

Maths plus 'geeky' images equals deterred students

Images of maths 'geeks' stop people from studying mathematics or using it in later life, shows research funded by the Economic and Social Research Council.

Many students and undergraduates seem to think of mathematicians as old, white, middle-class men who are obsessed with their subject, lack social skills and have no personal life outside maths. The student's views of maths itself included narrow and inaccurate images that are often limited to numbers and basic arithmetic.

The research revealed that many of the clichéd perceptions which it identified are linked to the way in which mathematics and mathematicians are presented in popular culture. Although there has been an increase since 2006, the number of people in England and Wales choosing to study maths has been in decline in the last decade. The subject's negative portrayal in popular culture contributes to this lack of interest. The research went on to suggest using popular culture as one way to promote a more positive view of maths.

Dr Heather Mendick and Marie-Pierre Moreau from London Metropolitan together with Prof Debbie Epstein of Cardiff University undertook a survey, focus groups and interviews with GCSE school students, final year mathematics undergraduates and post and undergraduate students in the social sciences and humanities.

Dr Heather Mendick, who led the project, said: "Given the narrow, negative clichés associated with maths and mathematicians, it is hardly surprising that relatively few young people want to continue with the subject.

Dr Mendick continues "a substantial majority of both Year 11 and university students saw maths as little more than numbers and mathematicians as old, white, middle-class men"

The notion of mathematicians as geeks was common both among those who identified with the subject and those who did not. Images of mathematicians Albert Einstein and John Nash were labelled as not normal, lacking social skills and being obsessive towards mathematics. But those students who chose to continue studying mathematics for A-level or at university were more likely to regard this obsession as indicating skill, commitment or devotion than madness. Some mathematics undergraduates – more particularly males – gave positive value to geek status, even though several went to considerable lengths to claim their own normality.

Dr Mendick concludes "This raises two important issues: first, we can see how popular culture is deterring many people from enjoying maths and wanting to carry on with it and, second, it raises issues in relation to social justice as these images are mainly of white, middle-class men and so may discourage other groups disproportionately."

Source: Economic & Social Research Council

This document is subject to copyright. Apart from any fair dealing for the purpose of private study, research, no part may be reproduced without the written permission. The content is provided for information purposes only.