Greater scientific expertise needed in Parliament to improve decision-making

August 19 2021

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Political parties need to put more effort into recruiting candidates with scientific backgrounds in order to increase 'cognitive diversity' among MPs, say the authors of a new academic study.

Of the 541 MPs with higher education degrees in the 2015-2017 Parliament, only 93 (17%) held degrees in STEM subjects (science,

technology, engineering, and maths). For comparison, 46% of UK students in 2019 graduated in STEM subjects. According to recent analysis of the 2019 intake, MPs with STEM backgrounds or interests still remain largely in the minority (103 MPs).

A dominance of MPs with social sciences backgrounds has long-existed in Parliament, however the issue has become more acute in recent years as policymakers grapple to understand increasingly complex data and evidence, not least in relation to Covid-19 and climate change.

By running analysis of Private Members Bills (PMBs) submitted by MPs, the researchers from the University of Bath found that politicians with STEM backgrounds were more likely to raise policy issues related to STEM subjects.

Their findings highlight that MPs who had both a scientific degree and had subsequently worked in a science-related field (e.g., as a researcher, or a doctor) devoted 10% more of their PMB proposals to STEM-related issues than MPs with no such background.

Professor Hilde Coffé from the University of Bath's Department of Politics, Languages & International Studies explained that "we know that diversity matters in Parliament and this cuts across gender, ethnicity, age. Diversity of educational and occupational background has been less well-acknowledged, but the dominance of the social sciences matters too in particular as policymakers are facing up to increasingly complex challenges underpinned by science and data.

"Political parties have a role to play here in widening the pool of candidates and actively recruiting individuals with STEM backgrounds to stand for election. For those already in Parliament with social sciences backgrounds, we should do more to upskill them to ensure they have good scientific literacy and knowledge. Ultimately though, we need a

diverse Parliament with different expertise and experiences. Achieving this can help us improve the robustness of policymaking."

Their analysis also highlights interesting gender splits when it comes to raising STEM issues in Parliament. Whereas men with a STEM educational background had a 30% likelihood of proposing at least one STEM Private Member Bill, women with a similar education and experiences were much more likely to, at 72%. The researchers hypothesize that this could be because women who have pursued STEM careers have often had to overcome norms and barriers which may make them more vocal in highlighting STEM issues.

Co-author Joshua Myers added that "the differences we found between the behavior of men and women MPs with STEM backgrounds were stark and surprising. It seems women with a STEM background are far more likely to become passionate STEM advocates in Parliament than men. This is likely partly a result of more women MPs holding degrees in life sciences subjects, which lend themselves to better engagement with the healthcare issues which predominate on the policy agenda. However, it also highlights the importance of intersectionality—the interactions between the various different background characteristics of any individual—in understanding how our elected representatives prioritize different policy issues."

The research was published in the journal *British Politics*.

More information: Joshua Myers et al, The impact of a STEM background on MPs' legislative behaviour, *British Politics* (2021). DOI: 10.1057/s41293-021-00188-2

Provided by University of Bath