



SCIENCE & POLICY EXCHANGE

RETHINKING FEDERAL RESEARCH FUNDING:

Towards More Equitable Funding for Canada's **Next Generation**

Perspectives of **International** Graduate Students & Postdoctoral Fellows: An SPE Report

The international mobility of students and postdoctoral fellows, in education and in research, is a critical component to post-secondary excellence - the excellence of domestically trained talent is championed by those traveling abroad, and incoming international talent can add new perspectives, skills, and depth to domestic learning and research^{1,2}. Most importantly, international mobility facilitates collaborative exchange, which strengthens both global science and global partnerships. Yet, international research trainees face unique challenges when pursuing their work in Canada^{3,4}. Not only must they learn how to navigate a new system, the choice to pursue academic studies in another country can lock trainees out from their own government's research funding system, while their host country may not offer much financial support for international applicants.

In this report, we present results disaggregated by citizenship status from SPE's 2018 scholarship and fellowship survey, which provided insight from over 1100 respondents. Our survey found that while 84% of Canadian citizens have applied for a federal funding opportunity during their training, only 60% of permanent residents and 25% of international applicants have done so. Of those who applied, only 20% of international students and 40% of permanent residents were successful in their application. Compared to Canadian respondents who achieved a 56% success rate, this may reflect a scarcity of funding opportunities for non-citizens. International graduate students are ineligible for the majority of Canadian federal training awards. This puts significant financial burden on international students, which has been heightened during a crisis like COVID-19, and limits their career development. Accordingly, 81% and 93% of permanent resident and international respondents, respectively, valued or highly valued increasing the number of awards available to international applicants.

Given a hypothetical increase in award funding, international trainees valued a general increase in the number of awards and also valued the inclusion of health and dental benefits in federal awards, likely because health and dental are less likely to be covered to the same extent for international students compared to Canadian citizens. International students also indicated that increasing both the number and monetary value of travel awards would be beneficial. Supporting international travel can facilitate diversity, international collaboration, and global exchange of ideas at conferences or workshops. The desire for this funding may highlight how support for international mobility can be achieved by supporting international students' needs.

Across our survey, trainees also expressed the desire to see award criteria widened to account for a more diverse research training experience. For permanent residents and international respondents there was a high value placed on international collaborations. This also highlights an important benefit to international training, as trainees from other countries can often bring international networks,

1 [Why Canada Needs a Global Education Strategy](#), Roland Paris & Margaret Biggs, International Journal, Apr 23 2018.

2 [Global Education for Canadians: Equipping Young Canadians to Succeed at Home & Abroad](#), Study Group on Global Education, Nov 2017.

3 [Value Beyond the Dollars and Cents: International Students' Contributions to Canada and Their Need for Supports](#), Canadian Alliance of Student Associations, Sept 04 2018.

4 [International Students Attending Canadian Universities: Their Experiences with Housing, Finances, and Other Issues](#), Moira J. Calder et al., Canadian Journal of Higher Education, Aug 31 2016.

resulting in increased collaborations across borders. Much like Canadian citizens, international students and permanent residents also expressed the desire for awards to incorporate additional training for skills such as career development and second language. Permanent residents showed the most inclination to value skills such as management training.

Furthermore, our survey highlighted several barriers to international recruitment and retention. A minority of international students (30%) and permanent residents (40%) found information regarding awards to be accessible, while a majority (~ 75%) of international students indicated that specific incentives for their recruitment were lacking, including a lack of monetary awards to support themselves and their research. With respect to choosing to study and live in Canada, 71% of international respondents indicated that finding funding was very difficult or difficult for them. About half of international respondents indicated that being competitive was a challenge, as grades and criteria for measuring excellence can vary by country of origin. These results highlight the need to re-evaluate the criteria for awards as student experiences vary widely, resulting in the potential undervaluation of international students as researchers.

By increasing international collaborations and bringing in diverse perspectives, international trainees provide many benefits to their institutions, their communities, as well as to Canadian research and academic excellence. International collaborations and student mobility are pivotal in establishing and expanding Canadian science's sphere of influence globally¹. However, our survey clearly indicates that international trainees face specific challenges when joining the Canadian research enterprise.

Along with recommendations made in our other survey reports, we recommend that the Canadian federal funding agencies:

1. Earmark federal research awards for international applicants in line with the number of international trainees at Canadian institutions.
2. Dedicate trainee funding for career development, international collaboration, and travel.
3. Expand criteria for federal awards to make them more inclusive of international students coming from different experiences (e.g. undergraduate marking scheme) depending on country of origin.

Different groups of students experience the federal funding system in unique ways. You can read more about some of their specific experiences in these micro-reports at the following link:

<https://www.sp-exchange.ca/rethinking-federal-research-funding>

1 [Students as Stakeholders in Science Diplomacy](#), Science & Policy Exchange, Oct 22 2018.





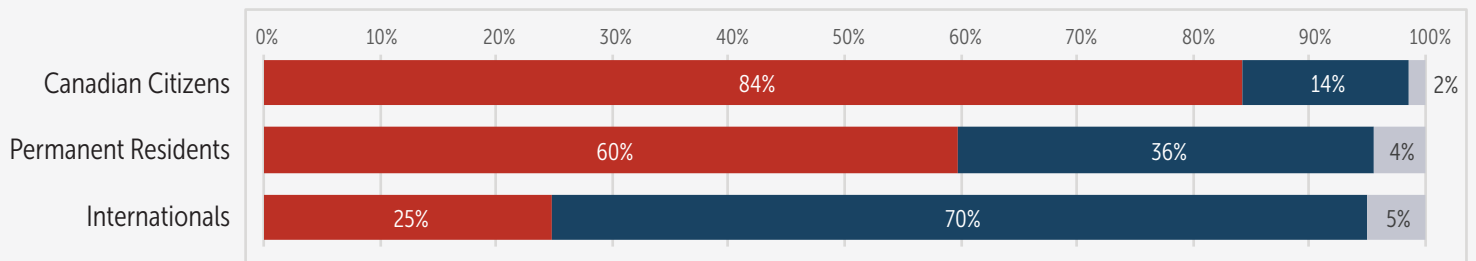
SCIENCE & POLICY EXCHANGE SURVEY ON CANADIAN SCHOLARSHIPS & FELLOWSHIPS

Science & Policy Exchange (SPE) is a non-profit group aimed at representing the voice of next-generation researchers to policy makers. We asked graduate students and postdoctoral fellows to tell us what they want for the future of scholarships and fellowships in Canada.

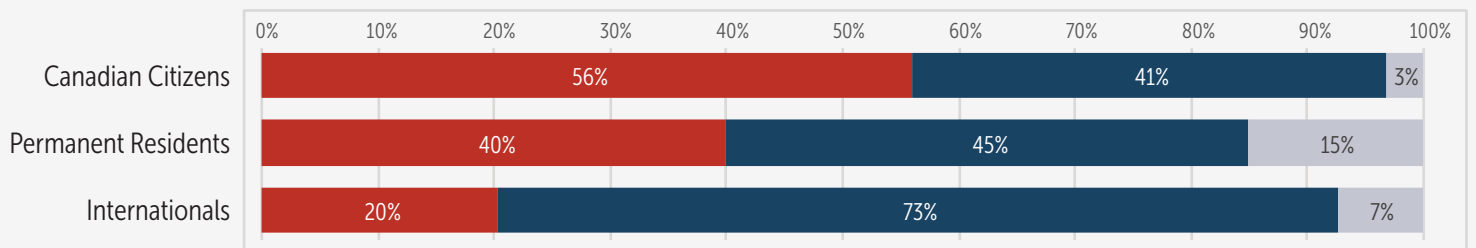
These selected data highlight the unique perspectives of early-career scholars regarding international mobility and the specific challenges experienced by young researchers from abroad already studying in Canada.

Award Application & Success Rates

Have you ever applied for a graduate or postdoctoral fellowship with CIHR, NSERC, or SSHRC?*



If **yes**, were any of your application(s) successful?

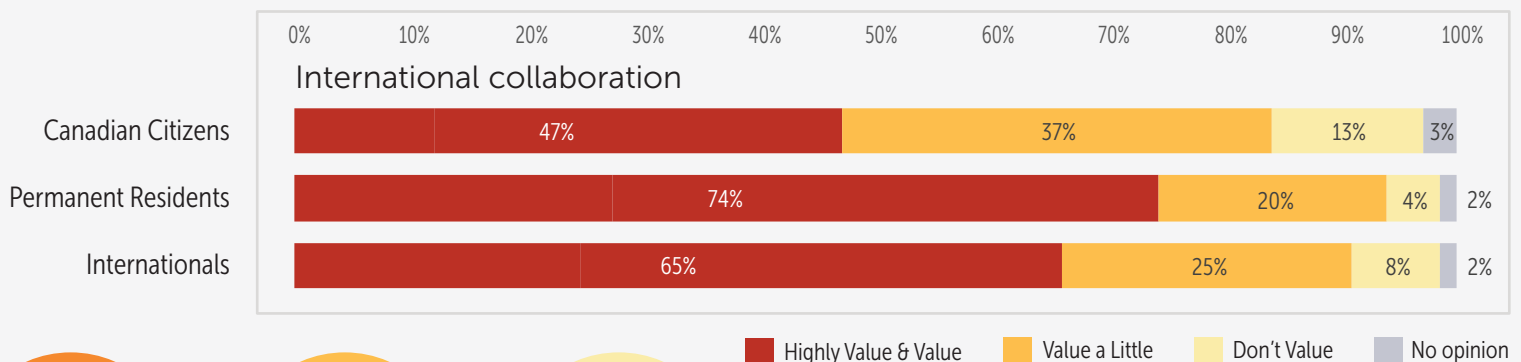


*Abbreviations:

CIHR: Canadian Institute of Health Research NSERC: Natural Sciences and Engineering Research Council SSHRC: Social Sciences and Humanities Research Council

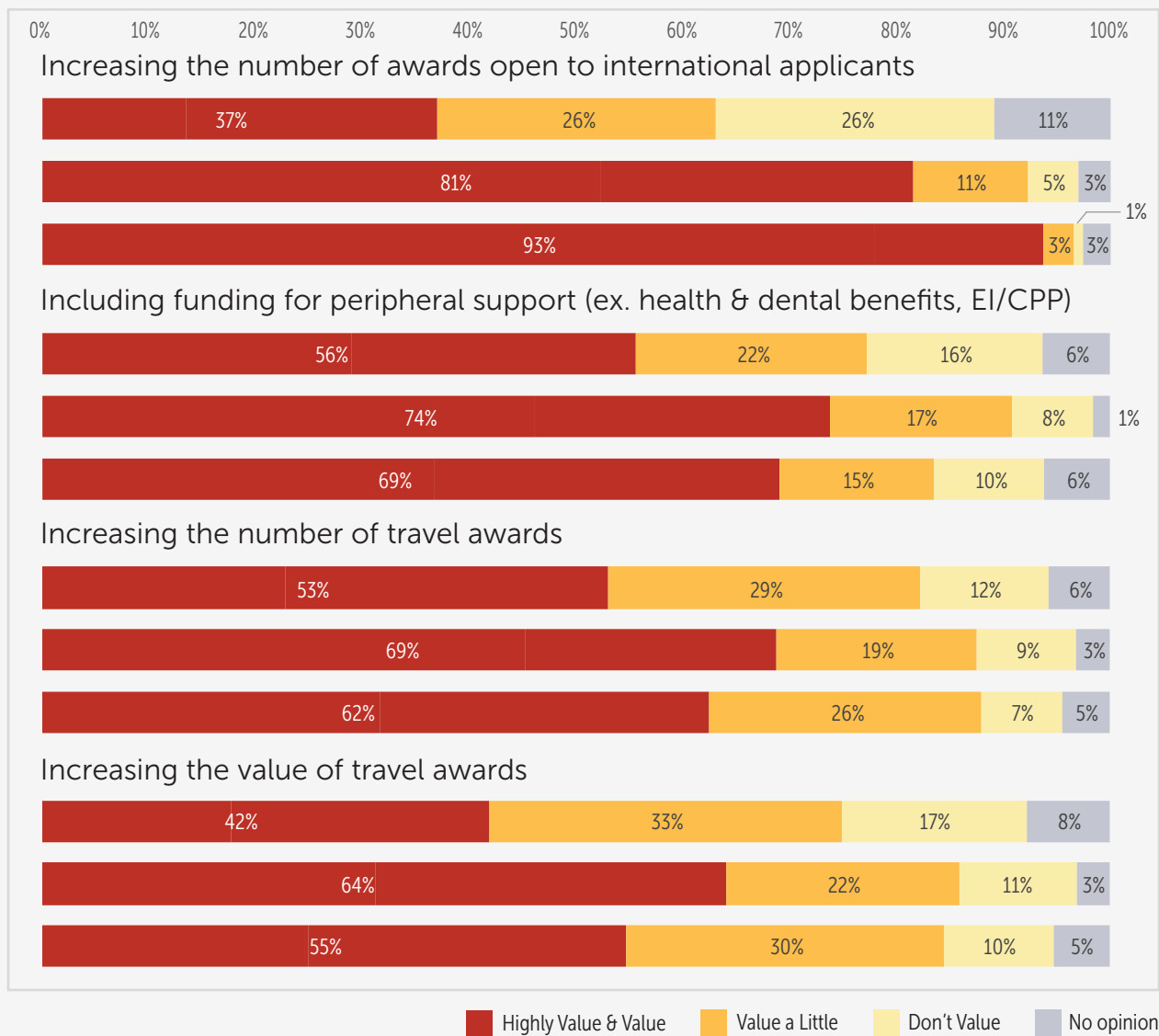
Redefining Excellence Criteria

In your opinion, rate how much value you think reviewers should place on the following factors when evaluating awards applications:



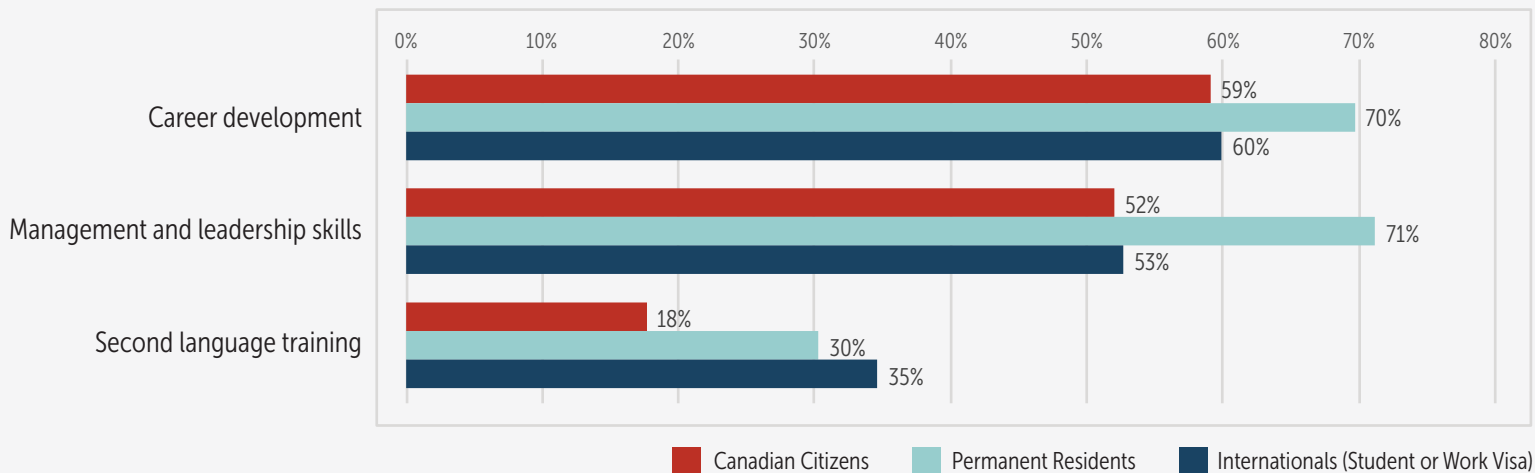
Increasing Trainee Support

If there were an increase in the total federal budget for graduate and postdoc awards, indicate how much you value the following:



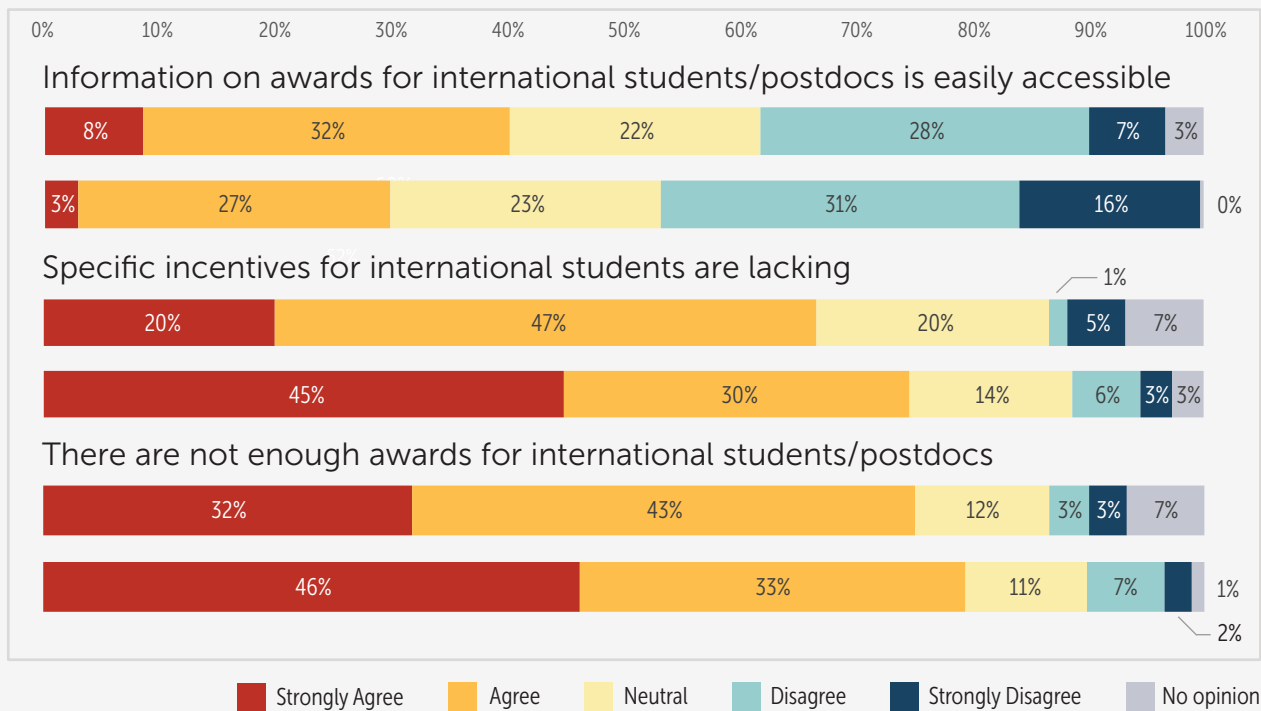
Redefining Skills Training

Are there other skills you would like to see incorporated and encouraged into training?

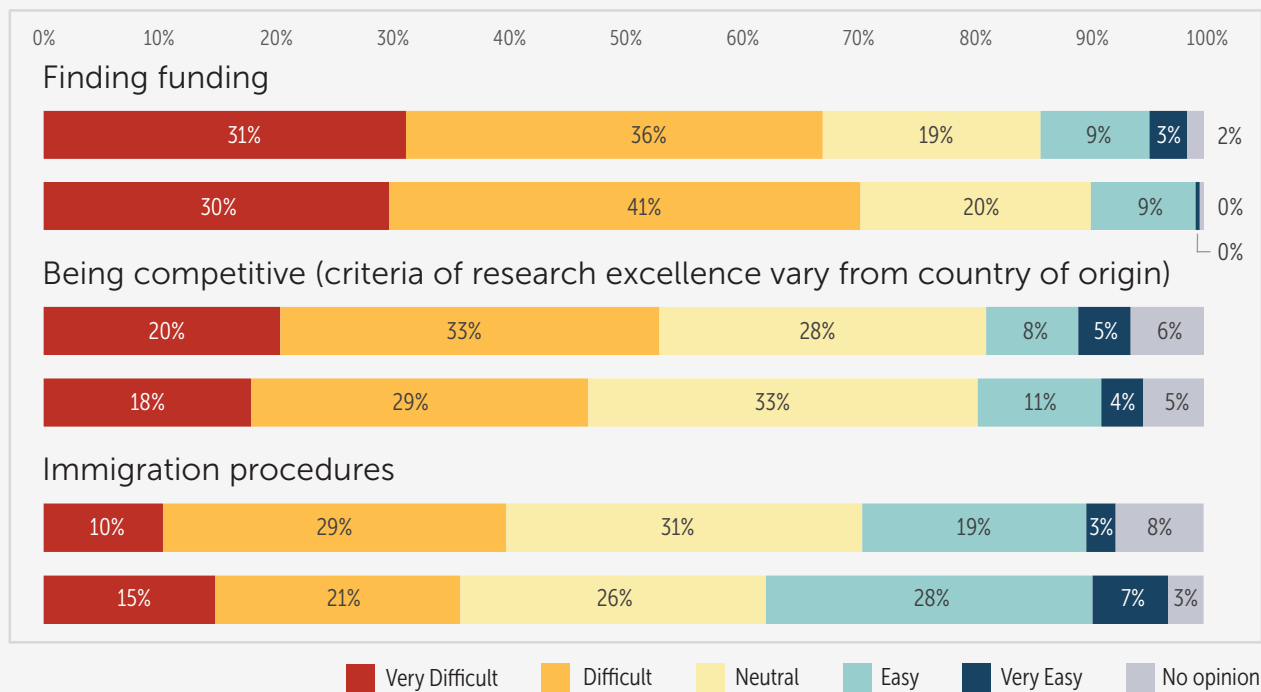


Barriers to International Recruitment & Retention

Rate how much you agree with the following statements regarding to immigration procedures & award application:



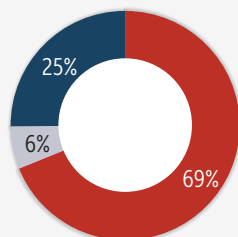
With respect to choosing to study & work in Canada, rate how difficult you found the following:



Citizenship Status Demographics

1100+
STUDENTS
& **FELLOWS**
SURVEYED

FR
&
EN



- Canadian Citizens
- Permanent Residents
- Internationals (Student or Work Visa)

