

Investigating the reasons why students within the University of Kent study Chemistry

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Introduction

In recent years there has been a decline in undergraduate applications to study Chemistry [2] and an apparent research gap as to the reasons why.

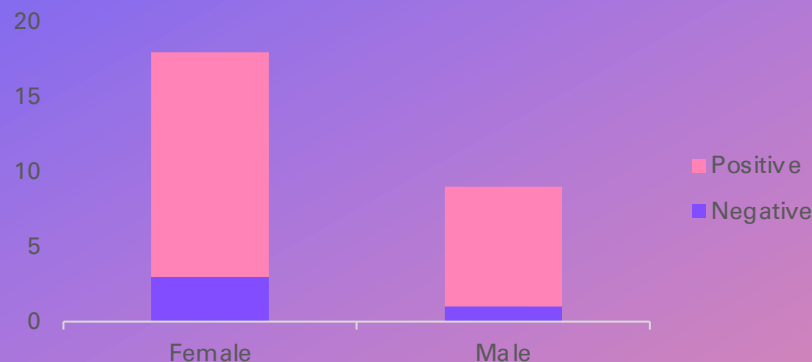
In this research I chose to focus on students within UKC and the influences behind their decisions to choose chemistry. The research focused on ideas of the scientist's identity, self efficacy and underrepresentation within the subject itself.

Method

A questionnaire was created using the following questions in order to gain deeper understanding on the choices of the undergraduate chemists at UKC

1. When choosing to study Chemistry what influenced their decision?
2. What is the general response when they relay the information that they study Chemistry?
3. What do they feel could be done to encourage more people like themselves to study Chemistry?

Gender vs General response



“Undergraduate science majors must often negotiate a culture characterized by white masculine values and behavioral norms” [1]

Participant (Gender)	What can be done to encourage more people like you to study Chemistry?
1 (Female)	I feel that more light should be shone on black females succeeding in Chemistry on social media, in schools and in Universities.
6 (Male)	Obvious positive representation. Not a sly or subtle reference. I might feel better suited to chemistry if I saw more than one black man in the department...
25 (Female)	Creating groups for girls of BAME. Seeing someone who likes me or has the same background in the Chemistry field

Results

The findings of the survey were very heavily skewed towards females as there was a ratio of 1:2 respectively of male to female participants.

The research showed that there is a need for more exposure of scientists within our department that did not fit in with the scientist's identity. The research also touched on the fact that Chemistry is not as hands on in pre university education. Participants suggested that this could be something that could help encourage future participants.

Conclusion

There was a particular focus on BAME students in chemistry in this research and the research showed that all the ideas explored in literature are still evident now. The findings of this research should be used by the university to explore ways in which they can encourage females and BAME students into Chemistry. This can be done through social media and career days at local schools.

[1] Carlone, H. B. and Johnson, A. (2007) "Understanding the science experiences of successful women of color: Science identity as an analytic lens," *Journal of Research in Science Teaching*, 44(8), pp. 1187–1218. doi: 10.1002/tea.20237. [2] Turner, K. (2020) *No quick fix for declining degree applications* / *Opinion* / *Chemistry World*. Available at: <https://www.chemistryworld.com/opinion/no-quick-fix-for-declining-degree-applications/4011026.article> (Accessed: April 5, 2021).