accounted for. The mixed findings with respect to human capital and racial and gender differences in academic rewards has led some to argue that human capital theory does not adequately explain disparities found in academic reward structures (Perna, 2001a; 2005; Toutkoushian, 1999). Instead, other factors might better account for academic outcomes.

This brings us to a second possible reason for the different patterns of academic reward for racialized and female faculty. The academic reward structure, as many have observed, is heavily based on research and less so on teaching and service (Fairweather, 1993; Henry & Tator, 2012; Leslie, 2002). This means that faculty who focus on teaching, mentoring, community outreach, and administrative

duties are at a disadvantage when it comes to tenure and promotion. With respect to racialized faculty, Padilla (1994) coined the term "cultural taxation" to explain why racialized faculty do not receive tenure and promotion at the same rate as non-racialized faculty. Cultural taxation refers to the added burden racialized faculty often confront as members of a limited pool of people who represent diversity within their academic faculties. For Padilla, cultural taxation includes serving on a number of committees to increase racial representation, and being called on as an expert on cultural and racial diversity. Others scholars, such as Joseph and Hirshfield (2011), have extended the types of cultural taxation to include heavier workloads that racialized faculty face, which include higher teaching loads and mentoring of students. Taxation occurs because students seek them out as of a small pool of faculty that may represent their own racialized experience or because non-racialized students who exoticize them.

Qualitative interviews with racialized faculty in Canada suggest that they also may feel an obligation to mentor other racialized and Indigenous students (Henry & Tator, 2009; Spafford, Nygaard, Gregor, & Boyd, 2006). Henry and Tator (2012) found this to be true among racialized faculty who often felt that they were overloaded with teaching and administrative work that left them with little time to publish. They also found that the same faculty members felt that they were asked to sit on more committees due to their ethno-racial backgrounds, a finding echoed by a number of other researchers from the US (cf. Jackson, 2004; Joseph & Hirshfield, 2011; Odhiambo & Charoenpanitkul, 2011; Villalpando & Bernal, 2002).

Some scholars have also argued that female faculty face a similar form of taxation related to their gender calling it "identity taxation" (Hirshfield & Joseph, 2012). Literature from the US has shown that female faculty have heavier teaching loads and spend more time on service activities and mentoring than male faculty (Hirshfield & Joseph, 2012; Menges & Exum, 1983; Misra, Lundquist, Holmes, & Agiomavritis, 2011; Nettles et al., 2000; Samble, 2008). Women, like racialized faculty, are often asked to sit on multiple committees to increase gender representation (Menges & Exum, 1983). Spending copious amounts of time on teaching, mentoring, and service has adverse effects on faculty productivity (Bellas & Toutkoushian, 1999; Fairweather, 2002; Hattie & Marsh, 1996; Hirshfield & Joseph, 2012; Johnson & Harvey, 2002; Joseph & Hirshfield, 2011). Bellas and Toutkoushian (1999), for instance, determined that faculty who spent higher amounts of time on teaching and service produced less research products such as peer-reviewed articles or grants. As already noted above, time spent mentoring students, teaching and doing administrative work is not as valued in the academy as time spent on research (Antonio, 2002; Henry & Tator, 2012; Leslie, 2002; Padilla, 1994). Cultural or identity taxation may account for why racialized and female faculty produce less research output, but counter to human capital theory,

it does not explain away differences in rates of tenure and promotion. In fact, it offers evidence of systemic discrimination.

As a result, this has left two competing perspectives for the lower rates of tenure and promotion among racialized and female faculty and two different conclusions. In our paper, we sought to examine which, if either, accounted for the academic outcomes, or rewards, of racialized and female faculty in eight Canadian universities. We did this by first examining whether racialized and female faculty are tenured or promoted at the same rate as non-racialized and male faculty. We then look at measures of human capital and cultural or identity taxation to see if they account for differences and then perform logistic regression analysis to look at additional controls and interactions.

Methodology

Examining tenure and promotion of racialized and female faculty in Canada is important for three reasons. First, Canadian research on tenure and promotion of female faculty is limited to a few studies (CAUT, 2008, 2010; Nakhaie, 2007; Ornstein et al., 1998, 2007; Stewart, Ornstein, & Drakich, 2009) and the literature on racialized faculty is even more sparse (Henry, 2012; Henry & Tator, 2012; Kobayashi, 2009; Monture, 2009; Nakhaie, 2007). Second, much of the Canadian research on tenure and promotion of racialized faculty is qualitative, employing a limited sample (exception: Nakhaie, 2007); to our knowledge, our analysis is one of the first large-scale quantitative studies looking at tenure and promotion among racialized faculty in Canadian universities. Third, we offer a rare study that looked at how both human capital and cultural taxation measures affect disparities in being tenured and promoted for racialized and female faculty.

To examine the effects of human capital and cultural or identity taxation on being tenured and promoted among racialized and female faculty, we conducted a new survey, the University Tenure, Promotion and Hiring (UTPH) survey[1] with faculty employed at Canadian universities. The online survey consisted of 77 questions focused on perceptions of tenure, hiring, and promotion of faculty at universities. The survey's sampling frame was based on all publicly available emails listed on the websites of eight Canadian universities. The universities included represent English Canadian universities from Western Canada, the Prairies, Ontario and Atlantic Canada. Three of the universities represented large institutions, two represented smaller ones, and five were members of the U15, which are considered to be the country's most research intensive schools. The survey was emailed to 15,571 faculty (irrespective of rank or type of academic affiliation or position) and was self- administered online. Participants were enumerated during the fall of 2013. The response rate was 16%, of which 66% completed the entire

survey. The response rate was in line with a similar study using the same methodology (see Jones, Weinrib, Metcalfe, Fisher, Ruben- son, & Snee, 2012). Although online surveys generally achieve lower response rates than mail surveys (Nulty, 2008), research shows that the representativeness of the sample is more salient than the actual response rate (Cook, Heath, & Thompson, 2000). We will dis- cuss the representativeness of the sample below when we discuss the results. The sample included both tenure-track and other faculty in enumerated U15 and teaching universities as well as institutions from all regions, save Quebec. The province of Quebec was excluded because francophone institutions have a different academic culture from English Canadian institutions, the cost of translation of the survey was prohibitive, and English institutions in Quebec are similar to others included in the sample. In future studies, we would encourage a broader sampling of schools.

We measured "racialized" faculty by asking if participants self-identified in any of the categories used by Statistics Canada's definition of visible minorities.[2] The term visible minority is a contentious term (Synnott & Howes, 1996) and therefore we, instead, have used the phrase "racialized" to recognize that visible minority categories are normative and are constructed in an ongoing process of power relations. We acknowledge that racialized people are not a homogenous population and that considerable variations exist within these populations. However, further disaggregation was not methodologically possible because of the limited sample size in each group. Participants were also asked if they identified as an Indigenous person. We combined those who identified as a visible minority and/or Indigenous person into a single category of racialized participants versus those who did not identify as either. We further acknowledge that Indigenous people are not usually considered the same as another ethnic or minority group in Canada due to their unique experience of colonization and history as "original peoples" (Comack, 2012, p. 64–65; Dua, 2008). We combined the two groups for two reasons: first, because both groups are underrepresented as faculty relative to their proportion of the population in Canada (see Ramos 2012), and second, because of the small number of participants who identified as Indigenous in this study (n = 35), it was difficult to perform a meaningful analysis if treated separately.

The variable "female" is measured by those who identified as such. In an attempt to be inclusive of faculty who did not identify with hetero-normative gender labels, we simply asked if participants identified with either male or female dominant labels in two yes/no questions. This allowed participants to identify as either, neither, or both. The strategy turned out to be less than ideal. The number of participants who identified as both or neither normative gender labels was too small (n = 21) to allow for a meaningful analysis. More important, a number of participants indicated that we did not capture gender well nor did we capture the

experiences of transgender populations. Likewise, some participants who subscribed to hetero-normative labels complained that we overly complicated the question. In future research we recommend leaving gender questions open to allow for the widest possible responses and later aggregation.

In our analysis we examine two dependent variables that are measures of academic achievement, reward, or outcomes: *tenure* status and *promotion* to associate professor. While some treat tenure and promotion to associate professor as synonymous (Ornstein, Stewart, & Drakich, 2007), our data demonstrated why it was important to look at both groups separately. For example, we had 113 respondents who were promoted to associate professor but were not tenured, and we had 78 respondents who were tenured but were not associate professors. Such situations occur in Canadian universities where tenure and promotion are not paired and in fields that appoint limited-term professors at higher ranks. For these variables, participants were asked to indicate whether they were tenured and whether or not they were promoted to associate professor. Both variables were dichotomous and therefore logistic regression was appropriate. Although each institution has its own standards for tenure and promotion and it would have been beneficial to control for the institution of the respondent, however, for the purpose of anonymity we did not ask participants in the survey to indicate which institution they came from and therefore could not control for it.

Human capital was measured by asking participants to estimate how many research grants they had won in the last five years and to estimate of how many refereed articles, book chapters, books, and edited books they published since they began working as a faculty member. Measuring the quality of a publication is difficult because of the highly subjective nature of what is considered "quality." Some might argue that journal rankings or impact factor measure quality; however, a publication in a high-impact factor journal does not necessarily equate to having broad resonance in the field, and the importance placed on specific journals varies by discipline and subfield. For these reasons we looked at counts. The variable for articles was positively skewed and for this reason quintiles were created to allow for simpler analysis. We used the top quintile as the reference category for each. Another measure of human capital is years of service. This was measured by asking respondents to indicate what year they began working at a university as a faculty member. We then subtracted the current year of the survey from the year hired. Again quintiles were created to allow for easier analysis and the top quintile was used as the reference category. Cultural (or identity) taxation was measured by examining faculty perceptions of teaching load, supervision of graduate students and administrative load. Participants were asked whether each was "lower," "the same," or "higher" compared to their colleagues. We combined "the same" and "lower" to compare against "higher."

In addition to these measures we controlled for academic discipline. Previous research suggests that racialized faculty tend to be concentrated in particular disciplines, such as engineering, computer science, medicine, and science (Dua & Bhanji, 2012; Henry, Choi, & Kobayashi, 2012; Henry & Tator, 2012; Stewart, 2009). Literature also suggests that fe- male faculty are also concentrated in traditionally feminized fields such as nursing, educa- tion, and English (Harper et al., 2001; Nettles et al., 2000) and are less likely to work in sci- ence, technology, engineering, or mathematics (CAUT, 2008; Etzkowitz, Kemelgor, & Uzzi, 2000; Perna, 2005). Moreover, we felt it was important to control for discipline because of differences across fields in rates of promotion. Ornstein, Stewart, and Drakich (2007) found that particular disciplines such as science, engineering, and professional schools promoted their faculty more rapidly and disciplines such as journalism, nursing, and other health professions took longer than average. Academic discipline was measured by asking participants to list what field they worked in and responses were then coded into 10 dum- my categories, including sciences, engineering, business, medicine, health, social sciences, arts, education, law, and other disciplines (which we used as the reference category).

We also controlled for immigrant status because a large proportion of racialized people in Canada are immigrants. According to the 2011 National Household Survey, immigrants comprised 21% of the total Canadian population, which was the highest among the G8 countries (Statistics Canada, 2013). Of the 19% of people who identified as visible minorities, 65% were immigrants (Statistics Canada, 2013). Immigrant status was measured by asking respondents to indicate whether they currently are, or ever were a landed immigrant. It should be noted that immigrants also include non-racialized individuals.

To assess the effects of human capital and cultural or identity taxation on being tenured and/or promoted among racialized and female faculty we used tabular and logistic regression analysis. In the following section we present our analysis and results.

Analysis and Results

We began by looking at some of the demographic attributes of participants. The survey sample was fairly representative of university faculty in Canada. Fifteen percent of participants in the survey identified as racialized (234 out of 1580), which was similar to the 16% of professors identified in the 2006 census[3] (Li, 2012; Ramos 2012). Forty-six percent of survey participants identified as female (700 out of 1523), which is only slightly over the 40% of women who identified as university professors in the 2006 census. Among faculty who identified as female, approximately 13% were racialized, and among those who were not female, 16% were racialized. These proportions are again similar to the 13% and 17% respectively found in the 2006 census (Li, 2012). Looking at the proportion of

immigrants in the survey, 40% of respondents identified as immigrants (636 out of 1578). Here, we unfortunately did not have comparative census figures of immigrants among the Canadian professorate, but we note the proportion is higher than the proportion of immigrants in the general population. The high proportion of immigrants in our sample, however, was not surprising given the large number of American professors in Canadian faculties, especially those hired during the 1960s and 1970s.

In Table 1 we examine the proportion of racialized and non-racialized faculty by gender and immigrant status. We can see that among racialized professors, female faculty accounted for 41% of professors and among non-racialized faculty, 47%. Moreover of the 40% of immigrant faculty in the survey, a very high proportion, 74%, were racialized.

Table 1. *Racialized and Non-Racialized Faculty by Gender and Immigrant Status*

	Racialized %	Non- racialized %	Difference (Racialized - Non-racialized) %
Female	41.0	46.9	−5.9
Non-female	59.0	53.1	
			n =1,516
Immigrant***	74.2	34.3	
Non-immigrant	25.8	65.7	−39.9
			n =1,575

* = $p \leq 0.05$
** = $p \leq 0.01$
*** = $p \leq 0.001$

Table 2 explores whether racialized faculty and female faculty are tenured and promoted to associate professor at the same rate as their non-racialized and non-female counterparts. When this was examined, we observed that racialized faculty were less likely to be tenured when compared to non-racialized faculty (53% versus 66%). Racialized faculty were also less likely to be promoted to associate professor than non-racialized faculty (56% versus 69%). An x^2 test of significance indicates that this difference was statistically significant. For female faculty, we noted that fewer had tenure compared to non-female faculty (59% versus 69%). With regard to promotion to associate professor, fewer female faculty were promoted compared to non-female faculty (61% versus 71%). These differences were again statistically significant.

Table 2. *Mean Differences in Human Capital Measures and Professional Outcomes*

Output	Racialized	Non-racialized	Difference (Racialized - Non-racialized)	Output	Female	Non-female	Difference (Female - Non-female)
Articles	38.53	36.03	2.50	Articles***	24.91	45.52	−20.61
Chapters*	4.68	5.96	−1.28	Chapters***	4.58	6.75	−2.16
Books*	0.71	1.04	-0.33	Books***	0.59	1.26	−0.68
Edited books	0.77	0.95	−0.18	Edited books***	0.63	1.14	−0.51
Grants*	2.04	1.55	0.49	Grants	1.60	1.65	−0.04
Years of service***	12.32	17.66	−5.34	Years of service***	13.68	19.11	−5.42
Outcomes	%	%	%	*Outcomes*	%	%	%
Tenured***	53.02	66.44	−13.42	Tenured***	58.71	68.92	−10.21
Promoted to associate***	55.66	68.69	−13.03	Promoted to associate***	61.36	71.28	−9.92

* = $p \leq 0.05$
** = $p \leq 0.01$
*** = $p \leq 0.001$

We next considered measures of human capital. Table 2 compares mean differences in the number of refereed articles, book chapters, books, edited books, and awarded research grants between racialized and non-racialized faculty as well as between female and non-female faculty. On average, racialized faculty published more refereed articles and acquired more research grants compared to their non-racialized counterparts. Racialized faculty published three more journal articles, on average, than non-racialized faculty. However, racialized faculty published fewer book chapters, books, and edited books than non-racialized faculty. When we examine statistical significance (using a *t*-test), we see that chapters, books, and research grants were all statistically significant. As with other research on human capital and the tenure and promotion of racialized faculty, we had mixed findings.

When differences between females and non-females were analyzed, also in Table 2, we found that females published fewer refereed articles, book chapters, books, and edited books. Female faculty also acquired fewer research grants compared to their non-female counterparts. The most stark finding here was that non-female faculty published an average of 21 more refereed articles than female faculty. As for statistical significance, a *t*-test indicated that all the variables were significant except for research grants. Again, as with other research on human capital, we found that female faculty were less "productive" in these measures than those who did not identify as female. However, as the literature review suggested, cultural or identity taxation may account for why this is the case.

In Table 2, we also considered years of service as another measure of human capital. When this was examined, we found that racialized faculty and female faculty had fewer years of experience compared to their non-racialized and non-female counterparts. The differences were statistically significant. The data show that this aspect of human capital may be associated with the lower rates of tenure and promotion among racialized and female faculty.

In Table 3, we examined cultural or identity taxation by comparing faculty perceptions of their annual teaching load, graduate supervision of students, and administrative load. When this was examined we found that a smaller proportion of racialized faculty felt their annual teaching load (22% versus 24%) and administrative load (38% versus 44%) was higher compared to non-racialized faculty. In contrast, a larger proportion of racialized faculty felt they had a higher load of supervision of graduate students than non-racialized faculty (32% versus 30%). This offered mixed results on the impact of cultural taxation and was counter to the conclusions of other studies. However, most of the existing research on cultural taxation tends to be qualitative case studies, and this may account for the differences in results. When we looked at identity taxation, a greater proportion of female faculty felt that their teaching load and administrative load

was higher compared to non-female faculty. However, more non-female faculty felt their supervision load of graduate students was higher. An x^2 test indicated that none of these differences were statistically significant. Such results were contrary to those found in existing literature on identity taxation. But again, we note that those studies tended to be qualitative and focused on a smaller number of cases.

So far we have mixed evidence to support human capital and cultural taxation arguments. In Table 4, we examined how the two explanations work in conjunction through logistic regression analysis presented in four models. In Model 1, we regressed whether or not one was tenured on measures of racialized, female, human capital and cultural taxation, while also considering controls on a reduced sample consisting of only those on tenure-track. When this was done we saw that racialized faculty had 54% lower odds of being tenured than non-racialized faculty, even after controlling for human capital and cultural taxation. These differences were statistically significant. For female faculty there was almost no difference, and it was not statistically significant.

When human capital measures were considered, we saw that having a higher number of research grants resulted in greater odds of being tenured, increasing them by about 17%. As expected, when we examined refereed articles, we discerned that having fewer published articles had a negative and statistically significant impact on being tenured. Also, fewer years of service resulted in lower odds of being tenured. Faculty in the quintile with the fewest years of service had a 98% lower odds of having tenure than those with the most experience. It appears that human capital has a consistent effect on being tenured.

Table 3. *Faculty Perceptions of Teaching Load, Graduate Supervision, and Administrative Duties*

Racialized						Female					
Compared to your colleagues, is your . . .	Lower %	The Same %	Not Higher %	Sure %	Total %	Compared to your colleagues, is your . . .	Lower %	The Same %	Not Higher %	Sure %	Total %
annual teaching load . . .	16.6	57.2	21.8	4.4	100	annual teaching load . . .	18.6	53.2	24.6	3.6	100
graduate supervision of students . . .	22.1	36.3	32.3	9.3	100	graduate supervision of students . . .	27.0	37.9	28.5	6.6	100
administrative load. . .	19.7	38.4	37.6	4.4	100	your administrative load . . .	18.3	32.8	44.7	4.2	100
Non-racialized						Non-female					
annual teaching load . . .	21.8	50.6	24.0	3.6	100	annual teaching load . . .	23.3	51.1	21.9	3.7	100
graduate supervision of students . . .	26.9	37.6	30.1	5.4	100	graduate supervision of students . . .	25.7	37.1	32.0	5.2	100
administrative load . . .	18.6	33.6	44.3	3.6	100	administrative load . . .	18.7	35.0	43.2	3.1	100
Differences in perceptions (Racialized–Non-racialized)						Differences in perceptions (Female– Non-female)					
annual teaching load . . .	−5.2	6.6	−2.2	0.8	0.0	annual teaching load . . .	−4.7	2.1	2.7	-0.1	0.0
graduate supervision of students . . .	−4.8	−1.3	2.2	3.9	0.0	graduate supervision of students . . .	1.3	0.8	−3.5	1.4	0.0
administrative load . . .	1.1	4.8	−6.7	0.8	0.0	administrative load . . .	−0.4	−2.3	1.5	1.1	0.0

* = $p \leq 0.05$
** = $p \leq 0.01$
*** = $p \leq 0.001$

Table 4. *Logistic Regression Models of Tenure and Promotion*

	Tenure-track Sample						Complete Sample					
	Model 1 Tenured			Model 2 Promoted to Associate			Model 3 Tenured			Model 4 Promoted to Associate		
	Logit	Exp	Std. Error	Logit	Exp	Std. Error	Logit	Exp	Std. Error	Logit	Exp	Std. Error
Racialized *(ref. non-Racialized)*	–0.7779 *	0.4594	0.3184	–0.6870 *	0.5031	0.3196	–0.6268 *	0.5343	0.2515	–0.5409 *	0.5822	0.2640
Female *(ref. not id as female)*	0.0813	1.0846	0.2213	0.1764	1.1929	0.2141	–0.0031	0.9969	0.1719	0.0888	1.0928	0.1789
Human Capital												
Grants	0.1542 **	1.1667	0.0566	0.1984 ***	1.2194	0.0591	0.0840 *	1.0876	0.0415	0.2250 ***	1.2523	0.0524
Chapters	0.0134	1.0135	0.0246	–0.0178	0.9824	0.0223	–0.0004	0.9996	0.0145	–0.0024	0.9976	0.0208
Books	0.1926	1.2124	0.1225	0.1595	1.1730	0.1054	–0.0216	0.9787	0.0643	0.0964	1.1012	0.0846
Edited books	0.0948	1.0994	0.1165	0.1126	1.1192	0.1067	0.0524	1.0538	0.0611	0.1446	1.1556	0.0990
Articles *(ref. category 5)*												
1st quintile	–1.4526 **	0.2340	0.4694	–1.6660 ***	0.1890	0.4720	–1.5770 ***	0.2066	0.3348	–1.8676 ***	0.1545	0.3808
2nd quintile	–0.5523	0.5756	0.4528	–0.6422	0.5261	0.4623	–0.2301	0.7944	0.3306	–0.6331	0.5309	0.3801
3rd quintile	–0.6116	0.5425	0.4148	–0.6762	0.5086	0.4216	–0.1726	0.8414	0.2967	–0.7067 *	0.4933	0.3484
4th quintile	–0.3319	0.7175	0.4260	0.2153	1.2402	0.4604	0.1074	1.1134	0.3033	0.0743	1.0771	0.3822
Years of Service *(ref. category 5)*												
1st quintile	–3.6880 ***	0.0250	0.4221	–4.0491 ***	0.0174	0.4483	–3.4472 ***	0.0318	0.3209	–4.0446 ***	0.0175	0.3732
2nd quintile	–0.7076	0.4928	0.4121	–1.1693 **	0.3106	0.4370	–0.9499 **	0.3868	0.3045	–1.4859 ***	0.2263	0.3549
3rd quintile	–0.5274	0.5901	0.4459	–0.7979	0.4503	0.4679	–0.8953 **	0.4085	0.3167	–1.3201 ***	0.2671	0.3718
4th quintile	0.6247	1.8676	0.4932	–0.1900	0.8270	0.4872	–0.1961	0.8219	0.3152	–0.4929	0.6109	0.3869
Cultural Taxation												
Teaching	–0.1545	0.8569	0.2556	–0.1594	0.8526	0.2517	–0.1916	0.8256	0.1945	–0.5856 **	0.5568	0.2011
Graduate Supervision	0.0429	1.0439	0.2477	0.2043	1.2266	0.2461	0.3303	1.3914	0.1985	0.3783	1.4597	0.2140
Administrative	0.8530 ***	2.3467	0.2203	0.6278	1.8734	0.2136	1.1569 ***	3.1800	0.1735	0.7774 ***	2.1757	0.1795

	Tenure-track Sample						Complete Sample					
	Model 1 Tenured			Model 2 Promoted to Associate			Model 3 Tenured			Model 4 Promoted to Associate		
	Logit	Exp	Std. Error	Logit	Exp	Std. Error	Logit	Exp	Std. Error	Logit	Exp	Std. Error
Academic Discipline *(ref. other)*												
Science	−0.4385	0.6450	0.4459	−0.2494	0.7793	0.4019	−0.2923	0.7466	0.3390	−0.1399	0.8695	0.3382
Engineering	−0.4673	0.6267	0.5637	0.4524	1.5721	0.5523	−0.0480	0.9531	0.4331	0.0666	1.0689	0.4325
Business	0.4266	1.5321	0.6029	0.9518	2.5903	0.5973	0.2850	1.3298	0.4790	0.6748	1.9637	0.4983
Medicine	−2.6598 ***	0.0700	0.4164	−0.7853 *	0.4560	0.3765	−2.7414 ***	0.0645	0.3080	−0.4452	0.6407	0.3033
Health	−1.3060 *	0.2709	0.5229	−1.1726 *	0.3096	0.4801	−1.1959 **	0.3024	0.3845	−0.9529 *	0.3856	0.3983
Social Science	0.0980	1.1030	0.5239	−0.0086	0.9915	0.4558	0.4566	1.5786	0.4119	0.1793	1.1964	0.3902
Arts	−0.4130	0.6617	0.4270	0.2252	1.2526	0.3817	−0.1678	0.8455	0.3160	0.1482	1.1597	0.3125
Education	−0.2307	0.7940	0.6910	0.1603	1.1738	0.6202	−0.1204	0.8866	0.5285	0.3499	1.4189	0.5276
Law	−0.1827	0.8330	0.5633	−0.2954	0.7442	0.4921	0.2160	1.2411	0.4454	−0.0126	0.9875	0.4362
Immigrant *(ref. non-immigrant)*	0.3583	1.4309	0.2393	0.5322 *	1.7026	0.2363	0.4487 *	1.5662	0.1826	0.3232	1.3816	0.1935
Constant	3.2158 ***	24.9232	0.6349	2.7535 ***	15.6980	0.6359	2.4911 ***	12.0741	0.4278	2.6501 ***	14.1556	0.5067
			n = 1,018			n = 982			n = 1,291			n = 1,252
			Pseudo R^2 = 0.4638			Pseudo R^2 = 0.4346			Pseudo R^2 = 0.4225			Pseudo R^2 = 0.4431
			LR x^2 = 527.38			LR x^2 = 492.40			LR x^2 = 710.02			LR x^2 = 707.19
			Prob > x^2 = 0.0000			Prob > x^2 = 0.0000			Prob > x^2 = 0.0000			Prob > x^2 = 0.0000
			Hosmer-Lemeshow x^2 = 11.15			Hosmer-Lemeshow x^2 = 15.77			Hosmer-Lemeshow x^2 = 24.43			Hosmer-Lemeshow x^2 = 6.55
			Prob > x^2 = 0.1931			Prob > x^2 = 0.0458			Prob > x^2 = 0.0019			Prob > x^2 = 0.5863

With regard to cultural taxation, we observed that faculty who felt their administrative load was higher had 135% higher odds of being tenured. The variables measuring perceptions of teaching load and supervision load of graduate students were not statistically significant. Such findings do not support cultural taxation as a factor affecting tenure. Quite the opposite, it appears that those who did more administrative work were better rewarded. When academic discipline and immigrant status were considered we found that both had an effect on being tenured. Those working in medicine and health had lower odds of being tenured (93% and 73% respectively). This is not surprising, given that these fields often do not offer tenure as an outcome, and many teaching in these faculties are practicing physicians. There was no significant difference between immigrants and non-immigrants in terms of being tenured.

In Model 2, we examined promotion to associate professor. Here we observed that even after controlling for human capital, cultural taxation, academic discipline, and immigrant status, racialized faculty had 50% lower odds of being promoted to associate professor than non-racialized faculty. These differences were also statistically significant. Again, this was not the case for female faculty. As with Model 1, when looking at human capital measures, we saw that having more research grants and refereed articles resulted in higher odds of promotion to associate professor. We also found that years of service also increased the odds. When looking at cultural or identity taxation measures in Model 2, we found that none were statistically significant for promotion. In terms of academic discipline, those working in the field of medicine and health had significantly lower odds of being promoted, compared to other fields. Faculty who identified as immigrants had 70% higher odds of being promoted to associate professor, compared to non-immigrants. As Table 1 shows, almost two thirds of these professors are racialized. We recognize that the other third are from the dominant group.

The models presented so far look only at faculty in tenure-track positions. However, in some Canadian universities tenure and promotion are not paired and in some fields limited-term professors are appointed at higher ranks. Thus, it is worth looking at all faculty members, irrespective of whether or not they are on a tenure track. For this reason, Models 3 and 4 of Table 4 look at the complete sample. Here we see similar results for tenure and promotion to associate professor. Variables have the same general relationships. To test the robustness of our findings we ran 20 additional models (available from the second author, upon request). In our first check we examined the interaction of racialized faculty with female faculty to discern whether being tenured and promoted differs for racialized, female faculty. We did this because research has demonstrated that racialized female faculty face double discrimination and, thus, experience a

unique set of challenges (Henry, 2012; Henry & Tator, 2012; Kobayashi, 2009; Ryu, 2008; Sutherland, 1990; Trower & Bleak, 2004). When this was run in the model the interaction was not statistically significant. Moreover, other variables in the model performed similarly to those reported in Table 4. This was the case for both the full and tenure-track-only samples. Therefore, our study did not find that racialized women experienced greater disadvantage. In our second robustness check, we looked at an interaction between racialized and immigrant faculty. We did this to examine whether tenure and promotion differs for racialized immigrant faculty. Again the interaction was not statistically significant in the tenure-track-only sample. Other variables operated in a similar fashion to models reported above. In a third robustness check, we also examined models with a reduced set of disciplines, looking at STEM (Science, Technology, Mathematics, and Engineering) versus other disciplines. This did not affect the significance of the disadvantage for racialized faculty being tenured but being racialized was no longer significant for promotion to associate professor. In our last robustness check, we examined an interaction between racialized faculty and STEM disciplines. As with other interactions, the term was not significant. We took the findings of the robustness checks to mean that the significance of being racialized had a consistent and direct effect on being tenured and promoted.

Overall, the effects of human capital were robust and the effects of cultural or identity taxation had mixed results. We also concluded that, even after controlling for human capital and cultural taxation as well as academic discipline and immigrant status, racialized faculty have unexplained differences in their odds of being tenured and promoted.

Conclusion

To our knowledge, our study is the first Canadian study to examine tenure and promotion of racialized faculty using large-scale quantitative data. Also, it is the first study to simultaneously examine both explanations of human capital and cultural taxation and the roles they play in the tenure and promotion process for racialized and female faculty. Our results demonstrate that racialized faculty exceed non-racialized faculty in attaining research grants and publishing journal articles. Yet, we see that racialized faculty are not tenured or promoted at the same rate as non-racialized faculty and are, in fact, less likely to be in either situation. We find these differences remain even after controlling for human capital, cultural taxation, and academic discipline. It should be noted that currently there is no national data on refusal rates for tenure (Acker, Webber, & Smyth, 2012). Moreover, there is no easy way to document cases where individuals have left a university position before coming up for tenure, left after being denied tenure, or appealed and eventually received tenure after a refusal. Therefore, it is hard to make a commentary on the rates at which racialized faculty receive tenure.

However, we feel that this actually strengthens our findings and that the case for racialized faculty might be even worse than we portray through our data since we cannot, for example, account for individuals who did not receive tenure and left the university.

Our study finds that human capital measures are important and consistent factors in increasing the odds of academic achievement, but they do not adequately explain disparities in promotion and tenure rates for racialized faculty. This is consistent with the literature from Canada (Nakhaie, 2007) and the US (Perna, 2001a) that illustrates that racial differences for faculty remain even after controlling for human capital. With respect to cultural taxation, this appears to be less of a barrier to tenure than anticipated in existing research in both Canada and the US (Hirshfield & Joseph, 2012; Jackson, 2004; Joseph & Hirshfield, 2011; Menges & Exum, 1983; Misra et al., 2011; Nettles et al., 2000; Odhi- ambo & Charoenpanitkul, 2011; Samble, 2008; Villalpando & Bernal, 2002).

Given the fact that the effect of race remains, even after controlling for human capital, cultural taxation, and other controls, future researchers may want to focus on the role of discrimination in the tenure and promotion process for racialized faculty, which can be difficult to capture through a statistical model. This finding and conclusion is in line with Nakhie (2007). Qualitative studies from Canada demonstrate that one reason racialized faculty feel that they do not receive tenure and promotion at the same rate as non-racialized faculty is due to the discrimination they face (Henry & Tator, 2012; Monture, 2009). In particular, racialized faculty indicate that they faced discrimination through the de- valuation of the research they conduct and career paths they pursue (Henry, 2012; Henry & Tator, 2012; Kobayashi, 2009). Baez (1998) found that racialized faculty in the US felt that their research was not rewarded in the same manner during tenure review because it did not often conform to mainstream research. Others have shown that research conducted by minority scholars in the US is often perceived as less rigorous and prestigious compared to research by other scholars (Boyd, Cintron, & Alexander-Snow, 2010). Yet others, such as Henry and Tator (2012), have established that Eurocentric knowledge is more validated and valued in Canadian academia (Henry & Tator, 2012; Monture, 2009), as can be seen in rewards for publishing in “mainstream” venues and rewarding “mainstream” career tracks, based on publication and grants. Our data and results suggest that there is macro support for these qualitative insights.

With respect to female faculty, we found they publish less than male faculty, and this is consistent with other research in Canada and the US (Bellas & Toutkoushian, 1999; Evans & Bucy, 2010; Hesli & Lee, 2011; Long & Fox, 1995; Nakhaie, 2002; Sax, Hagedom, Arredondo, & Dicrisi III, 2002). This was the case for articles, books, book chapters, and edited books when compared to male faculty. As with other

Canadian research (CAUT, 2008, 2010), we also discovered that female faculty are less likely to be found in tenured positions and as associate professors. However, these differences become non-significant when we control for measures of human capital, cultural taxation, and academic discipline. Therefore, our findings demonstrate that equity efforts may be working for female faculty in Canada but are not having the same effect for racialized faculty.

For this reason, we suggest that it may prove prudent to examine what has changed the trajectory of academic reward for women over the last few decades since those mechanisms are likely ones that can be used to generate a more equitable reward system for racialized faculty. It is clear that human capital recognition and reward is part of the answer, but our analysis also suggests that other factors also need to be pursued, such as advocacy and recognition of the need to continue to use equity policies to overcome disparities.

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Notes

[1] The full survey is available upon request to the second author.
[2] Visible minority status is defined by Statistics Canada according to the Employment Equity Act. The Act refers to visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour" (S.C.1995, c.44). Categories include: Arab, Black, Chinese, Filipino, Japanese, Korean, Latin American, South Asian, Southeast Asian, West Asian, other visible minority, and multiple (mixed) visible minority.
[3] The 2006 census data was used because it was the last comprehensive Canadian census. It has since been replaced with the National Household Survey, which is arguably less accurate in measuring small populations.

CHAPTER 4

GLASS CEILING OR MURKY WATERS: THE GENDERED AND RACIALIZED PATHWAY TO FULL PROFESSORSHIP IN CANADA

Wijesingha, Rochelle and Karen Robson. 2021. “Glass Ceiling or Murky Waters: The Gendered and Racialized Pathway to Full Professorship in Canada.”

ABSTRACT

We examined the predictors of being in the rank of full professor using a sample of faculty representing English Canadian universities. We hypothesized that women have a lower likelihood of achieving full professor status, controlling for a range of characteristics, including length of service, discipline, number of publications and Tri-Council grants. We also explored how race and immigrant status factored into the likelihood of being a full professor. Using a sample of associate and full professors, we found evidence of a strong negative effect of the probability of being a full professor for women, even after controlling for all variables in the model. We also found evidence of a glass ceiling, where a difference in the effect of years of service was found for men and women. Finally, we revealed that racialized immigrant professors had a greater likelihood of being at the rank of full professor and racialized Canadian-born professors had the least.

INTRODUCTION

In October 2018, Dr. Donna Strickland became the first woman to win the Nobel Prize in physics in 55 years and just one of three women to have ever won the award. At the time of the award, Donna Strickland was an associate professor at the University of Waterloo. Her historic win was clouded by critics online wondering why such an accomplished figure was not a full professor. Though Dr. Strickland made it clear that she just had not applied for the rank of full professor, it did cause a stir in the academy and in the wider

community regarding the lack of female representation in senior ranks at the university.[2] Indeed, recent figures from the Canadian Association of University Teachers (Samson and Shen 2018), showed that in 2016, over 70 percent of full professors at Canadian universities were men. Additionally, a recent report from the University of Manitoba found that women faculty, on average, waited a year longer for promotion to full professor, compared to their male counterparts (Schirle 2019).

Joan Acker (1990) in her seminal work discussed how organizations cannot be separated from the people that are in them and that these organizations are characterized by male dominance and the image of the ideal worker as a man. Indeed, institutions such as the University are not gender-neutral spaces. With women now making up around 40 percent of full-time faculty (Samson and Shen 2018), one would reasonably expect more women at the top ranks. However, data on senior leadership in Universities suggest that women are less likely to be in higher positions of leadership at Canadian universities (Universities Canada 2019). Moreover, other studies have shown that the U15 leadership disproportionately consists of white males (Smith and Bray 2019). Critical Race Theorists have long argued that organizations like the university, while operating under the guise of colour blindness, is a highly racialized space "on which racism in constructed, reproduced, and maintained" (Henry and Tator 2010, p. 221). Racialized and Indigenous faculty face severe underrepresentation in senior leadership positions in the university (Universities Canada 2019). There is the possibility that more gender parity is on the

[2] Professor Strickland has since been promoted to the rank of full professor (Booth 2018).

horizon, with women currently occupying mid-career positions, having spent extended time in earning the Ph.D. and moving through early and mid-career. Moreover, universities have increasingly been making formal commitments to equity, diversity and inclusion. In order to explore these trends, we ask "What are the predictors of promotion to full professor?" and "Are the predictors different by gender, immigrant status, and race?"

The Significance of Full Professorship

We acknowledge that academic appointments at universities are varied, but more recently tend to take a very segmented trajectory towards either tenure-track or precarious positions. Precarious labour in Canadian universities – characterized by the various positions that are short-term in nature – represent over half of new appointments in a recent Canadian study (Pasma and Shaker 2018). Of the appointments that are permanent and tenure track, individuals typically start at the rank of assistant professor, move to associate professor within six years, and can move to full professor at a later point in their career. It is this last group – those that achieve full professorship – that is the focus of our paper. Becoming a full professor is the most senior rank in the typical academic trajectory and is an acknowledgement that the individual has achieved wide (often international) recognition of their research contributions. The benefits of this rank are often, but not always, accompanied by pay increases[3], decreased teaching loads, and increased

[3] It should be noted that Professor Strickland did indicate that one of the reasons she did not apply for full professorship was because there was no associated pay increase at her university.

expectations of serving in senior administrative roles or opportunities to serve in esteemed leadership roles.

However, unlike the path from assistant to associate professor, the requirements for full professor are rather murky (June 2016), without any clear set of expectations or goal posts to aim for. And unlike the promotion from assistant to associate, there is no timeline on applying for promotion to full professor. There is no penalty for not doing so, and if an individual is denied promotion, they may reapply –even several times.

Incentives to Full Professorship and Context of Promotion in Canada

Because full professor is the highest academic rank that is typically possible in an individual's career, the title itself comes with a great deal of prestige. Generally, an associate professor must demonstrate excellence in research and teaching, as well as satisfactory service performance. The language around the expectations of an associate professor seeking promotion to full professor varies according to institution, but does have general consistency around the emphasis on excellence in research and teaching. For example, achieving full professor signals that the individual has "a high order of achievement in both scholarship and teaching" (University of Waterloo), "has established a wide reputation in his or her field of interest, to be deeply engaged in scholarly work" (University of Toronto), and "achieved a high degree of intellectual maturity. He or she shall have a good record as a teacher and shall be known widely on the basis of high-quality scholarship" (McMaster University). Furthermore, it is also recognized that this

rank "is not an assured step in the career of a faculty member" (University of British Columbia) and that "some will not attain this rank" (University of Waterloo).

Thus, there is the distinct possibility that an academic will spend extended time in associate positions (perhaps the rest of their careers). However, the application process to apply for this promotion is work-heavy and there are no penalties for not applying. As Buller (n.d.) stated on Stanford University's mid-career mentoring blog, "[t]here are few carrots to becoming a full professor and no sticks." Apart from the obvious status boost in a career, one might assume that such a promotion carries with it a salary increase. This is sometimes true – but not always. In Table 1, we have summarized three general characteristics of policies at the English-speaking U-15 group of universities in Canada: whether or not they have a unionized faculty association, if there are salary ceilings at associate professor, and if there is a salary increase at full professor. As illustrated in Table, less than half of the universities considered here have a salary increment upon promotion to full professor. While every university has some kind of annual increment/progress through the rank, and/or "merit-based" annual exercise, relatively few offer a salary bump at promotion to full professor. Those that do offer a salary bump tend to be unionized, although there are unionized faculty associations where salary increases upon promotion to full do not occur. Relatedly, the monetary incentive to apply for promotion to full professor is often removed where there are no salary ceilings at the rank of associate professor. Around half of the universities considered here (and all of the non-unionized faculty associations) have no salary ceilings at the

rank of full professor, so theoretically, a person can spend the remainder of their career in the rank of associate and still experience annual increases in earnings. Without the "push" to leave the associate level due to a salary ceiling, prestige alone becomes the sole motivating factor upon which to apply for promotion. It also must be recognized that there are often service roles that require individuals at the rank of full professor to perform, so it is possible that this promotion can bring with it additional service obligations with no associated remuneration.

Table 1. English Speaking U15 Universities and Policies Around Salaries and Promotion at Rank of Full Professor

	Unionized	Salary floors/ceiling at associate?	Salary Increase at full professor?
University of Alberta[a]	✓	✓	✓
University of British Columbia[b]	✓	X	X
University of Calgary[c]	✓	✓	✓
Dalhousie University[d]	✓	✓	✓
University of Manitoba[e]	✓	✓	✓
McGill[f]	X	X	✓
McMaster University[g]	X	X	X
University of Ottawa[h]	✓	✓	✓
Queen's University[i]	✓	X	X
University of Saskatchewan[j]	✓	✓	✓
University of Toronto[k]	X	X	X
University of Waterloo[l]	X	X	X
Western[m]	✓	X	X

[a] source: https://aasua.ca/how_we_work/agrmts/key_agmts/university_of_alberta_aasua_renewal_collective_agreement_july_1_2018_june_30_2020/university_aasua_renewal_collective_agreement_july_1_2018_june_30_2020, salary increase contingent on if current salary exceeds salary floor of full professor.

[b] source: https://www.facultyassociation.ubc.ca/assets/media/Faculty-CA-2016-to-2019_V_6July2018.pdf, annual career progress increment stops after 9 years

[c] source: https://www.ucalgary.ca/hr/sites/default/files/teams/239/tucfa-ca.pdf

[d] source: https://immediac.blob.core.windows.net/dfawebsite/images/dfa2017-2020collectiveagreementfinal.pdf

[e] source: https://umanitoba.ca/admin/human_resources/staff_relations/media/UMFA-Agreement-2017-2021-Final.pdf

[f] source: email exchange with Professional and Legal Office

[g] source: https://secretariat.mcmaster.ca/app/uploads/2019/05/Tenure_and_Promotion_Revised-July2017.pdf

[h] source: https://hrdocrh.uottawa.ca/info/en-ca/apuo/policies.html

[I] source: email exchange with QUFA President.

[J] source: http://www.usaskfaculty.ca/wp-content/uploads/2019/11/2017-2022-Collective-Agreement-True-Copy-for-initial-posting.pdf and email exchange with Labour Relations Intern.

[k] source: https://faculty.utoronto.ca/resources/full-professor/

[l] source: https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-77

[m] source: https://www.uwofa.ca/system/files/Collective-Agreements/FCA%202018%20to%202022%20-%20FINAL.pdf, confirmed with a colleague.

Correlates of Becoming a Full Professor

In this next section, we review the literature around what characteristics are associated with becoming a full professor. In particular, we focus on gender, race, immigrant status, academic productivity, length of career, and academic discipline.

Gender

Numerous research studies have shown that women are less likely to be full professors in Canada compared to men (Counter et al. 2020; Doucet, Smith and Durand 2012; Millar and Barker 2020; Nakhaie 2007; Ornstein, Stewart and Drakich 1998; Ornstein, Stewart and Drakich 2007; Qamar et al. 2020; Stewart, Ornstein and Drakich 2009; Wise et al. 2004). Statistics Canada estimates that women account for 28% of full professors in 2016-2017, an increase from 3.4% of full professors in 1970-1971 (Statistics Canada 2017a). In Radiology departments in Canada, females make up less than 36% of total radiologists and make up 20% of full professors (Qamar et al. 2020). Similarly, Wise and colleagues (2004) found that women were less likely to be promoted to full professor in Obstetrics and Gynaecology. Similar results were found in Canadian psychology departments (Carleton, Parkerson and Horswill 2012), orthopedic surgery (Yue and Khosa 2020), and among general surgeons (Gawad et al. 2020). Gawad and colleagues (2020) found that even after controlling for years worked, training as well as research productivity, female surgeons were still less likely to be full professors. Ornstein, Stewart and Drakich (2007) found that even after controlling for institution and discipline, men are promoted to full professor at a faster rate than women.

Race

Research on rank placement of racialized professors in Canada is extremely limited. Past research in Canada (Author 2017) has shown that racialized professors are less likely to be promoted to associate professor or be tenured than their non-racialized colleagues and therefore we would expect similar findings for full professors in Canada. There has been no publicly available data on the number of full professors that are racialized in Canada, which reflect a general lack of race data on a myriad of topics in Canada (Balkissoon 2020). To our knowledge, there is only study that examines rank placement to full professor for racialized faculty in Canada. Nakhaie (2007) found that racialized persons were significantly less likely to be associate professors than non-racialized persons. However, he found no significant differences between racialized and non-racialized persons for the rank of full professors. In contrast, research from the US shows that racial minorities are less likely to be promoted to full professor (Durodoye, Gumpertz, Wilson, Griffith and Ahmad 2020).

Immigrant status

Since the majority of racialized persons in Canada are immigrants, it is also important to examine differences between racialized immigrants and non-racialized immigrants in terms of rank placement. Statistics Canada estimated that in 2011, 65% of Canada's visible minority population were immigrants (Statistics Canada 2011). Similar to research on rank placement of racialized professors, there is a dearth of literature on immigrant status and rank placement (exception is Nakhaie 2007). Nakhaie (2007) found that being

born in Canada was a significant advantage over being an immigrant with regards to being a full professor. Similarly, in the US, Perna (2001) found that non-US citizens are less likely to be full professors.

Academic productivity

Academic productivity – particularly "academic excellence" is a central feature upon which promotion to full professor is assessed. This is usually measured in two ways: publications and research grants (Chen and Ferris 1999; Cora-Bramble, Zhang and Castillo-Page 2010; Perna 2001). Peer-reviewed publications are a core indicator of the productivity of a faculty member as well as an indicator of the larger influence that an individual has in their field. Peer-reviewed articles in particular "represent the perceived 'gold standard' for faculty seeking to advance through the academic ranks" (Gabbidon, Higgins and Martin 2011:166) Different fields of study have different expectations around what is considered a high standard of publication and around the value of writing books over articles. For example, Gabbidon and colleagues (2011) found that in the field of criminology/criminal justice, there is a decline in the value of book publications and an increase in the value of peer-reviewed journal articles. This finding of valuing journal articles over books was also present in other studies (Crawford, Burns and McNamara 2012).

Research grants are an important source of income for Canadian universities (Polster 2007). The granting record of a university is used as a primary measure of how

prestigious the institution is (Polster 2007). Therefore, it is not surprising that research grants are then used as way to evaluate faculty working in Canadian universities. The granting record of a faculty member is used for hiring and promotion (Polster 2007). There is very little research in Canada on research grants and promotion. In a qualitative study on tenure and promotion in Canada, participants indicated that research grants were used as a performance indicator for tenure (Acker and Webber 2017). A US study examining promotion disparities among medical school faculty found that faculty recipients of NIH awards were significantly more likely to be promoted (Fang, Moy and Colburn 2000).

Years of Service

Clearly becoming full professor usually requires a minimum number of years at the rank of associate professor, although few Canadian universities provide a clear timeline on exactly how many years someone should spend in the role of associate (sometimes a salary ceiling in associate would be considered a "push"). Ornstein, Stewart and Drakich (2007) found that from the time of hire, the median time for being promoted to full professor ranged from 7 years to 15.6 years. Nakhaie (2007) found that years of service or work experience was more important than the number of publications for promotion. In the U.S. research has found that years of experience might be the largest factor in promotion to full professor (Long, Allison and McGinnis 1993).

Academic discipline

Academic discipline is important to account for as research shows that promotion differs by discipline. For example, Ornstein, Stewart and Drakich (2007) found that promotion takes longest in nursing and other health professions and shortest in STEM fields. They state that while it is tempting to examine a host of disciplines when looking at disparities in promotion, a simple conceptualization of arts versus science (citing Snow 1959) is adequate for determining differences in promotion. Millar and Barker (2020) found that promotion to full professor in Ontario was more evident in STEM and business fields.

Combinations of traits

While considering the above-mentioned characteristics in isolation, it is important to consider that they often act in combination with one another. For instance, women are less likely to work in STEM disciplines (Canadian Association of University Teachers 2008; Xu 2008) and women are promoted faster in fields such as education, humanities, medicine and fine arts than men (Ornstein, Stewart and Drakich 2007). Millar and Barker (2020) found that gender disparities in promotion to full professor in Ontario was explained in part by academic discipline. However, Nakhaie (2002) found that in terms of publications, those in STEM tend to publish more, with multi-authored articles being the norm (Zeng et al. 2016). Research in the US has shown that women take longer to achieve promotion to full professor than men (Modern Language Association 2009), and as mentioned above, women tend to spend more time in the rank of associate before being promoted to full professor compared to men (Schirle 2019).

Theoretical framework

In this paper, we frame our work within the "glass ceiling" orientation. The phenomenon of the lack of women and racialized minorities in higher positions has been coined the "glass ceiling". The term originated in the 1980s to describe the challenges women experienced in the business sector. The metaphor of the glass ceiling suggests that women (and racialized persons) face barriers that limit the extent to which they can climb the corporate ladder (Boyd 2008). The glass implies that women and racialized persons can see the other side of the "ceiling" but it beyond their reach (Boyd 2008). Acker (2009) attributes the glass ceiling that is experienced by women and racialized persons to a number of practices: the image of the ideal worker as a white man; selective recruitment, hiring and promotion processes; the segregation of jobs by gender and race; and discrimination of women who choose to have children. These practices are characteristic of what Acker (2009) terms "inequality regimes" which are "interrelated practices, processes, actions, and meanings that result in and maintain class, gender and racial inequalities within particular organizations" (p. 201). We argue that the university is another example of an inequality regime where those who are women and racialized face significant disadvantages. In this paper, we can examine if the glass ceiling exists for women and racial minorities in Canadian academia if, controlling for the determinants of promotion, women and minorities are consistently underrepresented. We can also examine this by examining if the predictors of promotion "operate differently" for different groups. For example, are women's years of service "worth less" than men's?

Rationale

This study is important for a few reasons. There exists very little research in Canada on promotion to full professor as much of the literature on academic promotion focuses on tenure or the promotion to associate professor (Crawford, Burns and McNamara 2012). Also, there is no recent Canadian research on rank placement to full professor for racialized persons or immigrants. Moreover, studies on gender and promotion to full professor in Canada, while numerous, focus on a particular geographic location (Millar and Barker 2020), or a singular institution (Doucet, Smith and Durand 2012), or focus on a specific academic discipline (Carleton, Parkerson and Horswill 2012; Counter et al. 2020; Gawad et al. 2020; Qamar et al. 2020; Wise et al. 2004; Yue and Khosa 2020) and when this is not the case, are dated (Nakhaie 2007; Ornstein, Stewart and Drakich 2007; Stewart. Ornstein and Drakich 2009). We aim to fill the gap in the literature by examining the predictors of promotion to full professor and how these vary by gender, race, and immigrant status using a sample of Canadian professors at English-speaking universities.

METHODOLOGY

Data for this study come from the University Tenure, Promotion and Hiring (UTPH) survey, examining perceptions of tenure, hiring and promotion of faculty at eight Canadian universities. The sampling frame was based on publicly available emails listed on university websites. Eight universities were selected representing English Canadian universities from Western Canada, the Prairies, Ontario and Atlantic Canada. Three of the universities represented large institutions, two represented smaller ones, and five were

members of the U15. Those universities from the province of Quebec were excluded for a few reasons: the francophone universities have a different culture from the English Canadian universities, the English universities in Quebec are similar to other institutions included in the sample, and the cost of translation of the survey was prohibitive.

To be included in the survey, the respondents had to be employed at one of the eight Canadian universities as an academic and listed on the departmental websites of their respective university. A total of 15,571 faculty were enlisted to participate in the survey in Fall 2013, with a final response rate of 2,436 faculty (16% response rate). Of those that responded, 1613 completed the entire survey, for a completion rate of 66%. The survey was self-administered online using the survey platform Opinio. Participation was entirely voluntary and the study received ethics clearance through the Research Ethics Boards (REB) at Dalhousie University.

Our survey had a response rate in line with a similar study using the same methodology (see Jones, Weinrib, Metcalfe, Fisher, Rubenson and Snee 2012). However, we felt it was important to check the sample against known population characteristics to examine representativeness. In order to examine the representativeness of the survey sample, we employed available comparative data from Statistics Canada for the survey year (2013/2014). We used the entire survey sample of assistant, associate and full professors in the UTPH survey to examine the representativeness of the survey as seen in Table 2. The percentage of assistant professors in the UTPH survey (22%) is the same as the

number of assistant professors in Canada. Associate professors comprised of 38% of the sample and full professors were 40% of the sample. The comparable numbers from Statistics Canada were similar, with 40% being associate professors and 38% were full professors. A chi-square test of association was employed and indicated that the difference between the UTPH sample and Statistics Canada was not statistically significant ($X^2 = 3.86$, p-value = 0.145). In order to further investigate the representativeness of the survey, we wanted to look at the demographic attributes of the participants in our survey and compare against the same population in Canada. However, there are currently no comparable Statistics Canada data on professors in Canada by rank for racialized professors nor immigrant professors. The only available data from Statistics Canada was on gender by rank. When examining gender differences in rank, among female professors, 25% were assistant professors which is slightly lower than the percentage of female assistant professors in Canada (29%). The number of female associate professors in our sample (44%) were similar to those in Canada (45%). Our sample had a slightly higher percentage of female full professors (31%) than the percentage of female full professors in Canada (27%). A chi-square test of association was employed to examine the differences between the UTPH sample and Statistics Canada, the results showed that the differences were not statistically significant ($X^2 = 5.42$, p-value = 0.067).

Table 2. Comparative Data on Rank from UTPH Survey and Statistics Canada Analyzing Representativeness

	UTPH Survey (n=1,200)	Statistics Canada 2013/2014[a] (n=41,022)
Assistant professor	22%	22%
Associate professor	38%	40%
Full professor	40%	38%
Female Assistant professor	25%	29%
Female Associate professor	44%	45%
Female Full professor	31%	27%

[a] Data source: Statistics Canada (n.d)

The present study was limited to those faculty who are at the rank of associate professor or full professor, have worked at a university for more than five years and did not have missing values on any of the questions utilized in this study (n=799). It was important to limit the study to these particular characteristics to allow for individuals to have had the time to advance into their respective rank. For example, promotion to associate professor is generally given to an individual generally after five years of full-time employment as an assistant professor. Therefore, those who have worked less than five years have not had the opportunity to be placed into the rank of associate professor.

Measures

The outcome measure is a binary variable examining rank placement of being a full or associate professor. In the original survey item, respondents were asked to indicate their current academic position from the following options: sessional (course instructor), limited term appointment (all ranks), instructor, researcher, assistant professor, associate

professor, full professor, other (please specify). The focus of this study will be on the ranks of associate and full professor.

Focal Independent Variables

Gender was coded as female/male. Respondents were asked whether they were male (yes/no) or whether they were female (yes/no). This allowed participants to identify as either gender, neither or both. There were some respondents (n=13) who did not identify with the binary gender labels. However, the sample was too small to allow for any meaningful analysis of this population. Therefore, the 13 non-binary respondents in the sample were excluded from the analysis.

Racialized faculty were measured by Statistics Canada's definition of visible minority status which includes "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour" (Canada 1995). The definition does not include Indigenous people. Respondents were asked to choose their status from the following categories: Arab; Black; Chinese; Filipino; Japanese; Korean; Latin American; South Asian; Southeast Asian; West Asian; other visible minority; multiple (mixed) visible minority; not a visible minority. A separate question asked respondents if they were Indigenous (yes/no). Those who identified as Indigenous (n= 15) were combined with those who were coded as racialized due to the limited sample size of Indigenous faculty in the sample. It should be noted that racialized people are not a homogenous population and considerable variations exists within these populations with relation to culture, beliefs,

socioeconomic status as well as other factors. Moreover, Indigenous people are not a homogenous population either and have a unique and separate experience from racialized people with regards to their history of colonization. However, both racialized people and Indigenous people are underrepresented in terms of university faculty (Henry et al. 2017; Ramos 2012) and senior leaders in universities (Smith and Bray 2019; Universities Canada 2019). Racialized and Indigenous faculty also face documented systemic exclusion and discrimination in the university (see Henry et al., 2017). Therefore the decision was made to combine both groups for the purpose of this analysis.

Immigrant status (yes/no) was measured by asking respondents to indicate if they are currently or ever were a landed immigrant.

Covariates

Academic discipline was measured by asking participants to indicate what faculty they work in. The responses were then aggregated into four categories: STEM (science/computer science/information, engineering/architecture, health sciences/nursing/pharmacology); non-STEM (business/management/public administration, social sciences, arts/humanities, education, law); medicine and dentistry; other (libraries/graduate studies/multiple faculties) (reference category).

Years of service was measured by asking respondents to indicate what year they first started working as a faculty member. The year of the survey was subtracted from the year hired to determine how many years of service.

Publications were measured by asking respondents to estimate how many refereed articles they published since working as a faculty member. Respondents were also asked to indicate how many Tri-Council research grants they won. The number of refereed articles was positively skewed (4.38) and had a high degree of kurtosis (33.42). A natural logarithmic transformation was employed to make the variable more symmetric, similar to the analytic strategy employed by Nakhaie (2007). We limited our analysis to refereed published articles as book authorship is not considered a measure of productivity in all disciplines (Nakhaie 2007, Clemens, Powell, McIlwaine and Okamoto 1995).

Analysis

Our analysis occurs in three stages. In the first stage, we will discuss the characteristics of our variables. We will then consider the bivariate relationship between our dependent and independent variables. In order to not overstate the association between any single covariate and professorial rank, we will then undertake multivariate analysis to control for the effects of all covariates in the model. Due to the categorical nature of the outcome measure (1=full professor, 0=associate professor), logistic regression was employed. We also consider that the effect of covariates on the probability of being a full professor may differ for women (versus men) and racialized persons (versus white people) and we

employ the use of statistical interactions in our model to account for the possibility that the effect of years of service on the probability of being a full professor may be different for men and women, for example.

RESULTS

Descriptives

Descriptive statistics for the subsample are shown in Table 3. Associate professors make up 47% of the sample while full professors make up 53%. Of the associate and full professors in the sample, 43% are female, 13% are racialized and 42% identified as a landed immigrant. Looking at discipline, the majority of the sample are non-STEM (41%), 28% are in STEM disciplines, 16% are in medicine/dentistry and another 16% in other fields. On average, respondents have 1.86 tri-council research grants and have worked as a professor for 16.6 years. The mean number of logged refereed articles is 3.1.

Table 3. Sample Characteristics (n=799), UTPH Survey (2013)

	n	Percent (%)
Rank		
Associate professor	379	47.4
Full professor	420	52.6
Gender		
Female	347	43.4
Male	452	56.6
Racialized		
Yes	107	13.4
No	692	86.6
Landed immigrant		
Yes	339	42.4
No	460	57.6
Academic discipline		
Non-STEM	324	40.6

	n	Percent (%)
STEM	224	28.0
Medicine/Dentistry	124	15.5
Other	127	15.9
Years worked	799	$\bar{x}$ = 16.6 (9.8)
Number of refereed articles (log)	799	$\bar{x}$ = 3.1 (1.29)
Number of tri-council research grants	799	$\bar{x}$ = 1.9 (2.3)

Bivariate Analysis

There were considerably more female associate professors (nearly 54%) in the sample than men (just over 46%), but females only made up 34% of full professors and the difference was statistically significant. While 15% of associate professors were racialized, this corresponded to only 12% of full professors, although this difference was not statistically significant. There was not a significant average difference with regards to immigrants and native-born faculty when it came to rank. As expected, associate professors had worked fewer years (12 years on average) than full professors (21 years), received fewer (x=1.6) Tri-Council research grants compared to full professors (x=2.1), and published fewer articles (mean log articles =2.4 for associated and 3.6 for full).

Table 4. Descriptive Statistics by Rank (n=799)

	Associate Professor Percent (%)	Full Professor Percent (%)	Sig.
Gender			
Female	53.6	34.3	χ^2 = 30.1, p<.001
Male	46.4	65.7	
Racialized			
Yes	15.0	11.9	χ^2 = 1.7, p=.194
No	85.0	88.1	
Landed immigrant			

	Associate Professor Percent (%)	Full Professor Percent (%)	Sig.
Yes	41.4	43.3	$\chi^2 = 0.3$, p=.586
No	58.6	56.7	
Academic discipline			
Non-STEM	25.1	30.7	$\chi^2 = 7.9$, p<.05
STEM	45.4	36.2	
Medicine/dentistry	13.7	17.1	
Other	15.8	16.0	
Years worked	$\bar{x}$ = 11.9 (7.1)	$\bar{x}$ = 20.9 (9.9)	t = -14.5, p<.001
Number of refereed articles (log)	$\bar{x}$ = 2.4 (1.2)	$\bar{x}$ = 3.6 (1.1)	t = -14.3, p<.001
Number of tri-council research grants	$\bar{x}$ = 1.6 (2.1)	$\bar{x}$ = 2.1 (2.4)	t = -3.2, p<.01

Multivariate Analysis

We now introduce multivariate models to control for the effects of academic outputs and discipline while examining the impact of gender and race on promotion to full professor (Table 5). In Model 1 it is evident that after controlling for publications, years worked, and academic discipline, females had significantly lower odds of being a full professor (OR=0.63, 95% CI 0.44-0.91, p<0.05). There were no significant differences between racialized and non-racialized persons as well as immigrants and non-immigrants. Compared to those professors that work in STEM fields, non-STEM professors have significantly higher odds of being a full professor. In contrast, those working in medicine/dentistry have significantly lower odds of being a full professor. As expected, the greater the number of years worked and the number of refereed articles, the higher the odds are of being a full professor. The number of Tri-Council research grants, however, was not statistically significant.

Table 5. Results of the Logistic Regression Analyses Examining Predictors of Promotion to Full Professor (n= 799)

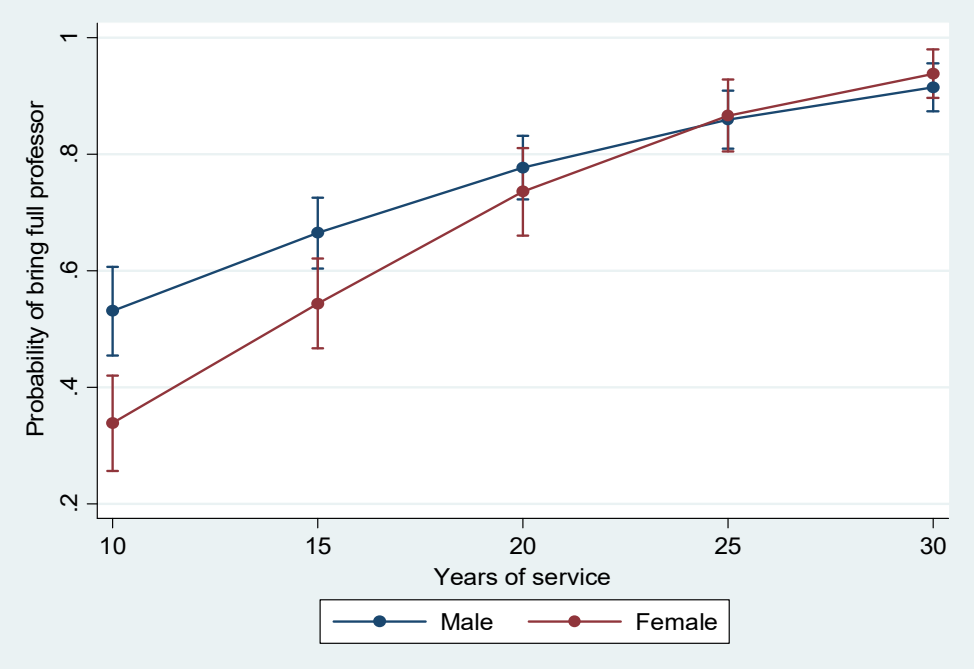
	Model 1: Main Effects Adjusted Odds Ratio, 95% CI	Model 2: Interactions Adjusted Odds Ratio, 95% CI
Gender		
Male	Reference	Reference
Female	0.63 (0.44-0.91), *p*=0.013	0.24 (0.11-0.56), *p*=0.001
Racialized		
No	Reference	Reference
Yes	0.70 (0.40-1.22), *p*=0.208	2.41 (0.71-8.2), *p*=0.158
Landed immigrant		
No	Reference	Reference
Yes	1.19 (0.80-1.77), *p*=0.391	1.41 (0.93-2.16), *p*=0.107
Academic discipline		
STEM	Reference	Reference
Non-STEM	1.98 (1.22-3.21), *p*=0.006	1.86 (1.14-3.05), *p*=0.013
Medicine/dentistry	0.53 (0.29-0.96), *p*=0.037	0.50 (0.27-0.93), *p*=0.027
Other	1.31 (0.73-2.35), *p*=0.371	1.26 (0.70-2.27), *p*=0.449
Years worked	1.15 (1.12-1.18), *p*=0.000	1.12 (1.09-1.15), *p*=0.000
Number of refereed articles (log)	3.08 (2.48-3.83), *p*=0.000	3.04 (2.45-3.78), *p*=0.000
Number of tri-council research grants	1.06 (0.97-1.15), *p*=0.180	1.06 (0.98-1.15), *p*=0.167
Gender x Years worked		1.07 (1.01-1.12), *p*=0.015
Racialized x Immigrant		0.20 (0.05-0.79), *p*=0.022
LR chi^2	386.99	397.90
Prob > chi^2	0.000	0.000
Pseudo R^2	0.350	0.360

In order to examine the potential differential effect of academic outputs on promotion, the interaction between years of service and gender was tested. We were particularly interested in this interaction because conjecture and limited research in the area suggests that women "take longer" to achieve promotion to full. An interaction between race and immigrant status was also introduced because the majority of immigrants in Canada are

racialized (Statistics Canada, 2013) but immigrants also include non-racialized individuals as well.

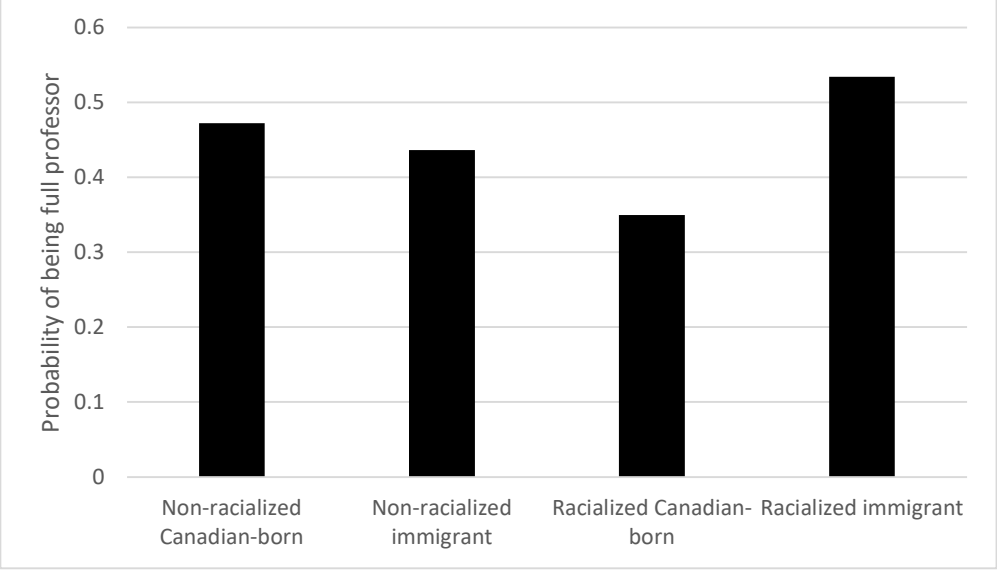
Both interactions were statistically significant. Because it is difficult to "eyeball" interactions, we have graphed both of these to illustrate how differential reward systems exist for different groups, as evidenced by our data. Figure 1 illustrates the predicted probabilities of being a full professor based on the interaction between gender and years worked as a faculty member. It is evident that there is a gender gap which only converges around 25 years, which demonstrates that after controlling for all other variables in the model, women take longer to achieve full professor. This is irrespective of field, publications or grants.

Fig 1. Interaction of Gender and Years of Service on the Probability of Being Full Professor



In Figure 2, we graph the predicted probabilities of being a full professor by the race and immigrant status interaction. It is evident that contrary to what we may have predicted, racialized immigrants were the most likely to be full professors, followed by non-racialized Canadian-born individuals, then non-racialized immigrants. It is also evident, however, that racialized Canadian-born faculty members were the least likely to be full professors. We should also note that our cell sizes for this particular test were small in some cases: There were only 107 racialized people in our total sample, with 88 (82%) being immigrants and 19 (18%) being native born. If we consider only full professors who are racialized, there were 50 in total with 37 (74%) being immigrants and 13 (26%) being native born.

Fig 2. Interaction of Racialization and Immigrant status on the Probability of Being Full Professor



It should be noted that we also tested for interactions between gender and race, gender and academic discipline as well as gender and number of publications, but these were not statistically significant. We did not include these findings in our final models.

DISCUSSION

We began this paper by asking "What are the predictors of promotion to full professor?" and "Are the predictors different by gender, immigrant status, and race?" Our findings have indicated that certainly years worked, publications, and academic discipline are important predictors of individuals being full professors compared to being associate. There is a lack of data and research on full professors in Canada. Much of the extant data is dated or focuses on a particular discipline. Therefore, we aimed to fill this gap in the literature.

Similar to the findings by Nakhaie (2007), our paper found that there were no significant differences in promotion to full professor between racialized and non-racialized faculty after controlling for discipline, grants, publications and years of service. Canadian research on racial differences in promotions to full professor are virtually non-existent. This is perhaps due to the lack of data on the matter. We must acknowledge that the number of racialized full professors in the survey sample (n=50) was not very large and therefore we were not able to look at groups such as Black or Indigenous faculty who face unique challenges in academia. It is pertinent that we collect better data on racial differences in promotion to full professor that is disaggregated to account for the

heterogeneity in the population of people that fall under the category of racialized. For example, in a report on diversity in senior leadership (Universities Canada, 2019), findings showed that while racialized individuals as a whole are underrepresented in senior leadership positions in the academy, some racialized groups fare better than others. Therefore, aggregating individuals into one group that encompasses racialized people hide important within-group distinctions. We need to do better.

To our knowledge, other than Nakhaie (2007) no research in Canada looks at the advancement in rank of immigrant faculty in Canada. Nakhaie (2007) found that those born in Canada were significantly more likely to advance to full professor rank than immigrants. Unlike findings from Canada (Nakhaie 2007) and the U.S. (Perna 2001), we did not find that this was the case in our sample. We found no significant difference between immigrants and Canadian-born faculty after controlling for discipline, grants, publications and years of service. While immigrants to Canada come from a number of different countries, most recent immigrants to Canada are racialized (Statistics Canada 2017b). Therefore, we wanted to know if there was a difference between racialized immigrants and non-racialized immigrants. To our surprise the findings showed that racialized immigrants were the most likely to be full professors. However, racialized Canadian-born were the least likely to be full professors. This was puzzling to us and requires further inquiry, and we must reemphasize that our subsample sizes here are far from ideal. There is the possibility that such individuals are racialized individuals in their fields that originated from high status universities in the U.S. Lachapelle and Burnett

(2018) have recently demonstrated a tendency towards the American origin of faculty at top Canadian universities, favouring foreign-trained candidates over their Canadian-trained counterparts. This is particularly true among the general cohort that would be at the rank of full professor now. However, without much more detailed data, we realize that this is just a speculation.

The statistical significance of gender in our multivariate models indicates that there is a glass ceiling for women. Controlling for the other variables in the model, women were still significantly less likely to be full professors compared to their male counterparts. And when we move on to our second research question, we illustrated that years of service was different by gender – in short, controlling for all other predictors, women had to put in more years of service before promotion to full professor. This finding confirms the general murmurings of past research and popular discussion on the matter we described earlier.

When looking at issues of academic promotion nearly 20 years ago, Canadian sociologist Nakhaie (2002:175) wrote: “it will be of little surprise if future research not only shows little gender gap in the lifetime research output, but also less gap between the sexes in terms of discipline or types of publication” – and he was right. It is not the case that women associate professors are underproducing. In fact, even after controlling for research productivity (among other variables), females professors are still not at par with male professors when it comes to promotion to full professor.

There are several explanations for these findings, all of which are interconnected. The first is that the glass ceiling does exist. Sexism that values the work of male scholars over their female counterparts exists at the overt and subtle levels that contributes to the additional number of years that women "put in" before going up for promotion. However, we also wish to acknowledge that the evidence from Table 1 provided earlier in this paper likely also feeds into this narrative. As Donna Strickland indicated when inundated by the worldwide media about only being at the associate level despite being a Nobel prize winner, sometimes there are just few incentives. The structures of pay scales and promotion across Canadian universities varies widely, and in several cases – without a salary ceiling at associate professor and no pay raise at promotion to full professor – what are the benefits – apart from status?

There is also the issue of file preparation and mentoring. University requirements about what is a promotion file to be considered strong is murky. Many universities use the words 'excellence" repeatedly in their descriptions, but what is excellence? The tenure and promotion documentation for universities varies considerably by university, but none are very specific about the types of questions an associate professor wanting to seek a promotion to full professor would have, such as" How many articles are enough? How many grants are enough? How many citations and in what journals are enough? With a lack of women in leadership roles in universities (as evidenced by the significantly lower levels of female full professors in our sample), it is likely quite difficult for female faculty to be certain of when they are "ready" and the kinds of benchmarks that they are aiming

for. So, while women can technically "break through" the glass ceiling, they must swim through some extremely murky waters to get there.

LIMITATIONS AND CONCLUSIONS

This study is not without limitations. As shown in Table 1, incentives for applying for promotion to full professor (i.e., salary increases) or union status differ by institution. Additionally, expectations around what is required for promotion to full professor also differ by institution and therefore it would have been beneficial to control for the institution of the individual. Moreover, the type of institution has also been found in previous literature (Nakhaie 2007) to be important to control for when looking at promotion to full professor. Such information was not available in our data set.

One popular explanation for the lower rates of promotion to full professor that is often cited in literature is the role of family formation (i.e. marriage, number of children especially young children). This study did not have data on variables related to family formation such as whether or not the individual is married or has young children. However, research in the U.S. has shown that family formation does not account for the lower rate of women promoted to full professor (Wolfinger, Mason and Goulden 2008). In fact, marriage increases the rate of promotion to full professor by 23% and having children had no effect. Similarly, research in Canada (Nakhaie 2007) found that being married and number of children had no significant effect for moving into the full versus associate rank.

While this paper used the quantity of refereed articles as a measure of scholarly output, some would argue that perhaps promotion to full professor is dependent on the "quality" of the publications rather than the quantity. The "quality" of a publication can be hard to measure as the definition of what is "quality" is subjective and differs by discipline and subfield. Additionally, measures of quality such as journal rankings, impact factors or citation counts can be quite flawed. For example, a publication in a journal with a high ranking does not necessarily mean that the publication is going to be influential. Moreover, research from the U.S. has found that quantity of publications may be more important than quality for promotion to full professor (Long, Allison and McGinnis 1993).

Lastly, we are aware of the severe limitations of lumping all racialized persons into a "visible minority" category. A blanket category such as this suggests that the experiences of all racialized persons are uniform, which is certainly not the case. Ideally, we would have investigated the impacts of race with separate categories for Indigenous and Black scholars, alongside other groups. Our case numbers, however, for such an endeavour, were not possible. There were far too few cases (approximately 15 for Indigenous faculty and 11 for Black faculty), particularly when we combined this with the statistical cell counts required for interactions. The lack of cases itself signals an underrepresentation of these groups at all levels of professorship – a finding unto itself. We are hopeful that new Statistics Canada data such as the Survey of Postsecondary Faculty and Researchers that

was just recently released (Statistics Canada 2020), will allow for a better analysis of such questions around the promotion experiences of racialized professors with more detailed breakdown of racial self-identification. This call for disaggregated race data is not one that is limited to this particular study – but a shortcoming that has been noted in the vast majority of Canadian data sets that could otherwise be used to examine issues of racial inequity across various topics and provide concrete evidence for policies that would aim to remedy racial gaps in employment and education.

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CHAPTER 5

CONCLUSION

Using original data from the University, Tenure, Promotion and Hiring (UTPH) Survey, each of the three empirical chapters in this dissertation examines inequities in promotion for faculty working in Canadian universities through different phases of their academic career. This chapter begins by summarizing the main findings from each of the three chapters. This is followed by a discussion of the main themes found across the chapters, a critical examination of institutional responses and concludes by examining the limitations of the current work as well as future directions of research

Summary of findings

Chapter 2 examined the career outcome differences among racialized and non-racialized faculty. It also focused on the differences in perceptions between racialized and non-racialized faculty on the factors that influenced tenure, promotion, administrative and committee appointments, and hiring. Racialized faculty were more likely to perceive tenure and promotion as being based on soft metrics such as personality and collegiality rather than hard metrics like publications or winning grants, with the opposite being true for their perceptions on hiring and administrative appointments. Moreover, racialized faculty were less likely to agree that equity considerations were a factor that affected tenure, promotion, administrative appointments and hiring.

Chapter 3 examined differences in promotion outcomes for early-career faculty. In particular, it looked at disparities in tenure outcomes and promotion to associate professor between racialized and non-racialized faculty as well as between female and male faculty, revealing that women and racialized faculty were less likely to be tenured and less likely to be associate professors. Two competing explanations in previous literature were examined: cultural or identity taxation and human capital. After accounting for human capital, cultural taxation and field of discipline, it was found that racialized faculty were still less likely to be tenured or promoted to associate professor, providing evidence of discrimination in the academic promotion system. However, for female faculty the differences in promotion and tenure outcomes disappeared after controlling for academic discipline, human capital and cultural taxation.

In Chapter 4, disparities in promotion outcomes for mid-career faculty were examined. There were no significant differences in rank advancement to full professor between racialized and non-racialized faculty as well as between immigrant and non-immigrant faculty after accounting for discipline, grants, publications and years of service. However, an interaction between race and immigrant status revealed that racialized immigrants were the most likely to be full professors while racialized Canadian-born were the least likely to be full professors. However, the most striking finding of this chapter was that after controlling for discipline, grants, publications and years of service, women were significantly less likely to be full professors compared to their male counterparts. Moreover, women had to put in more years of service before being promoted to full

professor, as witnessed by the significant interaction term between gender and years of service in the model.

Cohesive themes across the chapters

Examining these papers collectively, it is evident that there are systemic inequalities that exist within universities -- a far cry from the ideal image of the university as a site where equity and social justice prevail. Dua and Bhanji (2017) found that 35 out of the 49 English-speaking universities in Canada had offices dedicated to EDI. Moreover, 37 out of the 49 universities examined had at least one staff member (part-time or full-time) allocated to addressing equity. Universities also tend to make grand public statements about how much their institution values diversity and inclusion. Table 1 shows sample statements of commitment to EDI found on university websites for each of the U15 universities in Canada. Taken as a whole, these statements demonstrate a symbolic gesture that researchers in the sociology of education refer to as *ceremonial compliance*, whereby organizations engage in impression management while avoiding meaningful change and continuing to behave in a 'business as usual' fashion (Pizarro Milian, Davies & Zarifa, 2016).

Table 1. Sample Statements of Commitment to EDI at U15 Universities in Canada

Dalhousie University Source: https://www.dal.ca/dept/hres/equity---inclusion.html	Diversity among Dalhousie's faculty, staff and students contributes to excellence. In our recruitment efforts, hiring practices and day to day interactions, we embrace the principles of equality and fairness.

McGill University Source: https://www.mcgill.ca/equity/	We seek to widen diversity within our student body, our faculty, and our administrative and support staff.
McMaster University Source: https://hr.mcmaster.ca/employees/employment-equity/prospective-employees/	McMaster University is committed to building a diverse and inclusive community, where the rights of all individuals and groups are protected and all members feel safe, valued, empowered and respected for their contributions to the shared purposes of the University: research and education excellence.
Queen's University Source: https://www.queensu.ca/universityrelations/equity	Queen's welcomes and supports students, faculty, and staff from all countries and backgrounds. Diverse perspectives and a wealth of experience strengthens our campus community in myriad ways.
Université de Montreal Source: https://www.umontreal.ca/diversite/	The Université de Montréal considers equity, the enhancement of diversity and the inclusion of people who bear its various markers as necessary conditions for its development and assets in the pursuit of excellence. By focusing on a culture of inclusion, it allows everyone to be recognized in their identity and to make their contribution to the university community. (Translated)
Université Laval Source: https://www.ulaval.ca/en/research/research-units/canada-research-chairs	Université Laval reiterates its unwavering commitment to equity, diversity, and inclusion (EDI). By choosing openness, we are upholding excellence in research and research education.
University of Alberta Source: https://www.ualberta.ca/equity-diversity-inclusivity/index.html	At the University of Alberta we envision and cultivate a community where equity and diversity are fundamental to inclusive excellence in learning, teaching, research, service, and community engagement.
University of British Columbia Source: https://academic.ubc.ca/support-resources/freedom-expression/ubc%E2%80%99s-commitment-equity	We value and celebrate all members of our community and we stand strongly behind advancing equity, diversity and inclusion, inviting people from around the world to study and work at UBC.
University of Calgary Source: https://www.ucalgary.ca/equity-diversity-inclusion	We are committed to an equitable, diverse, and inclusive campus that is accessible to all and free from harassment, bullying, and discrimination.

University of Manitoba Source: https://umanitoba.ca/admin/human_resources/equity/about_us.html	We recognize that Women, Indigenous Peoples, Racialized Members and Person with Disabilities have been historically disadvantaged in the workforce and our goal is to level the playing field for these groups.
University of Ottawa Source: https://www.uottawa.ca/president/strategic-areas/diversity-and-inclusion	The University of Ottawa is committed to ensuring equity, diversity and inclusion in the scholarly and leadership environments of our students, staff, and faculty.
University of Saskatchewan Source: https://wellness.usask.ca/safety/equity-diversity.php	As members of the University of Saskatchewan, we lead the way in role modelling and creating a welcoming and inclusive workplace. We are proud of the diversity of our faculty and staff and we recognize that our university only grows stronger as we better reflect the province and society as a whole. We are committed to diversity and having a workforce that is representative of our community.
University of Toronto Source: https://hrandequity.utoronto.ca/inclusion/	We continue to advance an inclusive, diverse and equitable U of T, where everyone belongs. This is a shared responsibility, which requires us to foster an inclusive community, invest in our people and promote a positive institutional culture.
University of Waterloo Source: https://uwaterloo.ca/research/research-equity-and-inclusion	The University of Waterloo has a strong commitment to increasing equity, diversity, inclusion, and Indigenous initiatives (EDII) in all facets of its operations and to remove barriers to achieving an equitable academic, research and campus environment. This commitment is rooted in one of Waterloo's core human values - we all belong. In our pursuit of excellence, we create conditions for everyone to flourish.
Western University Source: https://www.uwo.ca/equity/diversity/index.html	Our commitment to equity, diversity and inclusion (EDI) supports the University's mandate as a research-intensive institution of higher learning, an employer of choice and a community leader. We believe that the University is enriched by the diversity of our campus community and strengthened by our shared commitment to equity and inclusion.

Ceremonial compliance can also be seen when it comes to hiring, where universities also make equity statements on job advertisements to demonstrate their commitment to EDI. For example, the University of Saskatchewan includes the following statement for all their Canada Research Chair postings: "The University of Saskatchewan is committed to diversity, inclusion and equity in the workplace and encourages applications from members of the four designated equity groups (women, members of a visible minority/racialized group, Indigenous persons, and persons with disabilities) (University of Saskatchewan, 2020)." This type of messaging is not uncommon now and is included in faculty job postings across disciplines and across rank. See Figure 1 and 2 for examples of job postings found on the University Affairs website.

Fig 1. University of British Columbia job posting for an Assistant Professor in the Department of Forest Resources Management

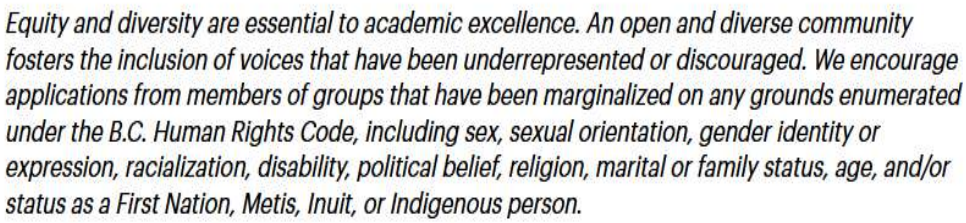

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

Fig 2. University of Toronto job posting for a Director and Professor in Cellular and Biomolecular Research.

Diversity Statement

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

As part of your application, you will be asked to complete a brief Diversity Survey. This survey is voluntary. Any information directly related to you is confidential and cannot be accessed by search committees or human resources staff. Results will be aggregated for institutional planning purposes. For more information, please see http://uoft.me/UP.

Accessibility Statement

The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission.

The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities.

We see that regardless of field of study or job position, grandiose statements about equity and diversity have become the norm. Despite all the institutional policies, performances and practices in place, the chapters in this dissertation demonstrate that there are deeply embedded structural issues within the university that need to be addressed. The findings of this work showed that despite years of employment equity policies in place, racialized faculty are still skeptical of the effectiveness of these policies and performances. This was seen in Chapter 2 when racialized faculty were less likely to agree that equity considerations play a role in hiring, and promotion.

Beyond perceptions, Chapter 3 and 4 provided compelling evidence of the continued racial and gender discrimination faced in academic workplaces. The findings of Chapter 3 suggest that the mechanisms explaining racial inequality and gender inequality for tenure and promotion to associate professor are somewhat different. It is not that female faculty do not face barriers, but that the explanation for contemporary gender inequality here is somewhat different and hinges less on direct discrimination than it does in the case of racialized faculty (though institutional/systemic discrimination is still a factor). In the chapter, controlling for human capital measures accounted for the differences in tenure and promotion to associate professor between men and women. Thus, female faculty in their early career seemed to display lower research productivity. While this study did not have the capacity to study why, the research often points to family formation and household responsibilities. Future research needs to examine if this is indeed the case. If it is the case, it reveals the institutional discrimination that is at play for female faculty. Therefore, such inequalities can only be rectified by structural changes such as accommodations for such things as parental leave, back-to-work transitions, and childcare when tenure and promotion decisions are being undertaken.

However, the same mechanisms are not at play for racialized men, where racial discrimination no doubt plays a greater role (and probably in addition to cultural taxation). This was evident when even after controlling for research productivity, cultural taxation and other factors, racialized faculty still did not receive tenure and promotion to associate professor at the same rate as non-racialized faculty. Furthermore, while this

study did not find a significant relationship between race and gender, perhaps other studies with larger samples need to explore the idea found in countless qualitative studies that racialized women are often subject to a double burden. For example, qualitative studies have shown that racialized female faculty face a number of challenges when teaching such as being publicly challenged by their students and constantly questioned about the knowledgeability on subject matter they teach (Monzó & SooHoo, 2014). As more women enter senior leadership positions in the academy, many have just replaced White men as "gatekeepers" (Daniel, 2019). With regards to White female administrators, Daniel (2019) writes "The racist practices of White women are simply akin to patriarchy in dresses, pantsuits, and pumps." Quantitative studies have also shown the importance of considering intersectionality in EDI efforts. Additionally, Li (2013) compared average earnings of university professors in Canada by race and gender and found that while women faculty as a whole had significantly less average income than their male counterparts, White women faculty had the highest average income amongst women.

In Chapter 4, there was evidence of direct discrimination for female faculty when looking at promotion to full professor. The discrimination women face in the academy is not new and has not improved in every aspect. In fact, a recent study by Momani and colleagues (2019) found that gender pay gaps persist and even widen as women moved up in seniority. Moreover, data from Statistics Canada revealed that a gender pay gap exists in Canada at every university, apart from three (OCAD, Capilano University and University of the Fraser Valley) (Cummings, 2020). The gender pay gap in the academy exists

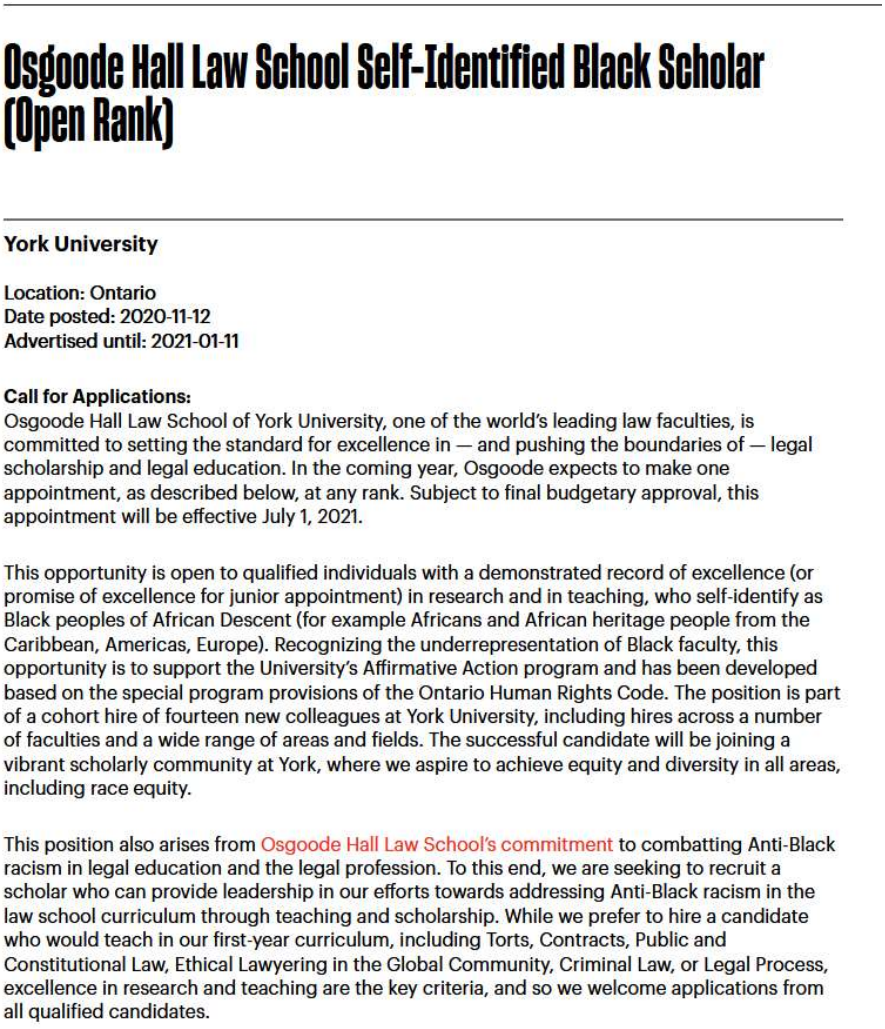
despite actions taken by universities like McMaster University whom in 2015 gained notoriety in the media for giving every female full-time faculty a raise in an attempt to close the gender pay gap. Other universities like the University of Toronto, UBC and the University of Waterloo followed suit. However, critics have argued that these attempts at compensation do not get at the structural processes at play that result in inequities for female faculty (Cummings, 2020). In fact, this is yet another scenario that just goes to show that universities are not at the forefront of equity and diversity but are another site of oppression reflecting the same issues society as a whole face.

Institutional responses

Since the time of data collection for the UTPH survey (2013), universities have begun setting hiring quotas and engaging in targeted hiring attempts for racialized and Indigenous faculty. For example, in June 2020 the Ontario College of Art and Design (OCAD) University announced that they would be hiring five full-time Black faculty members (Redden, 2020). Another example of this targeted approach to hiring can be seen on the Universite Laval's website where they write, "Université Laval is committed to diversity and encourages all qualified individuals, in particular women, members of visible and ethnic minorities, Indigenous persons, and persons with disabilities, to apply to its faculties. Université Laval expects recruitment and nomination processes to respect equity standards, which include prioritizing, in the case of equivalent competence, individuals from underrepresented groups." Thus, we can see that universities are even

stating that they prioritize individuals from underrepresented groups. See Figure 3 for an example of a targeted hire job posting.

Fig 3. Osgoode Hall Law School job posting for a Self-Identified Black Scholar (Open Rank)



Osgoode Hall Law School Self-Identified Black Scholar (Open Rank)

York University

Location: Ontario
Date posted: 2020-11-12
Advertised until: 2021-01-11

Call for Applications:
Osgoode Hall Law School of York University, one of the world's leading law faculties, is committed to setting the standard for excellence in — and pushing the boundaries of — legal scholarship and legal education. In the coming year, Osgoode expects to make one appointment, as described below, at any rank. Subject to final budgetary approval, this appointment will be effective July 1, 2021.

This opportunity is open to qualified individuals with a demonstrated record of excellence (or promise of excellence for junior appointment) in research and in teaching, who self-identify as Black peoples of African Descent (for example Africans and African heritage people from the Caribbean, Americas, Europe). Recognizing the underrepresentation of Black faculty, this opportunity is to support the University's Affirmative Action program and has been developed based on the special program provisions of the Ontario Human Rights Code. The position is part of a cohort hire of fourteen new colleagues at York University, including hires across a number of faculties and a wide range of areas and fields. The successful candidate will be joining a vibrant scholarly community at York, where we aspire to achieve equity and diversity in all areas, including race equity.

This position also arises from Osgoode Hall Law School's commitment to combatting Anti-Black racism in legal education and the legal profession. To this end, we are seeking to recruit a scholar who can provide leadership in our efforts towards addressing Anti-Black racism in the law school curriculum through teaching and scholarship. While we prefer to hire a candidate who would teach in our first-year curriculum, including Torts, Contracts, Public and Constitutional Law, Ethical Lawyering in the Global Community, Criminal Law, or Legal Process, excellence in research and teaching are the key criteria, and so we welcome applications from all qualified candidates.

Therefore, it appears that universities are attempting to do a better job of hiring racialized and Indigenous faculty. However, there is much more work that needs to be done. Hiring racialized faculty does not, however, necessarily equate to universities retaining these

same faculty members. Moreover, the literature points to a "leaky pipeline." The metaphor of the leaky pipeline has been popularly used to describe the phenomena where women "leak" out of the pipeline before reaching senior leadership positions (Ysseldyk et al., 2019). This metaphor has been especially popular in STEM (Polkowska, 2013; Sheltzer & Smith, 2014). Racialized and female faculty are still underrepresented in senior leadership positions. While women occupied 49% of senior leadership positions in Canadian universities, these positions were often lower-rung positions (Universities Canada, 2019). The situation was even more dire for racialized senior leaders, where racialized faculty account for 22% of university faculty but make up 8% of senior leaders in the university (Universities Canada, 2019). This picture becomes even more dreary for racialized women who occupy 0.9% of the U15 presidents' leadership teams (Smith, 2019). It is vital that women, racialized and Indigenous faculty occupy positions at senior levels of the university because they have the lived experiences to provide unique insights and solutions to the difficulties racialized, Indigenous and female faculty and others who occupy spaces in the academy endure. Furthermore, it is important to acknowledge that there is no national data on refusal rates for tenure or promotion outcomes. Thus, it is virtually impossible to know how many individuals have left the university before coming up for tenure or promotion or left the university after being denied tenure or promotion. Therefore, the case for racialized and female faculty might be far worse than what was found in the three chapters.

Universities must also acknowledge that cultural and identity taxation does occur in the university. The idea that racialized faculty are more often asked and feel compelled to do work that is not rewarded is not a new concept. Henry and Tator (1994) discussed the significant burden racialized faculty feel being obliged to mentor and counsel racialized graduate and undergraduate students. Approximately 25 years later, *Nature* (Gewan, 2020) interviewed myself and four racialized faculty to discuss the "cultural tax" placed on racialized individuals highlighting their experiences at different stages of their careers. These experiences include being asked to sit on numerous committees because of their gender or race, and being the "voice" for their community or the voice of racialized people in general. Therefore, acknowledgement of this cultural tax is the first step. The progress must not stop there. Universities then need to incorporate graduate supervision of students, administrative and committee work and added teaching loads into the reward process. While research output is important to observe for promotion and tenure, so are these other things.

The fact that racialized faculty in Chapter 2 were more likely to agree that soft metrics are important for tenure and promotion rather than hard metrics such as publishing and grants indicate a problem. It seems that racialized faculty believe who they know seems to matter more than what their research output is when it comes to tenure and promotion. While some would argue that perception does not equate to reality, qualitative accounts by racialized faculty in academia show how the departmental culture can be divisive and toxic. For example, James and Chapman-Nyaho (2017) found that Indigenous and

racialized faculty who sat on hiring committees observed that who a person knows or their network of friends can at as a barrier to getting a faculty appointment. Kobayashi (2009) in discussing the experiences of racialized women in academia spoke of her own experience of dealing with gossip and strife from White colleagues in the department. While collegiality is important in any profession, there are also significant issues that arise from basing tenure and promotion on soft metrics. One consequence of this would be the exclusion of those individuals who deviate from the norm (AAUP, 2016). This is seen in the many accounts by racialized faculty who indicated that they feel isolated from their colleagues and their department (Henry and Kobayashi, 2017).

Finally, there needs to be more transparency when it comes to tenure and promotion guidelines. Chapter 4 in particular discussed just how vague university guidelines are for tenure and even more so at the rank advancement to full professor, with significant variation between institutions. There is often no clear consensus of what the requirements are for receiving tenure and promotion in the university. Strunk (2020) states that transparency in tenure and promotion guidelines is a form of "equity intervention" because "when we rely instead on hidden networks of knowledge and power, we create a system that will always disadvantage marginalized scholars and advantage scholars from privileged groups". Not being part of the "old boys' club" means that racialized and female faculty do not have the same access to information and networks that would allow them to advance through the ranks in the same way White, male faculty can. A more

transparent process for tenure and promotion would diminish the effects of not belonging to these exclusive "boys" club and level the playing field.

Limitations

The UTPH Survey collected data on faculty in eight English-speaking U-15 institutions in Canada but for the purposes of anonymity did not ask participants in the survey to indicate which institution they came from. However, institutions may differ in their compositions (in several respects) and in their standards for tenure and promotion. Therefore, it would be beneficial to collect information on institutions in future studies to be able to adjust for the potential effects.

While cultural or identity taxation did not play a significant role on tenure and promotion outcomes, it has to be noted that the measures of cultural taxation used measured perceived cultural taxation rather than actual cultural taxation. To state this differently, the measures for cultural taxation in the UTPH survey asked faculty whether their teaching, supervision and administrative load was lower, the same or higher than that of their colleagues. However, in future studies it may be important to ask the question differently, instead asking how many courses the faculty member taught for the year, how many graduate students did they supervise and how many committees did they sit on for the year. Perhaps, this may yield different results.

The late Patricia Monture (2009) discussed her experience going up for tenure and the impact of not having a mentor to help navigate the path to tenure. She described the lack of mentorship for racialized, Indigenous and female faculty as another way the university "covertly" excludes these groups and aids in denying them access to information. Research also shows that racialized graduate students are not mentored the same way as non-racialized graduate students and that there is a relationship between good mentoring and the success of graduate students (Brunsma, Embrick & Shin, 2017). While the UTPH survey did have questions on mentorship, they were only able to assess whether or not an individual had someone mentor them about hiring, tenure and promotion at their university. The questions were not able to speak to the quality of mentorship. Therefore, future studies should examine the role mentorship plays in the tenure and promotion of racialized and female faculty.

One of the most commonly cited mechanisms explaining gender inequality in academia is the idea that women are less "productive" than men. The reasons for the differences in academic productivity are because women still carry more of the weight of the "second shift". Women are more likely to take parental leave, spend time looking after children and ageing family members which can take time away from that spent on research. Therefore, it would have been beneficial for the UTPH Survey to collect data on family formation and women's household responsibilities.

Lastly, a recurring theme in this work was the data gaps that are present not only in this work but in Canadian research as a whole. Significant gaps in data exist for racialized and Indigenous persons that limit the conclusions one can make about the nuanced experiences of this population. In the UTPH survey, there were not sufficient numbers of racialized and Indigenous scholars to do a meaningful analysis on this population, pointing to a larger problem of underrepresentation. Moreover, it is critical that disaggregated data be collected so that policies can be informed appropriately. Using a racialized/non-racialized dichotomy assumes a similar trajectory for all non-white faculty, which is simply not true. In fact, a recent report (Universities Canada, 2019) found that while racialized faculty as a whole are underrepresented in senior leadership, some groups fare better than others (See Table 2 below).

Table 2. Canadian University Senior Leadership by Racialized Groups (n=93)

	Percentage							
	Total Racialized Population	Arab or West Asian	Black	Chinese	Japanese	South Asian	Mixed Visible Minority	Other[7]
Senior university leaders[1]	**8.3**	**0.8**	**0.8**	**1.4**	**0.5**	**2.9**	**0.5**	**1.4**
Full-time faculty[2]	20.9	3.9	1.9	5.1	0.6	4.7	0.2	N/A
Doctorate holders[3]	30.5	6.6	3.0	9.7	0.5	6.7	0.3	N/A
Graduate students[4]	40.1	7.1	6.1	N/A	N/A	8.4	4.0	N/A
Undergraduate students[5]	40.0	N/A	6.0	12.0	N/A	8.0	N/A	N/A
General population[6]	22.3	2.3	3.5	4.6	0.3	5.6	0.7	N/A

Notes:

[1] Universities Canada EDI Survey

[2] Statistics Canada, Census 2016

[3] Statistics Canada, Census 2016 data on highest educational attainment - earned doctorates

[4] Canadian Association for Graduate Studies, Canadian Graduate and Professional Student Survey, 2016

[5] Canadian University Survey Consortium, 2018

[6] Statistics Canada, Census 2016

[7] Comparable data not available due to differences in definition of "other" racialized category

Therefore, it is not unlikely that the same is true for racialized faculty in the university, where some groups tend to be better represented than others. However, without adequate data we can not know if this is actually the case. A recent report by the Canadian Statistics Advisory Council (2020) echoed this sentiment revealing that gaps in data for racialized and Indigenous people is a critical priority area that needs to be addressed.

So where do we go from here? In 2012, I met my academic hero, Dr. Frances Henry, at a conference where I heard her speak. What she said then resonates with me to this day. Speaking to a large crowd, Dr. Henry said she's been writing and talking about the same issues of injustice for 40 years and they are still ever present even today. She is right. We have to make progress to ensure that another 40 years do not go by with the same narrative.

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