A DESCRIPTIVE STUDY OF RESEARCH DEVELOPMENT IN CANADIAN RESEARCH INSTITUTIONS

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ABSTRACT

Research development, also known in Canada as research facilitation, is a strategic approach used by research institutions globally to enhance research capacity and competitiveness. However, there is an absence of literature describing how the function is structured and implemented in the Canadian context. This descriptive study contributes some of the first empirical findings into the demographics, practice settings, and professional activities of Canadian research development practitioners. A survey was administered to self-identified practitioners affiliated with the two largest professional associations of research management and administration in Canada. Findings show that, similar to the United States, research development is a well-developed function at Canadian research institutions as well as a stable and mature profession. Practitioners exhibit a homogeneous demographic profile, reflective of current trends, and many work in both official languages. The prevalence of postdoctoral education suggests an alternative academic career path. The work performed is largely developmental, spanning the areas of grant development, research communications, research collaborations, development of researchers, and strategic research advancement, along with some research administrative functions. Regardless of research intensity, there is a common set of services offered across institutions, and the most research-intensive tend to implement both centralized and devolved service models. This study serves as an initial step in developing a comprehensive understanding of Canadian research development practices, laying a foundation for further investigations.

INTRODUCTION

Research development (RD), also known as research facilitation, is a strategic approach used by postsecondary research institutions around the world to enhance research capacity (Marlin, 2009). As early as the 1960s, the two terms were used interchangeably to refer to faculty-held research facilitation roles and developmental programs designed to stimulate research activity (Batey, 1985; McArt, 1987). Later, a professionalization shift occurred, which strengthened with the establishment of the National Organization of Research Development Professionals (NORDP) in 2010 (Levin, 2011). The grassroots organization has played a pivotal role in shaping our collective understanding of RD, offering a widely accepted definition centred on providing strategic capacity building support enhancing research excellence and competitiveness, and delineating its principal activity areas (NORDP, n.d.; "Research Development", 2021).

The current body of empirical and grey literature on RD primarily stems from the United States. Yet, it is imperative to understand how RD is conceptualized and performed elsewhere given the variations in national research funding contexts. While RD activities are certainly carried out in other parts of the world, the term itself is not universally adopted and its function is not as distinctly delineated from other research support functions as it is in the U.S. Rather, RD activities are usually subsumed within the broader umbrella of research management and administration (Green & Langley, 2009; Derrick & Nickson, 2014; Virágh et al., 2019), which has made drawing meaningful comparisons and insights from the literature challenging. Another reason why RD as a sub-function and profession warrants further investigation comes from the latest international

Research Administration as a Profession (RAAAP) Survey, where RD was identified as one of the preferred professional identities of research administrators and managers in Canada, the United States, the United Kingdom and other parts of Europe, Oceania, as well as other parts of the world (Kerridge, 2023).

In Canada, the emergence of university grant research facilitators can be traced back to the late 1990s. During this period, substantial investments in federal research funding resulted in enhanced capacity building and diversification in academic research support structures, programs, and personnel (Zornes, 2023). The current state of literature lacks a synthesized or comprehensive picture of the diverse ways in which RD is structured, implemented, and by whom. What we do know is that 366 research support professionals or approximately one-third of the membership of the Canadian Association of Research Administrators (CARA) identified grant facilitation as one of their areas of interest or work (S. Lampson, personal communication, December 11, 2023), making RD a prevalent function at Canadian research institutions.

While grant facilitation has been generally seen as the cornerstone of RD, institutions also use other innovative developmental strategies to enhance research capacity, maintain competitiveness, and keep pace with an ever-changing research landscape. In 2013, a group of devolved research facilitators at the University of Saskatchewan in Canada defined their role as "promoting a vibrant culture of research by supporting researchers, colleges and schools, and the institution to achieve funding success and research impact" (Watts et al., 2013). Through an analysis of their job profiles, they devised a research facilitation framework that delineates four key areas of work: Research Funding, Collaborations, Profile Building, and Strategic Planning. NORDP similarly identifies four core areas of RD work: Proposal Development, Enhancement of Collaboration and Team Science, Communication of Research and Research Opportunities, and Strategic Research Advancement (NORDP, n.d.). The similar categorization of work in the two countries suggests a shared understanding of RD. Even so, Eck and Roney (2023) point out that understanding RD can be challenging, as not all areas are ubiquitously performed, and the practice evolves to address new demands arising from adapting to the dynamic nature of research.

One related area, emerging in Canada but well-established in the U.K., is researcher development—a function that supports the personal, professional, and career development of practicing and aspiring researchers (Evans, 2011). Research growth at U.K. universities is supported by focusing on the researcher and their acquisition of additional skill sets valuable for a career in research (Vitae, 2010), using modes such as career mentorship and coaching, professional development workshops, and other instructional and training activities (Daley et al., 2017). While research development stems from the administration field, researcher development arises from a human resources perspective (Exner, 2019). Despite their distinct origins and scholarly foundations, both functions aim to develop and strengthen research capacity, and the terms are occasionally discussed together (Monk, 2021; Loi, 2022; Kerridge, 2023).

Recognizing the complex and multifaceted nature of RD, marked by diverse terminologies, position titles, organizational structures, and foci, unpacking this messiness can provide a clearer understanding of what this strategic function entails, thereby informing decisions around requirements and expectations for the role, training plans, and resource allocation. Understanding how RD is conducted in the Canadian context also lays a knowledge base for institutions to benchmark their practices and helps in the design of effective institution-specific research support strategies. On a broader level, it allows for cross-cultural validation of concepts and practices identified in other countries, notably the U.S., and potentially identifies unique practices not found elsewhere.

In this study, we empirically examine RD within the Canadian academic context. Specifically, we aim to provide insights into the demographic profile of RD practitioners, where they work across various practice settings, and the professional activities they perform.

METHODOLOGY

We developed an online survey aimed at Canadian RD professionals, drawing inspiration from existing U.S. studies outlining the practice, including Ross (2017), Eck et al. (2020), and Preuss et al. (2020), as well as

literature on researcher development. We also applied our experience as Canadian RD practitioners to tailor the survey to the Canadian context. The resultant 28-question survey was structured into three sections: demographics, practice settings, and professional activities. The survey included 37 distinct professional activities, categorized into five areas of RD work: grant development, research communications, research collaborations, development of researchers, and strategic research advancement.

Most multiple-choice questions included an "Other" option, allowing for open-ended responses. The survey instrument is accessible on Zenodo (Clark & Sharma, 2023). Test participants provided feedback on the instrument to ensure its clarity and completeness. The study received approval from the University of Saskatchewan Research Ethics Board (Beh-REB# 2997).

In early 2022, survey invitations were sent in English and French to the listservs of the two largest research management and administration organizations in Canada, CARA and the Association des administratrices et administrateurs de recherche universitaire du Québec (ADARUQ). The sample was self-selected, with survey recipients asked to self-identify as having a RD or research facilitation role. An in-depth description of RD ("Research Development", 2021) was also provided. The survey required an average completion time of nine minutes. Incomplete surveys and those from respondents stating 0% RD-related work functions in a survey question were excluded from the 129 survey responses received. This provided 121 usable surveys. The analysis involved descriptive and inferential statistics (independent t-test, Pearson chi-square) using SPSS. Based on best estimates, considering a population of 440 (or one-third) of CARA and ADARUQ members engaged in grant facilitation, our sample size would ensure representativeness based on a 28% response rate and allow for analysis with a 95% confidence level and a margin of error of 8%.

RESULTS

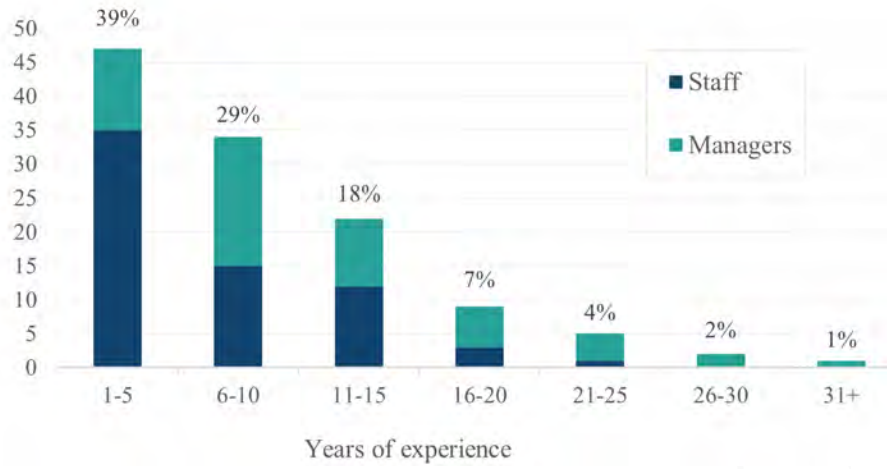
Demographic Profile

To understand who Canadian RD practitioners are, respondents were asked about demographic characteristics, including age, gender, identity, and education. Ensuring a diverse sample, respondents were based at research institutions in all 10 provinces, as well as Yukon Territory. Respondents identified using she/her (81%) and he/him pronouns (19%) and most fell within the age brackets of 30-39 (27%), 40-49 (40%) and 50-59 (26%). A majority (76%) did not identify as part of an underrepresented group, i.e. visible minorities or racialized groups, Indigenous Peoples, persons with disabilities, or members of the 2SLGBTQIA+ community. Most respondents held postgraduate degrees, including master's degrees (38%) or doctorates (29%), with 19% reporting postdoctoral training. Given Canada's bilingual status with English and French as official languages, we queried respondents about the languages they used at work: 79% reported using only English, 2% used only French, and 20% used both languages. Among these bilingual respondents, the majority worked in Quebec and Ontario.

Respondents were also asked about their position, institution, and years of experience. They included operational-level staff positions (55%), with diverse title descriptors such as officer, facilitator, coordinator, advisor, and specialist, and managerial-level positions (45%), including roles such as director, manager, and lead. Notably, the term "research development" appeared in 16% of all job titles. There was no statistically significant difference in gendered pronouns used between the operational and managerial levels.

Figure 1 shows the distribution of years of experience in RD. On average, respondents reported 9 years of work experience, but with a notable spread (SD=7). Early career professionals (1-5 years) made up 39% of the sample, mid-careers (6-15 years) 47%, and established career professionals (more than 15 years) 14%. Managers' experience averaged 11.7 years (SD=7.7), statistically significantly more than staff who averaged 6.7 years (SD=5.4), $t(119)=4.15$, $p<.0001$. The manager-to-staff ratio rose with increasing experience suggesting a career progression. In terms of professional mobility, on average respondents have held 2.5 RD positions (SD=1.5) in their careers within 1.6 institutions (SD=0.9).

Figure 1
Distribution of Respondents' Years of RD Experience.



Note. Work experience averages 9 years, but experience levels vary widely (SD=7 years) and a sizable proportion (47%) falls within the mid-career range (6 to 15 years). Managers have notably more experience than staff, suggestive of a career progression.

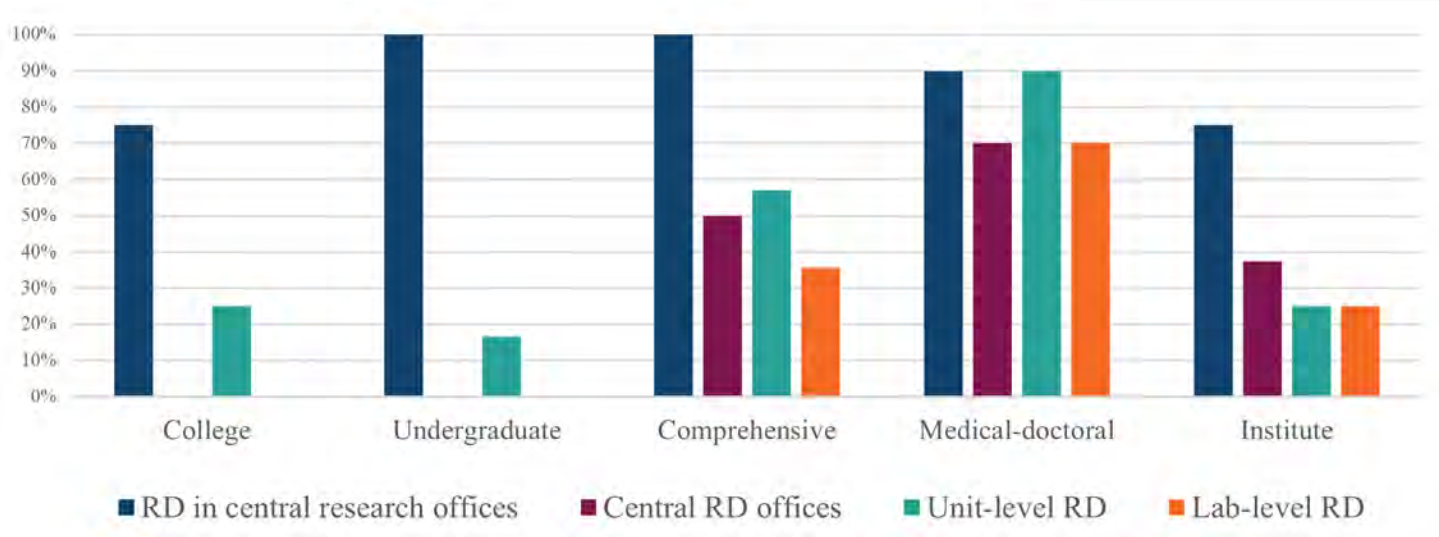
Practice Settings

The next set of questions asked about where RD practitioners work, in terms of the type of institution and RD service model. Respondents were employed across all types of research institutions commonly found in Canada: comprehensive universities, which have significant research activity (34%), medical-doctoral universities, the most research-intensive (31%), specialized research institutes (12%), community or technical colleges (11%), primarily undergraduate universities (10%), and health authorities (3%). This latter category emerged through the "Other" text box, but numbers were too few to draw meaningful insights. No respondents identified as private sector consultants.

Within their respective institutions, respondents worked within three different RD service models: in central research offices (62%), at the academic unit-level (28%), and in central RD offices (14%). None said they worked in a fourth option, the lab-level. Two respondents indicated that they worked in a hybrid central/unit-level setting. For analysis purposes, we included them in the unit-level category. When examining the prevalence of staff and managers in terms of the service model or centralized/devolved location they work in, no significant differences were observed.

In addition to exploring where practitioners worked, the survey explored more broadly the RD service models present at their institutions: the central research office, central RD office, and devolved unit- and lab-level RD. The risk of overrepresentation was mitigated by only using the responses of individuals who disclosed the name of their institution and excluding duplicate entries. Thus, Figure 2 shows data from 42 distinct research institutions. Of these, 90% delivered RD services through their central research office and 40% had a dedicated central RD office. The latter were the more research-intensive universities and research institutes. Yet, 38% of research institutions had both these types of centralized RD models. Devolved models were also present. Unit-level RD existed at half of the 42 institutions, mostly at research-intensive institutions, but also in some colleges and undergraduate universities. Furthermore, 45% of institutions had both centralized and devolved RD models. Lastly, lab-level RD, of which personnel are usually funded through grants, was found at one third of institutions but only at the more research-intensive ones. All but two of the 14 research-intensive institutions had all four types of RD service models.

Figure 2
Prevalence of RD Service Models at Different Research Institutions

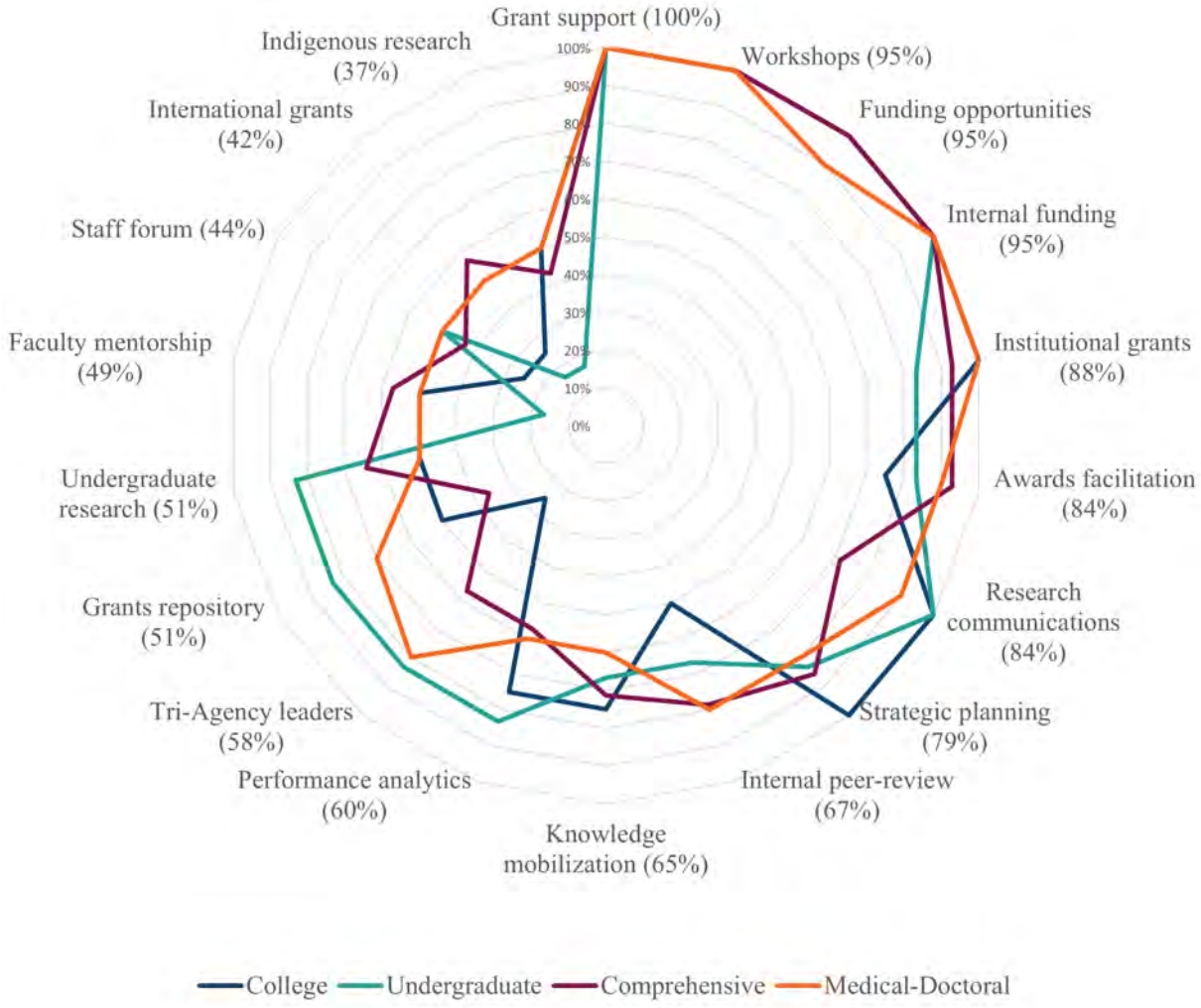


Note. Research intensive institutions have a greater number of RD service models and thus more distributed RD services.

Professional Activities

The final set of questions asked about what RD practitioners do. First, respondents were asked about the RD services available at their institutions. Figure 3 compares RD service profiles across the set of 42 distinct post-secondary institutions, highlighting their prevalence. Regardless of research intensity, these institutions exhibit similar offerings. Notably, 14 services are provided by more than half of all institutions, with the most widespread offerings being grant development support to researchers (100%), grant workshops and information sessions (95%), dissemination of funding opportunities (95%), internal grant programs (95%), awards facilitation (84%), research communications (84%), and strategic planning (79%). The less prevalent services include faculty mentorship programs (49%), RD staff forums (44%), and the facilitation of international (42%) and Indigenous research (37%).

Figure 3
Profiles of RD Services Available at Different Research Institutions



Note. Irrespective of research intensity, these institutions provide many of the same RD services.

Respondents were then asked to identify the RD activities they personally engage in from a selection of 37 activities categorized within five areas of RD work. Open responses did not yield any additional work activities beyond the options provided. Table 1 shows the frequency of activities undertaken by respondents. Participants selected between one- and two-thirds of all proposed activities (M=17.9, SD=7.9), indicating a moderate level of job diversity or scope. Underlining the fundamental role of grant-related tasks within the RD function, five of the top 10 most frequently performed work activities fell within the grant development category, with editing and providing feedback on grants being the most prevalent (86%). Conversely, scientific writing was the least performed activity (12%). However, the writing of non-scientific content, such as summaries and knowledge translation prose, was a relatively common activity (48%).

Table 1
Prevalence of Respondents' Performed RD Activities

Activity	RD Area	%
Editing and providing feedback	GD	86%
Draft or coordinate letters of support	GD	74%
Inform researchers on emerging research-related issues	DR	72%
Troubleshoot with funding agencies	GD	70%
Submission support	GD	70%
Analyse reviewer feedback with unsuccessful applicants	GD	69%
Review for aspects related to institutional compliance	GD	69%
Facilitate introductions and research connections	FC	66%
Conduct grant workshops and information sessions	RC	64%
Advise leadership on opportunities and challenges	SA	64%
Advise on cash and in-kind contributions	GD	63%
Find and communicate funding opportunities	RC	62%
Develop budgets and budget justifications	GD	60%
Reviewing CVs	GD	59%
Report on research performance and activity	RC	55%
Suggest potential co-investigators or collaborators	GD	53%
Communicate and celebrate awards and funding success	RC	51%
Participate in institutional strategic planning	SA	50%
Implement strategic initiatives reflecting institutional priorities	SA	49%
Writing of non-scientific content	GD	48%
Project management and team coordination	GD	47%
Promote institutional priorities to the research community	SA	45%
Intelligence gathering and performance analyses	SA	44%
Research training support of new research skills	DR	43%
Mentorship support to early career researchers or other stages	DR	39%
Develop strategies, databases, and tools that promote collaboration	FC	37%
Liaise with agencies on issues impacting the research community	SA	36%
Convene and coordinate groups	FC	36%
Support knowledge mobilization activities	RC	34%
Write or promote research success stories	RC	31%
Serve as institutional representative and facilitate partnerships	SA	31%
Professional development support to trainee researchers	DR	28%
Develop career award nominations	DR	25%
Promote career advancement opportunities	DR	18%
Create or update researcher profiles and websites	RC	17%
Develop research marketing products	RC	13%
Writing of scientific content	GD	12%

GD: Grant Development, FC: Facilitating Collaborations, RC: Research Communications, DR: Development of Researchers, SA: Strategic Advancement

When we classified these activities within each of the 5 RD areas, the majority of respondents (91%) reported performing one or more grant development activities. Notably, only two respondents exclusively engaged in activities listed under the grant development area. Less, but still considerable numbers reported working in the other areas of research communication (82%), research collaboration (75%), development of researchers (83%), and strategic advancement (83%). Highlighting the multifaceted nature of their roles, most (77%) reported involvement in RD activities across at least four of the five areas.

Table 2 highlights statistically significant differences in RD activities between staff and managers. Notably, managers demonstrated a higher prevalence in performing these activities, and they performed more of the 37 activities listed (M=20.6, SD=8.2) than staff (M=16.0, SD=7.0), t(118)=3.3, p<.001.

Table 2
Differences in the Prevalence of RD Activities Performed by Staff and Managers

Activity	Staff	Managers	p value
Grant Development			
Develop budgets and budget justifications	49%	69%	.03
Suggest potential co-investigators or collaborators	39%	65%	.004
Writing of non-scientific content	36%	57%	.02
Project management and team coordination	34%	56%	.02
Research Communications			
Report on research performance and activity	46%	67%	.02
Communicate and celebrate awards and funding success	42%	63%	.02
Write or promote research success stories	24%	41%	.05
Research Collaborations			
Facilitate introductions and connections b/w researchers	54%	81%	<.001
Convene and coordinate interest groups and gatherings	21%	54%	<.001
Develop strategies, databases, and tools that promote collaboration	24%	54%	<.001
Development of Researchers			
Promote career advancement opportunities	12%	26%	.05
Develop career award nominations	18%	33%	.05
Strategic Research Advancement			
Participate in institutional strategic planning	31%	72%	<.001
Implement strategic initiatives reflecting institutional priorities	30%	72%	<.001
Serve as institutional representative and facilitate partnerships	13%	52%	<.001
Promote institutional priorities to the research community	33%	59%	.004
Intelligence gathering and performance analyses	40%	48%	.004
Liaise with agencies on issues impacting the research community	25%	50%	.005

It was not possible to determine how respondents' work activities differed across institutions as frequency counts were often too low. However, no noticeable difference was observed in the total number of RD activities (M=16-20) between these types of institutions. Statistical differences were present between respondents from central research offices and academic units for some RD activities (Table 3). Overall, respondents working at the unit-level engaged in more RD activities (M=20.6, SD=7.6) than those working in central research offices (M=16.7, SD=7.7), t(105)=2.42, p=.02, with those from central RD offices in between (M=18, SD=9.4).

Table 3
Differences in the Prevalence of RD Activities Performed in Two Different Service Models

Activity	Central Research Office	Unit-level	p value
Grant Development			
Analyse reviewer feedback with unsuccessful applicants	59%	79%	.04
Suggest potential co-investigators or collaborators	44%	65%	.04
Writing of non-scientific content	36%	59%	.03
Research Communications			
Report on research performance and activity	49%	71%	.04
Development of Researchers			
Promote career advancement opportunities	12%	29%	.03
Develop career award nominations	16%	41%	.006
Mentorship support to early career researchers or other stages	32%	59%	.008
Strategic Research Advancement			
Liaise with agencies on issues impacting the research community	44%	26%	.02

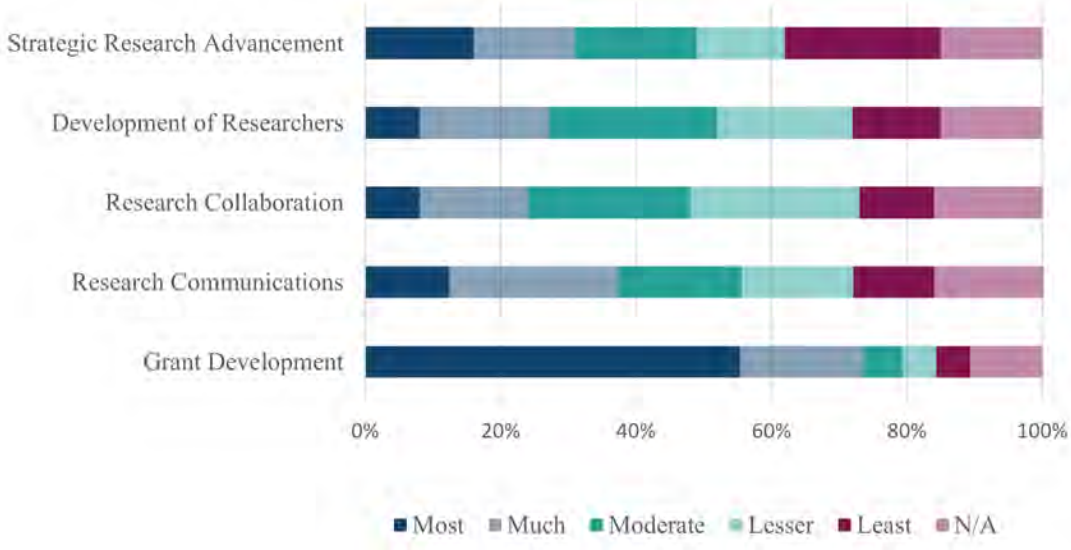
When asked about the time spent overall on RD, the median time was 75%, with a quarter of respondents indicating they spent the majority of their time (95%-100%) doing RD-type work. These individuals were largely those working in central RD offices and academic units. At the other end of the spectrum, a small proportion (7%) indicated spending less than 25% of their time on RD. These individuals worked in a central research office. Figure 4 shows the different proportions of time spent performing RD-type work across these various practice settings.

Figure 4
Proportion of Time Spent on RD-type Work in Different Service Models

Note. Respondents employed in central RD offices and in academic units primarily allocate their time to RD-type work, while those in central research offices spend less time on the function.

Probing further, we asked participants to rank the 5 RD activity areas in terms of the time spent in each sector (Figure 5). Grant development emerged as the most time-intensive category. The other four categories—strategic research advancement, development of researchers, facilitating research collaborations, and research communications—took up less time but proportions were comparable between them. More staff reported grant development as the most time-consuming area of RD work than managers, X^2 (1, N= 121) = 13.27, p<.001), while managers indicated that strategic research advancement was the most time-consuming area, X^2 (1, N=121) = 14.29, p<.001).

Figure 5
Prevalence of Respondents Ranking Their Time Spent on Different RD Activity Areas



Note. Grant development takes up the majority of respondents' time, but they also engage in various other types of RD activities.

When respondents were queried about the type of grants they predominantly support, 35% identified as generalists—offering support for grants of all types. The other two-thirds comprised specialists, with a focus on grants in the social sciences (20%), health sciences (19%), and natural sciences (16%)—the three primary funding areas of the federal Tri-Agency granting councils, as well as institutional (7%) and international (2%) grants. Nine percent of respondents did not support any grants.

Asked how many researchers they support in a typical year, the majority (45%) reported less than 50 researchers. A quarter of respondents supported a range of 50-100 researchers, while 17% indicated supporting 100-200 researchers. Notably, 12% reported supporting more than 200 researchers, and this group exclusively comprised respondents from the more research-intensive medical-doctoral and comprehensive universities. The type of RD office, whether central or devolved, had no discernible influence on the number of researchers one supported.

Lastly, asked about the overall nature of their work, 21% reported performing only RD-type work. For the remaining 79% who reported engaging in non-RD type work, most (84%) reported involvement in administering programs, policies, or services; 45% engaged in staff supervision, of which two-thirds were managers; and others reported having research (15%) and teaching (7%) responsibilities.

DISCUSSION

Who are Canadian RD professionals?

Demographically, RD professionals are predominantly female, in their 40s, and hold an advanced degree. This mirrors trends seen in the U.S. (Preuss et al., 2018, 2020; Eck et al., 2020) as well as more broadly in research management and administration in Canada and the rest of the world (Oliveira et al., 2023). The male gender is starkly underrepresented in this workforce in a ratio of 1:4. Representation in RD from visible minorities, Indigenous Peoples, the 2SLGBTQIA+ community, and persons with disabilities appears to align with Statistics Canada data of the general population, although demographic alignment with the academic population they support is unclear. Nevertheless, the homogeneity observed in the RD field raises concerns about the potential limitations on innovation within a practice that plays a strategic advisory role to researchers and institutions. This lack of diversity could impede the breadth of perspectives and creative solutions necessary to foster innovation in developmental supports.

The survey inquired about postdoctoral education drawing from our observations and echoed by Acker et al. (2019). Despite the fact that it is not a prerequisite for RD professionals (Preuss et al., 2018), one-fifth of respondents did have postdoctoral research training. While a career in research development would likely have not been the initial plan, practical considerations such as job security and flexibility, and the opportunity to remain engaged in academic research could explain the appeal of this alternative career for individuals with advanced scientific training (Acker et al., 2019; Poli et al., 2023).

Reflecting the linguistic diversity of Canadian research institutions as well as the bilingual nature of federal funding agencies, one-fifth of respondents are using both official languages at work. This bilingual proficiency can be a valuable asset for expanding research initiatives on a broader scale, across the country and globally.

As expected, the terms “facilitator” or “facilitation” frequently appeared in respondents’ job titles. Conversely, in the U.S. these terms are not commonly used or absent from studies investigating the RD profession (Preuss et al., 2018, 2020). As for the term “research development”, its appearance in several respondents’ job titles suggests a growing adoption within professional terminology in Canada, possibly owing to the influence of NORDP. Although in Quebec, “développement de la recherche” is a term commonly used.

Findings regarding the length of RD practice suggest a stable and mature profession as indicated by a notable retention of highly qualified personnel, a promotion pathway to management, and alignment with the professionalization of Canadian RD developing around the late 1990s. The distribution in years of experience

is remarkably similar to that seen in the 2017 NORDP member survey, although the surveys were performed five years apart (Preuss et al., 2020).

Where do Canadian RD professionals work?

The institutions where RD practitioners are found are similar to those listed in the RAAAP survey relating to Canadian research administrators and managers (Zornes, 2023), with the majority being employed in universities. Health authorities, a category overlooked in our study, merit further investigation as many of these entities across the country are eligible to receive national research funding. The presence of RD professionals in all types of research institutions, regardless of an institution's research intensity, shows the value placed on this in-house function.

While RD can be structured in many different ways (Preuss et al., 2020) including within other service models, such as shared-services (servicing multiple academic units) or hybrid models (servicing both administrative and academic units), our findings identified four main types of RD service models—two centralized and two devolved. Research-intensive institutions tend to implement multiple service models within the same institution. This strategic approach to spreading the RD function across the institution points to greater capacity and specialization. The combination of centralized and devolved supports is also a widespread practice in the UK (King et al., 2020) and at American R1 universities (Mulfinger et al., 2016). The unit-level RD provides more personalized support and facilitates stronger relationships with researchers (Marlin, 2009). This aligns with our findings that the more prevalent RD activities performed at the unit-level seem to be those that require closer interaction with or in-depth knowledge of researchers and their research programs. However, while unit-level RD is commonly associated with larger institutions, this practice setting was also present in approximately one-fifth of the lesser research-intensive colleges and undergraduate universities. For smaller institutions with limited resources and fewer research programs, focusing resources at the academic unit-level, close to researchers, is a more effective practice (King et al., 2020). Conversely, the larger centralized offices can offer a broader range of expertise and specialized services (Ross et al., 2019). Our results also show that both centralized RD service models often coexist within the same institution. While small numbers did not permit investigating the specific differences in RD services between these two centralized offices, several Canadian research-intensive universities are known to separate support functions based on those for investigator-led grants and routine operational services, and those for large, institution-led grants and strategic initiatives.

What do Canadian RD Professionals do?

RD practitioners demonstrate a clear professional focus or specialization as the majority of their time is devoted to RD-type work. However, their responsibilities also encompass non-RD-related work, primarily administrative tasks. The multifunctional nature of central research offices supports the observation that practitioners in these offices engage in less RD work than their counterparts in dedicated RD offices and unit-level positions. It also implies that not all practitioners may view RD as a standalone professional identity if for many, RD only represents one function in their broader role. Exploring the diverse ways in which professionals engage in and conceptualize RD would contribute to a more comprehensive understanding of RD across various institutional contexts. The presence of research and teaching as non-RD work functions, while outside the scope of research management and administration, makes sense considering that many practitioners possess advanced education and research experience. This observation aligns with the characteristics often associated with third space professionals, that is individuals adept at navigating and contributing to both administrative and academic spheres, thereby blurring traditional professional lines (Loi, 2021).

The types of RD services offered by Canadian research institutions exhibit a remarkably similar profile, despite differences in institutional research intensity. This commonality reflects a shared institutional commitment as well as the trend towards building capacity in lesser research-intensive colleges transitioning to universities and in health authorities (Samson, 2018; Trytten et al., 2019), many of which have become eligible to administer national research funding.

We categorized RD activities within the five areas that best reflected what Canadian practitioners do. These included the four NORDP activity categories (NORDP, n.d.), plus researcher development. Existing literature lacks clarity on the relationship between RD and researcher development, but this could be due to a yet unestablished connection. We believe that if surveyed, many RD practitioners elsewhere would acknowledge the development of researchers as an aspect of their work. In the Canadian context of our study, a substantial 83% of RD practitioners viewed enhancing individuals' capacity to engage in research, achieved through providing instruction, mentorship, and other professional development activities, as a fundamental component of their work.

As anticipated, grant development activities are overwhelmingly the most performed among the five areas. Still, more than three-quarters of respondents worked in at least four areas, indicating diverse responsibilities beyond grant facilitation. This was also observed in the U.S. studies (Preuss et al., 2020). More specifically, top ranked activities were very similar between the two countries. One notable difference was compliance review, of which 69% of Canadian RD professionals performed, compared to only 25% in the 2017 NORDP survey. Pre-award compliance review meshes both administrative elements, often leading to *required* changes in the application, and strategic or developmental elements, usually resulting in *recommended* changes. These types of reviews can overlap in practice. A possible reason for the Canadian-U.S. difference could be variations in the sample populations. The U.S. survey sampled NORDP members, who likely strongly identify as RD professionals, and perhaps not so much or not at all as research administrators. In Canada, CARA and ADARUQ are professional associations representing the field of research management and administration more broadly. Thus, their members, our respondents, may have a wider, overlapping range of administrative and developmental roles and responsibilities and thus a more broadly defined professional identity.

Lastly, data showed that managers performed a greater number of RD activities and significantly more of certain activities than staff. Findings corroborate those of Preuss et al. (2020) whereby strategic advancement activities are more likely performed by individuals in managerial-level positions. However, contrary to the findings of this U.S. study, staff did not appear to engage in more grant development activities than managers—although, they did report grant development being their most time-consuming area of work. It is unclear if managers may be indeed more actively engaged in RD or responding on behalf of their offices.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This study represents an initial step towards developing a comprehensive understanding of the function and practice of RD in Canada. Our findings show that it is a well-developed function of Canadian research institutions irrespective of research intensity, and a stable and mature profession, in the broad sense of the term. The study revealed notable structural variations in service models and a diverse range of activities performed within the five areas of grant development, research collaborations, research communications, development of the researcher, and strategic advancement. Our study classified RD activities into core areas based on a categorization rooted in historical and experiential considerations. Future research should aim to empirically ground these activity areas through case studies or other qualitative methods, to clarify both their distinct and overlapping traits. This approach would provide a clearer delineation of the field and offer better insights into its evolving nature. While the study focused on the practitioner's viewpoint, exploring RD from an institutional perspective is needed. Investigating the dynamics of service delivery, especially when RD is spread across an institution's administrative and academic units, can draw attention to collaborative efforts and synergies among the different service models. Gaining a more comprehensive understanding of how RD is operationalized, within the varied landscape of Canadian research institutions and elsewhere, can lead to identifying optimal strategies around training, role expectations, resource allocation, and organizational structuring.

AUTHORS' NOTE

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