What are the key influences for trainees in deciding whether to choose science for their specialist research project in the third and final year of their Primary ITE course?

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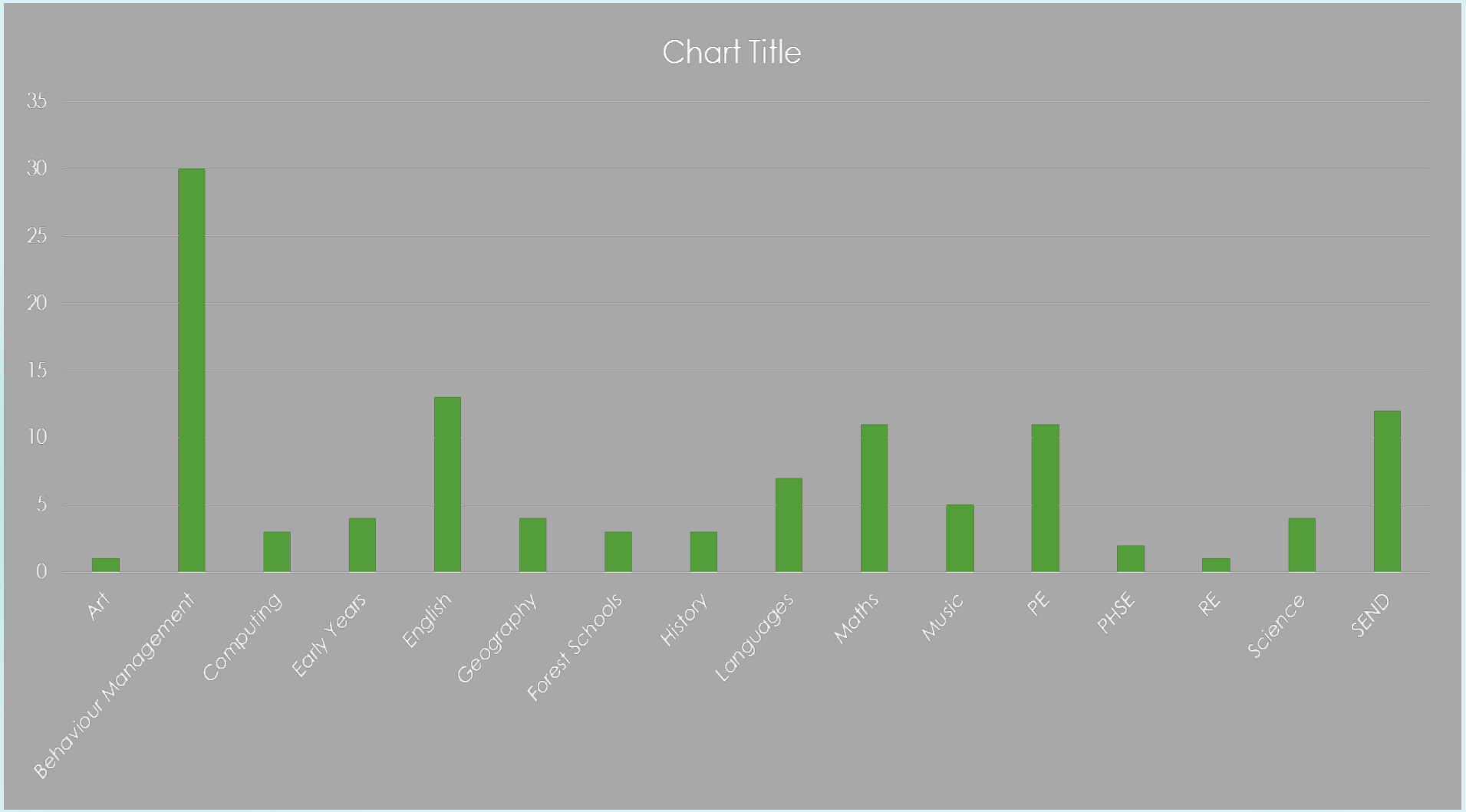
The profile of Primary Science

- Recent research has highlighted the diminished school profile of primary science (Harlen, 1998; Wellcome Trust 2011; Ofsted 2013) due to its previous non-statutory status and it links to limited testing.
- Linked to this it has been widely reported that there is a significant deficit in numbers of young people graduating with degree level science knowledge, as required by the workforce (CBI, 2014).
- ITT courses should as much as possible to encourage the production of high quality science teachers by engaging trainees in science related research. This links to the Carter Review (2015) of ITT which recommended teaching and teacher education should be a research informed and evidence-based profession.

Current PRiSS Choices



Reasons for current choice

- The majority of students said they chose their subject because it is an area of interest for them (63.77%).

‘I have a personal interest in behaviour management’ ‘to explore a current issue that I find interesting’ ‘to inform pedagogy, a passion for the subject’ ‘SE positive experience’ improve my confidence’

‘I want to further my skills as I aspire to be a SENCo’ ‘help me deliver foundation subjects more creatively’.

- 90% felt that science was as important as other core subjects.

The study

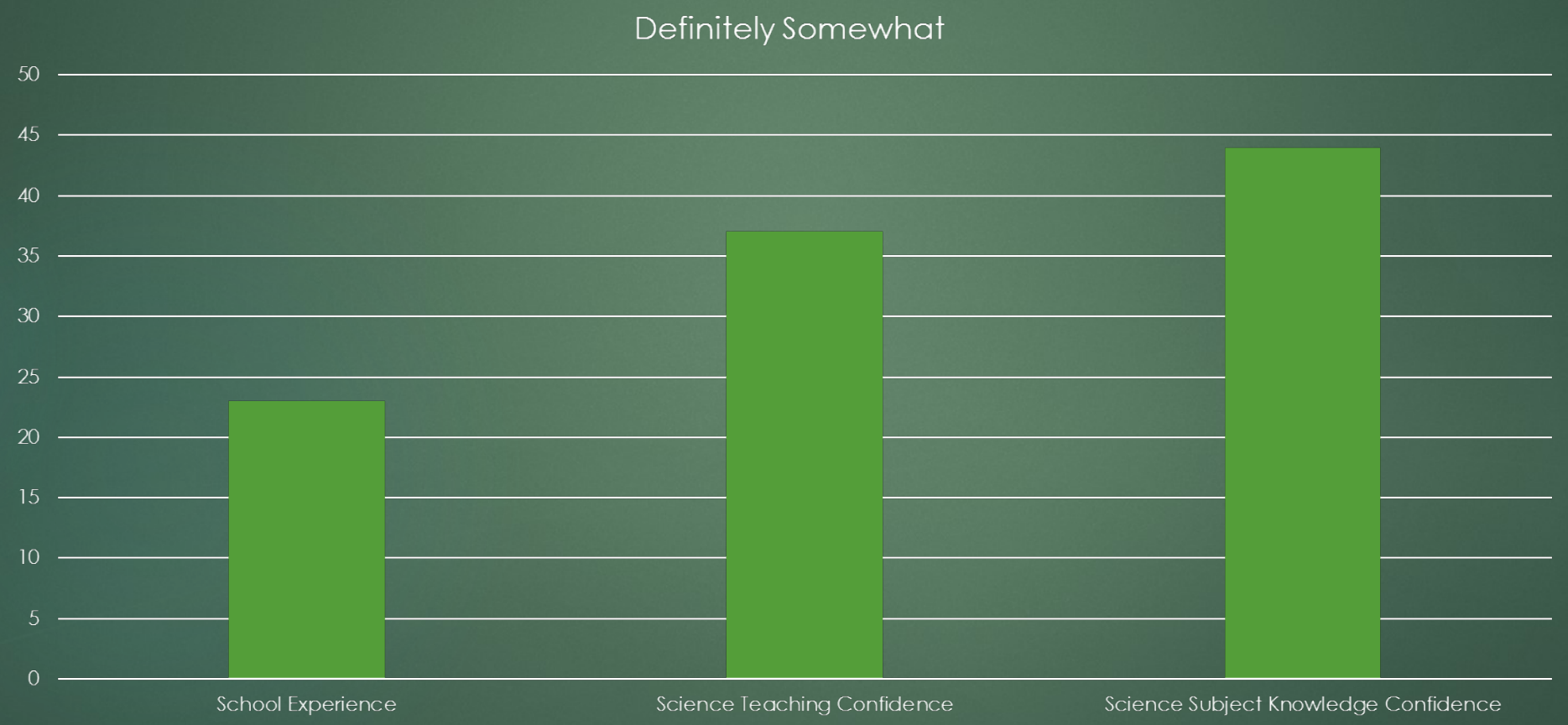
- This project aims to gain an understanding of why only a very low proportion of Year 3 UG trainees choose science as a research area in their final double module PITE3003 PRiSS (currently 4 out of 114 or 3.5% of students).
- Methodology: Firstly questionnaires were issued to all UG3 students (114). 61% were returned and these were analysed to reveal the key themes and ideas regarding their current or proposed research area.
- A small focus group interviews were carried out to explore the themes from the analysis of the questionnaires.

Findings

- What other Priss subject would you like?

Assessment, PHSE/SMSC/Professional Studies.

Quantitative comments



Qualitative comments reflecting the influences upon your subject decision

- **where the trainee is placed for SE3** *'the year group in which I have been placed' and 'worry that schools wouldn't be teaching science whilst we are there'*
- **previous experience** *'I have an extensive background with SEND' 'I had more experiences of behaviour management in my school experiences than science'*
- **lack of passion for Science/ more passion for another subject** *'I do not have a full interest in the subject to undertake a 7000 word research project about it' 'my personal passions lie with music and drama'*
- ***Influence on future job opportunities.***
- ***feedback/ grades from previous assignments.***

How might you choice of Priss influence your career?

- **Future type of school** *'interested in working in an SEN school with behavioural difficulties'*
- **Becoming a subject leader/ coordinator** *'hopefully it will increase my chances to become the subject leader' 'SENCo and child psychology' 'schools will be positive about having maths specialists, could become maths specialist'*
- **Improve employability** *'positively contribute to securing a job teaching the age and stage of children I … am interested in working with'*
- **General classroom pedagogy** *'will help with classroom management and for me to be an effective teacher' 'implement new ideas' 'I hope to become a more confident practitioner'*

what could have been done to encourage science to be chosen?

- **nothing** *'I don't think anything could have been done for me- I wanted to do other areas more'*
- **given examples of previous research and outcomes** *'examples of previous science research and how it was carried out in school' 'how it has influenced prior students in their careers'*
- **seeing it in school/ more opportunities to teach it in school** *'if I had taught more science in schools' 'seeing science in primary schools more' 'more science tasks to be done on placement... like phonics'*

Conclusions

Issues

- confidence in being able to teach science and the subject knowledge linked to this.
- Exposure of science on placement and concerns that this may limit the opportunity for a study. This links to the reported profile of primary science (Harlen, 1998; Wellcome Trust 2011; Ofsted 2013)
- Relevance for their future career in teaching. Students wished to gain an increased opportunity to be a subject leader, classroom manage to become a effective teacher and implement new ideas.

Recommendations

- Liaise with partnership to discuss expectation of seeing/teaching science on SE.
- Continued focus on school based task to build trainees confidence to complement positive feedback on confidence gained from lectures.
- Provide access to previous PRiSS to illustrate value for students professional practice.
- Make students aware of how PRiSS science can improve their confidence in science. (Carter Review (2015) of ITT recommends that trainees recognises that teaching is a research informed and evidence-based profession).
- Now science has become a core subject make students aware of its future significance in school life and in children's life expectations (numbers of young people graduating with degree level science knowledge, as required by the workforce (CBI, 2014).

References

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