

Developed countries online survey on fundamental research

9 May 2017

Introduction

In addition to the official data presented in Chapters 2 and 3, we also developed and ran a quantitative online survey to query researchers about their perceptions of, and experiences with, funding for fundamental research. An important aim of the survey was to provide an understanding researcher's personal experiences and outlook on the research funding landscape. We had an excellent response to the survey, with over xxxxx researchers completing it, suggesting that fundamental research funding is a high priority topic for Canadian researchers. Herein, we detail the survey questions and results.

Methods

Online Survey

The survey was open to researchers from all disciplines (e.g. science, social sciences, humanities, engineering, medicine) and career stages, with the proviso that they had some experience applying for research funding. The survey gathered detailed information in four major areas: 1) the types of research the scholars conduct (fundamental, use-inspired, applied), 2) the extent of external partnerships in their research, 3) their grant success rates, and 4) how important they perceive fundamental research is to the federal government and its future prospects in . The survey also enquired how each of these factors have changed over time for the researchers. Finally, the survey gathered basic information from each respondent about gender, discipline, career stage and the year their PhD was obtained. The full survey is provided in Appendix 2.

The online survey was open from the end of May through early October 2016, and ran on the Fluid Surveys platform (fluidsurveys.com). Note that the survey was open to researchers from any country in the world because it is was run as part of a global survey through the Global Young Academy. To disseminate the survey to researchers, we gathered email addresses from university websites for as many faculty members as possible and emailed individual researchers directly. We also shared the survey broadly on social media, as well as through the Global Young Academy network, on scientific list serves, and through personal connections.

Survey Data Analysis

Note that numbers not all the same because respondents did not always answer every question

Results

In total, 2512 researchers from developed countries completed the online survey. Of these, almost xxxxx were male (72%) and xxxxx were female (28%); xxxxx proportion either did not input their gender or selected other. xxxxx of the survey respondents (28%) were either senior academics (0%), defined as those researchers with more than ten years experience applying for research grants since completion of their PhD, or early career academics (28%) (Figure 4.1). xxxxx also came from post-doctoral researchers (5%), non-academic researchers (1%), or those who did not indicate their career stage (0.4%).

Researchers from many different disciplines were represented in the survey. Almost xxxxx percent of responses came from either the natural or physical sciences (Figure 4.2). The remaining responses were spread amongst the medical and life sciences (23%), engineering (10%), interdisciplinary research (6%), and social sciences and humanities (8%).

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■ 2006–2010
■ 2011–2015

Figure 1: Fig 4.14 Distribution of research funding over the past 10 years. Researchers were asked to estimate the distribution of their research funding sources in 2006-2010 and 2011-2015.

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