



## SCIENCE & POLICY EXCHANGE

# RETHINKING FEDERAL RESEARCH FUNDING:

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

### Graduate Student & Postdoctoral Fellow Perspectives Across **Gender Identities**: An SPE Report

In this report, we present gender-disaggregated results of SPE's 2018 scholarship and fellowship survey, which provided insight from over 1100 respondents on their current interactions with Canada's federal funding ecosystem. Men have been historically overrepresented in the sciences, and still remain so in many disciplines<sup>1,2</sup>, and people of other genders may face unique barriers to participation in research such as those associated with care-giving or child-bearing. We disaggregated our data by gender in order to reveal differences in the federal funding experiences of those with different identities.

Given that gender is not binary, the survey gave respondents the option to specify their gender as male, female, non-binary, or other, with the latter providing an option to describe their gender. For the remainder of the report, "male" and "female" will be reflected by the more appropriate terms "man" and "woman". Gender identity also falls on a larger spectrum than these options, which did not account for all cis or trans gender identities or other possible LGBTQ2SIA+ identities<sup>3,4</sup>. Future research on federal fellowships should better account for the wider variety of possible identities. While non-binary responses only represented approximately 1% of total survey respondents, we still considered it important to highlight the experiences of this group. We also wish to acknowledge that gender identity is not mutually exclusive of other identities, such as disability status, racial identity, or Indigenous identity, and that these other factors also influence experience.

An important insight from the survey data is that women perceived a greater benefit from obtaining their own funding (instead of being supported indirectly through a supervisor's grant) compared to men. Financial benefits, provided by direct funding can provide important support for women pursuing advanced research training and to do excellent research. Furthermore, women and non-binary respondents indicated a desire for change on where and how to invest in funding for early career researchers. Given an increase in funding for awards, both non-binary and women respondents indicated they valued creating more awards for outreach and engagement activities. Of note, non-binary respondents highly valued an increase in the number of total awards available as well as increased financial support for awardees with dependents.

Women and non-binary respondents also responded differently than men regarding their views on the scholarship and fellowship merit review process. Current merit criteria for these awards are stringent and limited in scope - academic publication record and grades are valued much more highly than other measures of excellence. All respondents, regardless of gender, placed the quality of the research project proposal as the most valuable award criterion. Women and non-binary respondents placed less emphasis on peer-reviewed publication record, compared to men, and women in particular indicated a higher value for research-related extracurricular activities. Notably, over half of non-binary respondents indicated that reviewers should value non-academic publications.

1 [Persistence and representation of women in STEM programs](#), Katherine Wall, Statistics Canada, May 2 2019.

2 [Female health scientists face large gender bias in access to federal research dollars, Canadian study reveals](#), Iven Semeiuk, The Globe and Mail, Feb 7 2019.

3 [Sex and Gender: consultations for the 2021 Census Test](#), Statistics Canada, Sept 15 2020.

4 LGBTQ2SIA+: An acronym for Lesbian, Gay, Bisexual, Transgender, Queer, Two-Spirit, Intersex, Asexual, Plus

All genders indicated a desire to see a more comprehensive skillset become part of academic research training. Women and non-binary respondents wanted awardee training to include communication towards diverse audiences, beyond academic publications. Both groups also valued training in ethics and management skills, more so than men. Therefore, widening the scope of academic skills training will benefit groups that have been historically underrepresented in benefit groups that have been historically underrepresented in research<sup>1,2</sup>.

Overall, the survey highlighted the differences in experience between people with different gender identities. These results can guide policy decisions to create a more inclusive research environment. In particular, improving access to awards for those from marginalized genders provides them with the financial support to pursue an advanced degree. This can be particularly impactful for first-generation university students or LGBTQ2SIA+ students who have faced additional barriers throughout their educations.

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

1. Collect and report data on gender and LGBTQ2SIA+ representation amongst awardees.
2. Create trainee awards for science outreach, science communication, and other community services.
3. Widen criteria for award recognition to de-emphasize previous success and increase emphasis on research-related extracurricular work.

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

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

1 [Persistence and representation of women in STEM programs](#), Katherine Wall, Statistics Canada, May 2 2019.

2 [Female health scientists face large gender bias in access to federal research dollars, Canadian study reveals](#), Iven Semeiuk, The Globe and Mail, Feb 7 2019.



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DIALOGUE SCIENCES & POLITIQUES



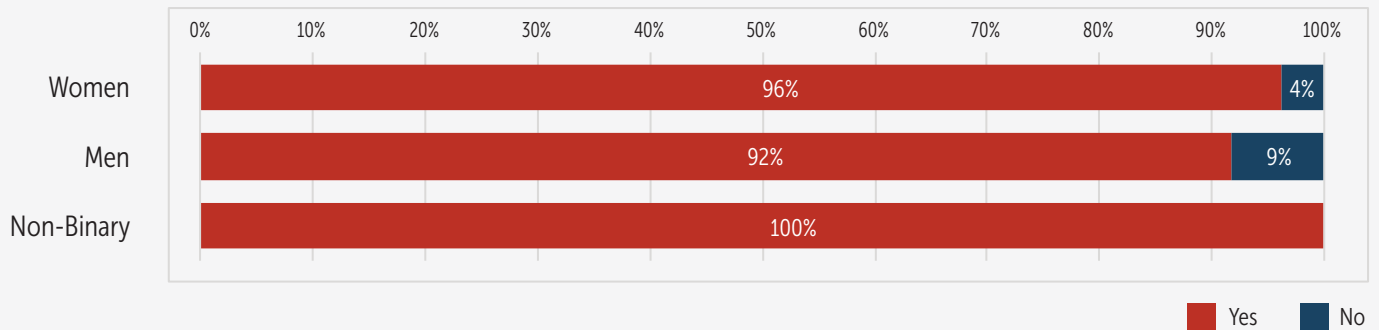
# SCIENCE & POLICY EXCHANGE SURVEY ON CANADIAN SCHOLARSHIPS & FELLOWSHIPS

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.

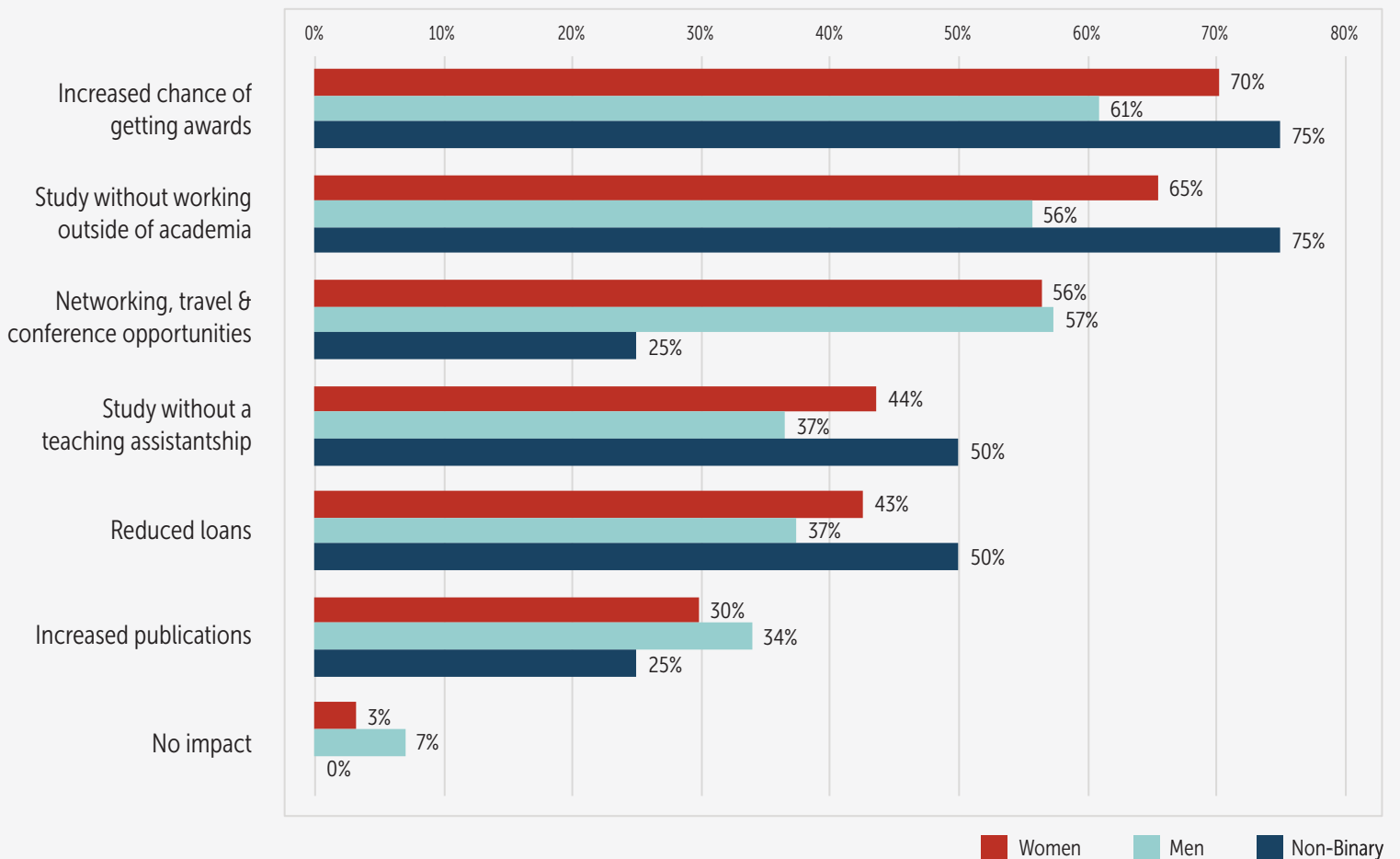
These selected data highlight the diverse perspectives of early-career scholars with regards to their gender identity. These data showcase their experiences and further the crucial analysis required to commit to equity, diversity and inclusion in trainee funding.

## Perceived Benefits to Receiving Funding

Do you think there are benefits of obtaining funding from awards, rather than receiving support from your supervisor's research grants (or other indirect sources)?

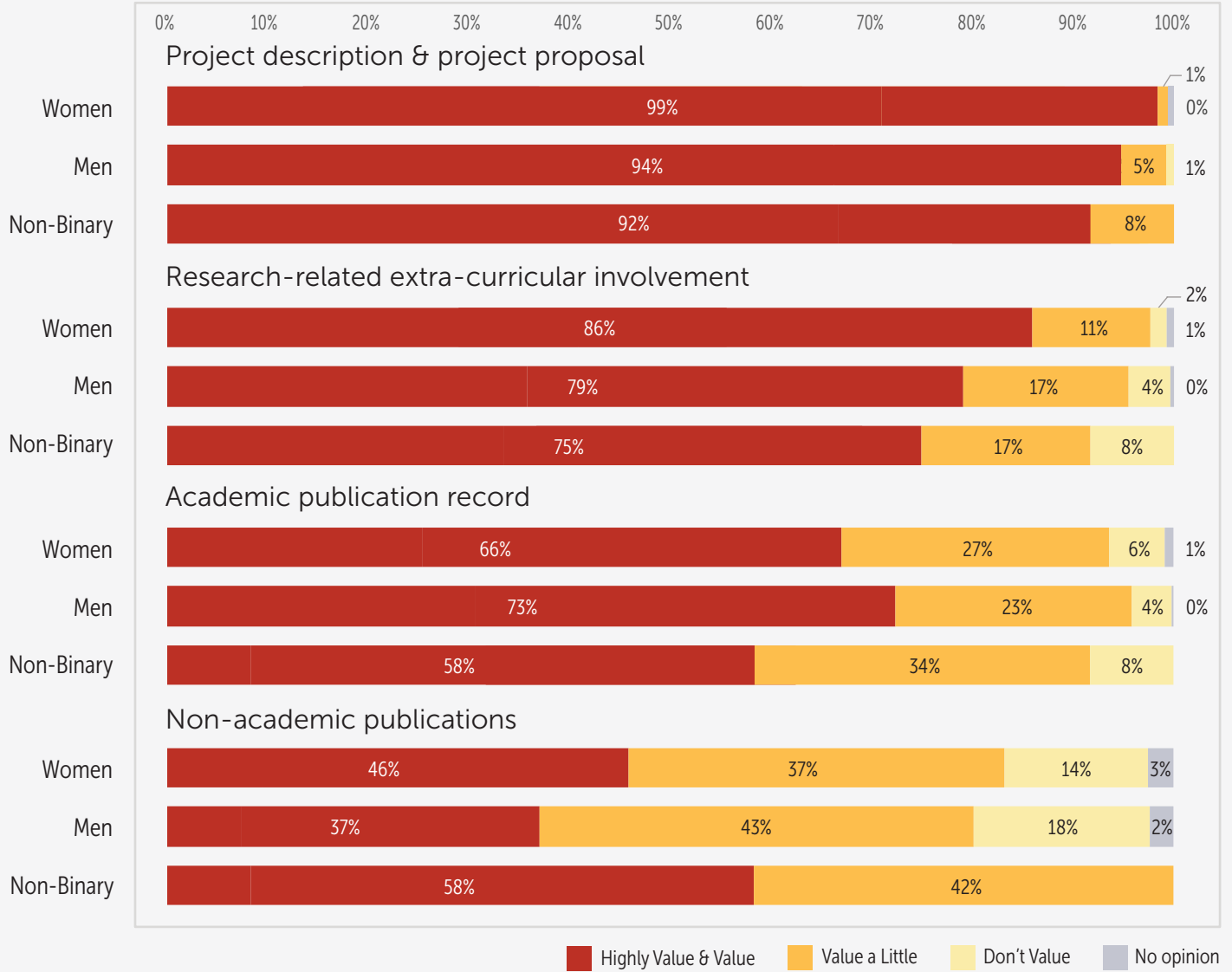


## What impact did receiving an award have on you and your research?



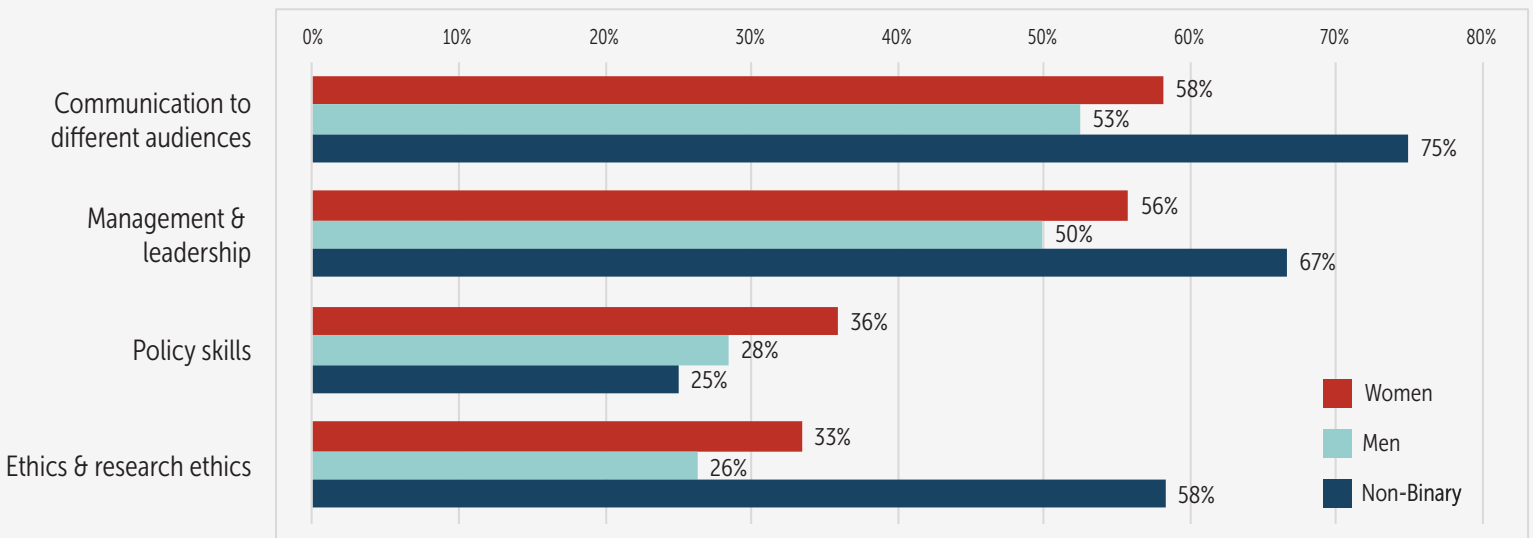
# Redefining Excellence Criteria

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



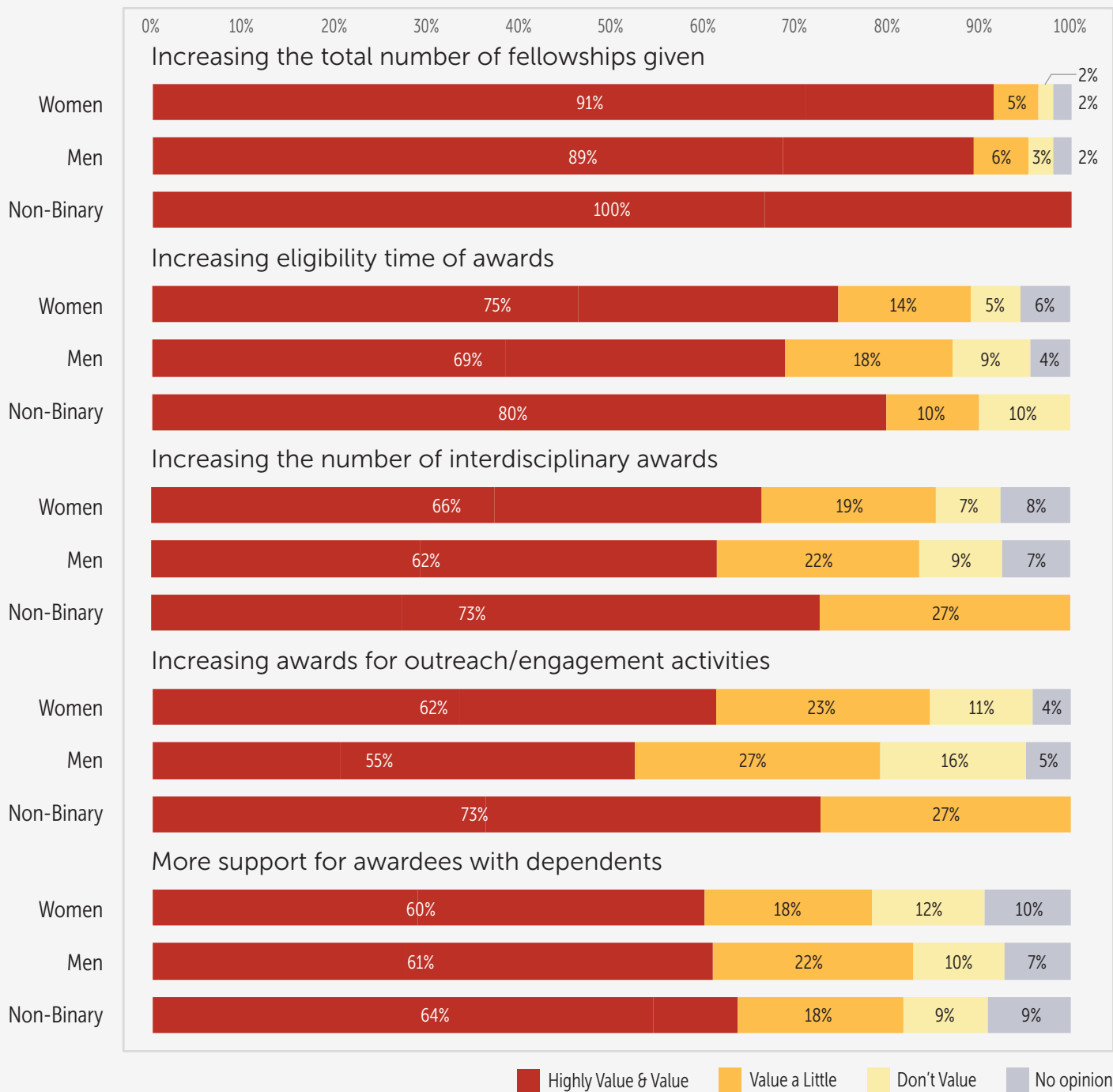
# Redefining Skills Training

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



# Increasing Trainee Support

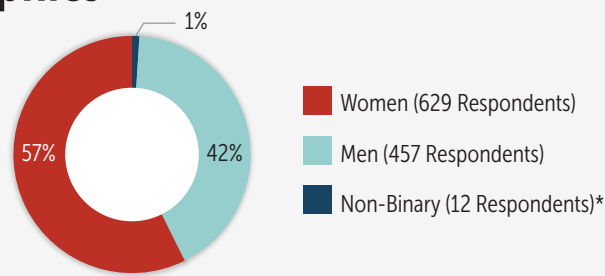
If there were an increase in the total federal budget for graduate and postdoctoral awards, indicate how much you value the following:



## Gender Identity Demographics

**1100+**  
STUDENTS  
& FELLOWS  
SURVEYED

**FR  
&  
EN**



\*SPE recognizes that gender is not binary and thus gave respondents the option to specify their gender as male, female, non-binary or other, with the opportunity to describe their gender if they denoted other. In our cohort, 629 respondents were women, 457 men, and 12 non-binary respondents. These standards on gender identity are in line with new and modified questions on sex at birth and gender in the 2019 Census Test from Statistics Canada.