

Project-Based Undergraduate Learning Opportunities (PBULO) for Underrepresented Minority Groups in Higher Education

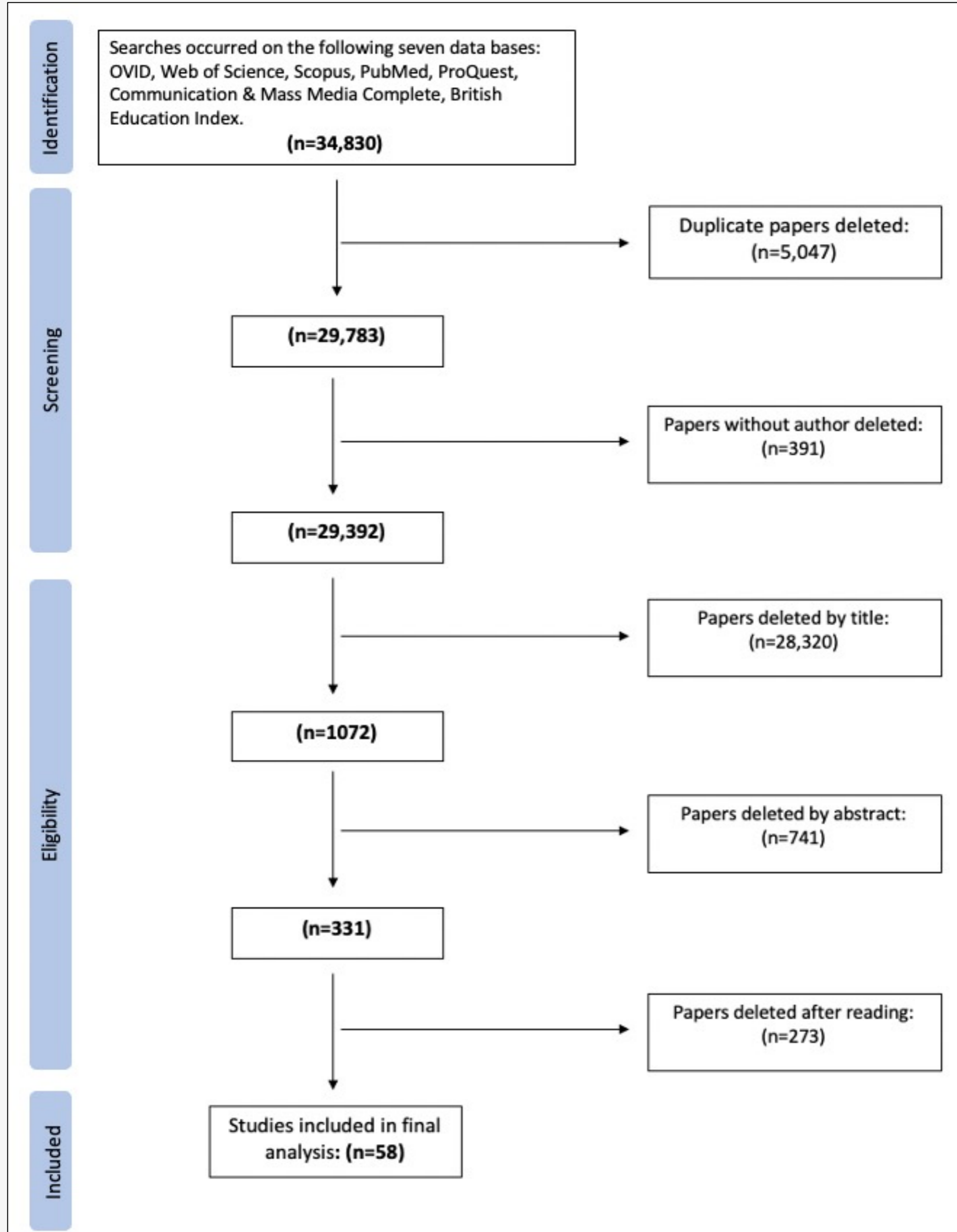
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Introduction:

- The awarding gap in the UK is 9.9%. This is the difference between the proportion of white students that are awarded first or 2:1 compared to underrepresented minority students.
- The aims of this project were to research the outcomes of PBULO for underrepresented minority students, if they reduce the awarding gap, how these programs and their outcomes differ between developed and developing countries.
- PBULO encompasses a number of programs with the common thread of offering more than just a learning experience, with some form of application in a problem or project-based scenario. Such as Capstone experiences, Service Learning, Research Internships.

Method: Systematic review

- Two groups of countries were selected; the first contained five westernised developed countries. The second was a mix of seven African countries with varying degrees of development. The historically discriminated minority groups were identified within each country.
- There were three searches that occurred. The first included the minority terms. The second search included the different terms for PBULO. The third was for papers with at least one term from each of the first two searches.



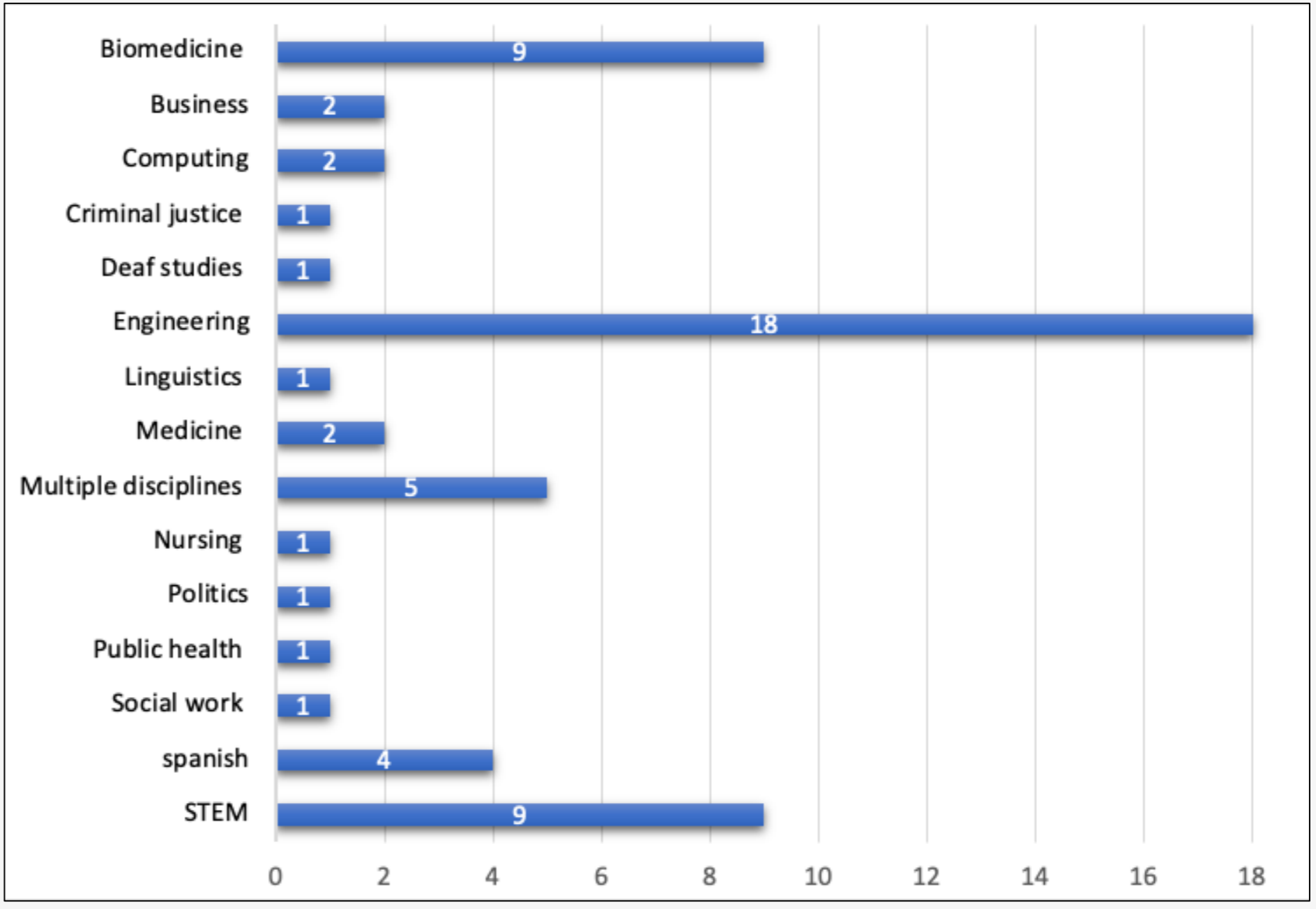
Conclusions:

This research has shown that PBULO are beneficial to underrepresented minority students. It is hard to quantify how useful as the majority of studies presented only subjective research. The papers that did present objective findings had really positive results, boosting the attainment of minority students above national averages. However, students who partake in these programs are likely to be motivated students whose attainment is higher than average. Meaning the sample used here may not be representative of the actual population. The opportunities cannot be compared between developed and developing countries due to the little research coming from anywhere but the USA

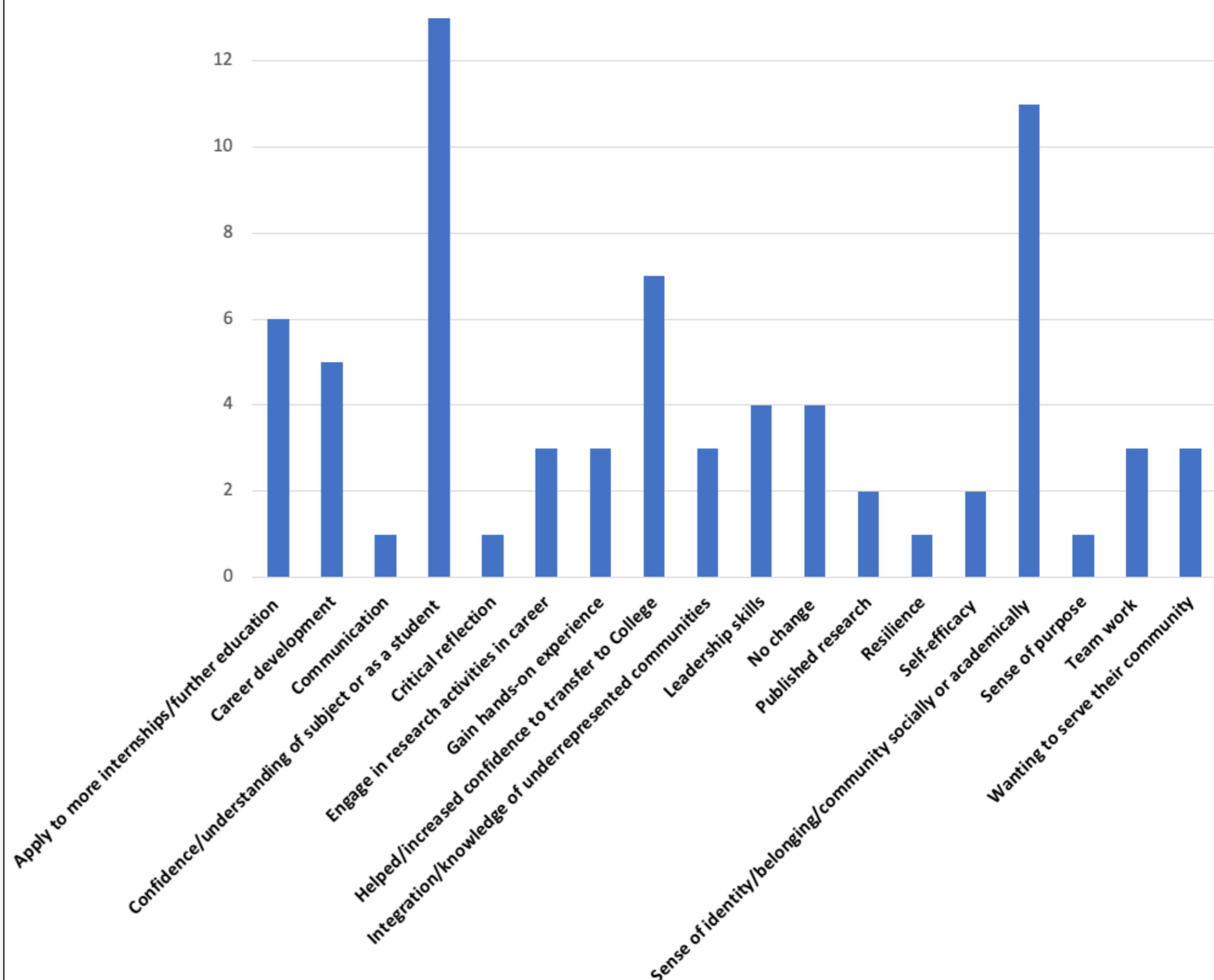
More programs should be aimed at the BA subjects which currently are underrepresented. And the disparity of educational outcome between gender or ethnicity is something I would like to research further.

Findings:

- 96% of the papers came from the USA, with no research coming from any of the African countries. Making immediately clear that international comparisons were not possible. And conclusions will be generally specific to the USA.
- The disciplines involved in these studies (shown below) were comprehensively dominated by the engineering and STEM subjects. There were little opportunities for students studying BA subjects.



- 35 studies recorded subjective outcomes of the students, largely through pre- and post-program surveys (shown below). Increases in confidence/understanding and a sense of identity/belonging/community are the most common impacts students reported.



- 13 studies recorded objective outcomes which were measured by one of the following: Transfer rate (from a community college to university), medical school acceptance rate, graduation rate, or by grades. I compared these outcomes to the national American average. The results showed that 10 of the studies had better objective outcomes than the national average. However, none of the studies specifically reference firsts or 2:1's therefore impacts on the awarding gap cannot be commented on.

Discussion:

An interesting finding of this research was that in some studies underrepresented minority (URM) men had higher self confidence in their academic ability than non-URM women. This is notable as it made me realise I presupposed that the most potent factor causing a disparity in educational outcome is ethnicity; this finding implies that it may actually be gender. Other studies showed that after partaking in PBULO women reported a proportionally greater increase in self-confidence than men, showing it is an effective measure to close this gap. However, this finding only references self-confidence. Actual educational outcome may result in different findings.