

An EPSRC/Cambridge Funded Project



The CEBRG Team



THE CAMBRIDGE ECO-BEHAVIOURS
INTERDISCIPLINARY RESEARCH GROUP



Faculty of Education | Judge Business School | The Bartlett (UCL)

CEBRG Aims and Objectives



To examine how young people in the UK understand the need for a more sustainable society.

To investigate the factors that drive or inhibit young people's energy saving behaviour.

To consider how we might we support young people to work towards innovative, entrepreneurial and sustainable futures?

The EPSRC Pilot Project



What kinds of 18-24 year olds have environmentally friendly values and attitudes?

How do values and attitudes translate into (self-reported) behaviour?

Which life transitions amongst this age group are significant in terms of influencing energy-saving behaviour? What other factors are significant?

How effective are eco-schools in preparing young people for environmentally-friendly life-styles?



Conceptual Framework



Situated learning is learning that takes place in the same context in which it is applied. Learning should not be viewed as simply the transmission of abstract knowledge from one individual to another, but rather like a social process whereby knowledge is co-constructed through authentic learning experiences in a specific context and embedded within a particular social and physical environment (Lave & Wenger, 1991).

The CEBRG Focus Group Study



Aim of focus group study:

- To explore energy use and energy saving behaviours and attitudes in young people aged 16-18 years old
- To better understand the role of eco-schools / environmental education and learning about sustainability in preparing young people for environmentally friendly life-styles and if this knowledge / attitude transfers to other spaces i.e. the home environment

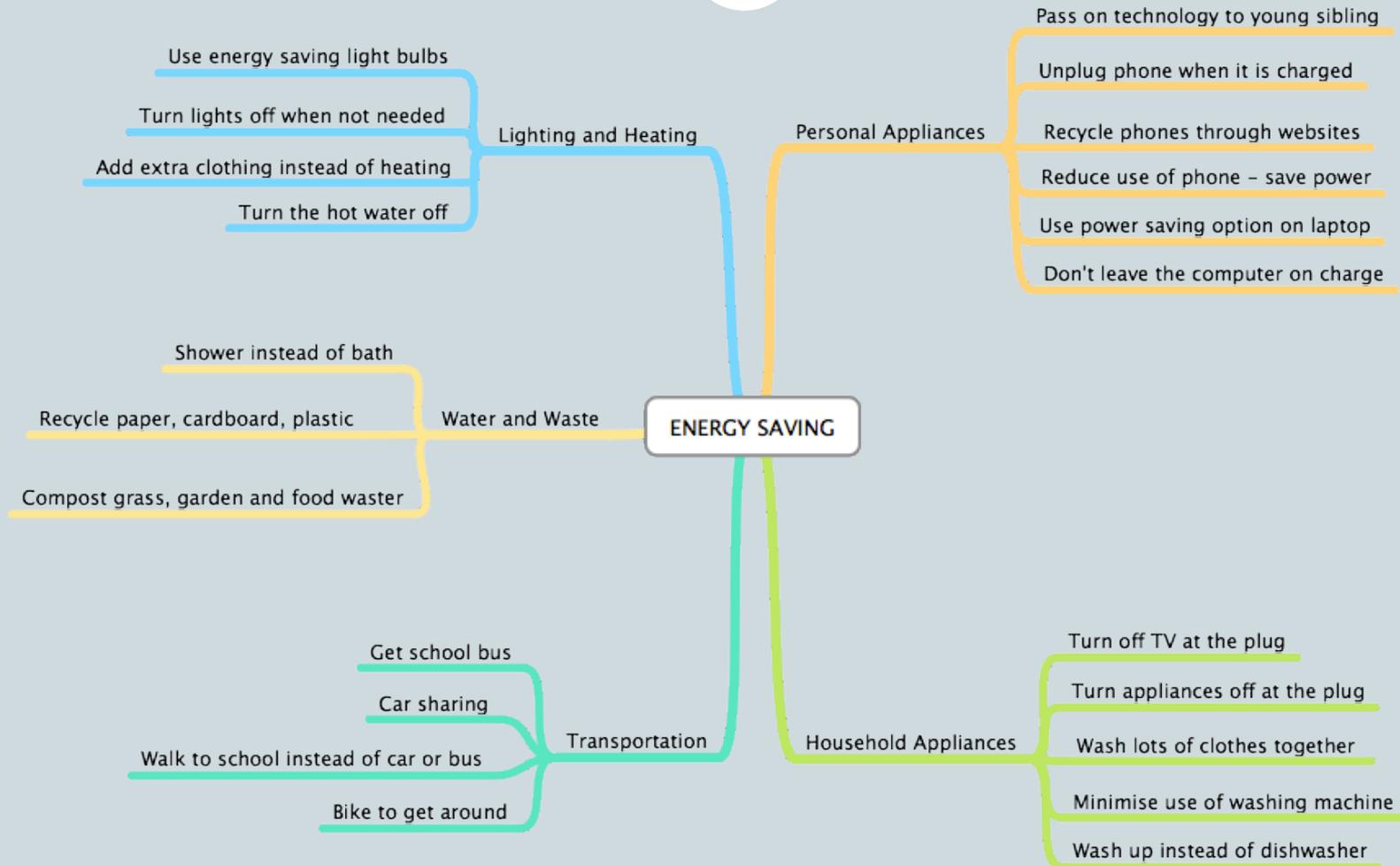
Participants: 16-18 years old from schools in England

Method of analysis: Thematic analysis of narrative data collected from the focus group discussion and post-its and postcard activities

Energy Use in 16-18 Year Olds



Energy Saving in 16-18 Year Olds



School Experiences & STEM subjects

“Everyone did it in GCSE in natural sciences and people who took Chemistry at A level have a unit on it.”

“We were just talking about the activities we do in class but I couldn’t really think of anything »

“We watched something in Biology yesterday and that was about Kew Gardens, they have seed banks and it was showing how they are trying to keep those because they can be used for medicine, and just that there are like really pretty plants that we don’t really want to lose and they could be food for other animals and that’s why we need to keep them because they could get destroyed as well.”

Memorable School Activities



“When you are little you go and plant trees, stopping deforestation and stuff like that you might need to do to preserve it, I remember stuff like that.”

“I think its a lot to do with the teacher and what they have done because there are some teachers at primary school that I remember that they were into all this environmental stuff and why we needed to do it and they were really inspirational with getting people motivated to do it and they were all explaining why you should do this but there isn't really a program or such its down to a person...”

Reward Systems, Habits & the “Scare” factor

“A lot of the time, it sounds quite bad, but people won't do something unless they get something in return...so probably people would want a reward to be motivated to do something.”

“I think that the main thing that forced us to maybe change our ways a little bit was how they basically scared us that in 30 years we are going to have no water, no energy, no nothing, we will be like cavemen.”

“Its subconscious things that we all do now, its not stuff that we do out of thinking its stuff that we do out of habit, like putting stuff in the recycling bin, turning the lights off, turning the TV off.”

Family Values & Altruistic Behaviours

“My dad made quite a big difference in how I look at this whole thing because he likes nature and everything and brought that into me because I like nature and I kind of preserve it.”

“For me it was my mom because she threatened me once that if I don’t recycle paper she will reduce the paper money that I receive.”

“Its quite scary to think that if you have children, their lives are going to be affected by this stuff and its down to us to protect our future generations, even though you might think its not going to affect you, it does. For me it’s quite sad to think that your children and for your children’s children, this will affect them in the future.”

“If we use too much energy they are going to have none left and we know nowadays that if we didn’t have energy a lot of people would struggle, so you think that if they don’t have energy how much they will struggle.”

Media Influencers



“There was this one documentary by David Attenborough, where he was showing all these creatures and the way he showed them it was amazing, showing all their lifecycles, their behaviours, and what they do, and at the very end of it they showed the destruction of how people were trying to get energy and destroying all these habitats so it sort of breaks your heart thinking that all of these creatures they are not infinite either as well as the energy.”

Cool / Uncool environmental actions

“People are shouting about it too much "look we are environmentally friendly" because they want people on their side and I think people feel a bit forced.”

“So we have got all the documentaries like David Attenborough documentaries and stuff, seeing that sort of makes you want to preserve nature, so that gives you a bit of motivation”

“The Reduce-Reuse-Recycle advert and that went on for a long time and I think that got everybody thinking about it again and then faded out, you need something for constant engagement. The government is focusing on business and all of the targets for reducing energy, but I think they need to start with like aiming at the individual, because it's the individuals that are going to make the difference after all, aren't they?”

Local versus Global Dimension



“It’s not where we live so most of us just thought it’s not going to happen. If it happens in our area I think then it would have an effect on us.”

“I think that weather events that happened recently, all the flooding that we had, makes me think about that, because if this is going to happen more regularly and you think of all the devastation that it causes, not just here but also in other countries, like hurricane Katrina and all the devastation that caused, that was horrible and seeing how long that has taken them to clean up, thinking if that is going to happen again and if its going to happen more regularly, its just, its not right.”

Situated Learning

“The windmills that we built that week (Energy Week), we were playing around with different designs of windmills, constructing them and seeing who can make the most efficient one”

“Last year I went to Germany to the wind farm factory and we were looking at how they work and they showed us how using that sort of energy could bring jobs for the production of it all, and how this can bring a lot of energy as well.”

“Giving us facts and putting things into perspective so for example we had facts like “in 30 years we are going to run out of fossil fuels” or “so far in our life we have used this many fossil fuels” or just giving us really interesting facts about what we have been doing so far with sustainability and where we are heading towards.”

“It would be nice if we were taught about potential future developments, like recently we found materials which absorb almost 100% of electromagnetic radiation which could be used for effectively super efficient solar panels. I would like to hear it at school.”

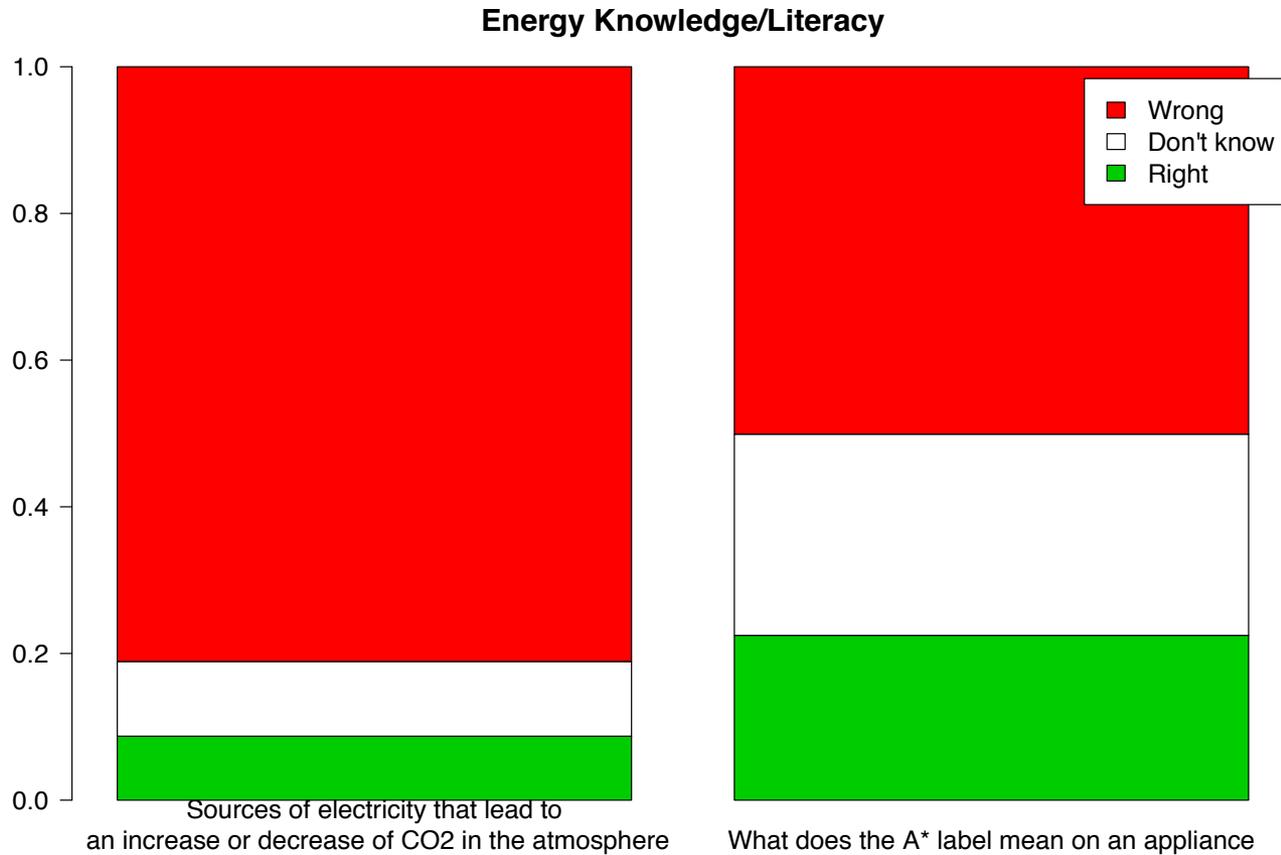


Key Findings and Suggestions



- Help young people make meaningful connections between the messages at school and at home
- Tensions between personal rewards and competitive individualism versus altruistic values and moral systems of young people
- Altruistic values traced back to their families because of the practice of their home community
- The school is not the only community of practice, learning is happening all the time and everywhere
- Create a different culture with set of social norms and new sites for situated learning through authentic learning experiences with a focus on context, sense of locality and peer-to-peer learning

Energy Knowledge

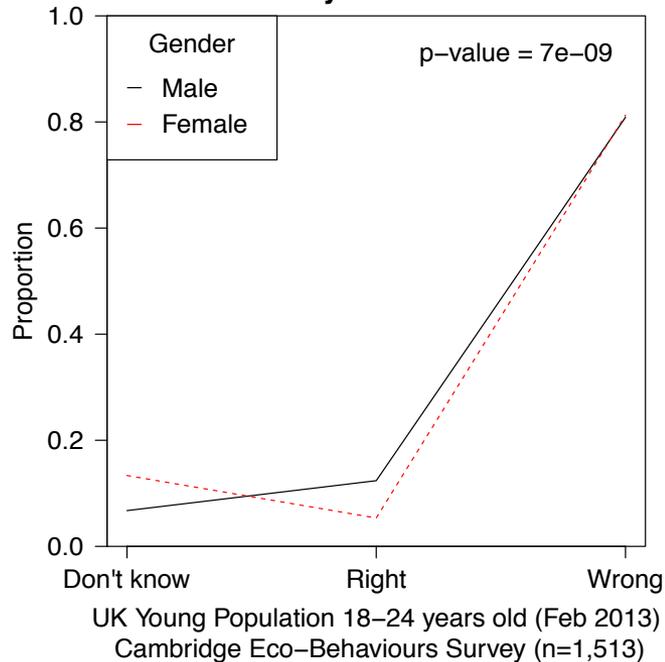


UK Young Population 18–24 years old (Feb 2013)
Cambridge Eco-Behaviours Survey (n=1,513)

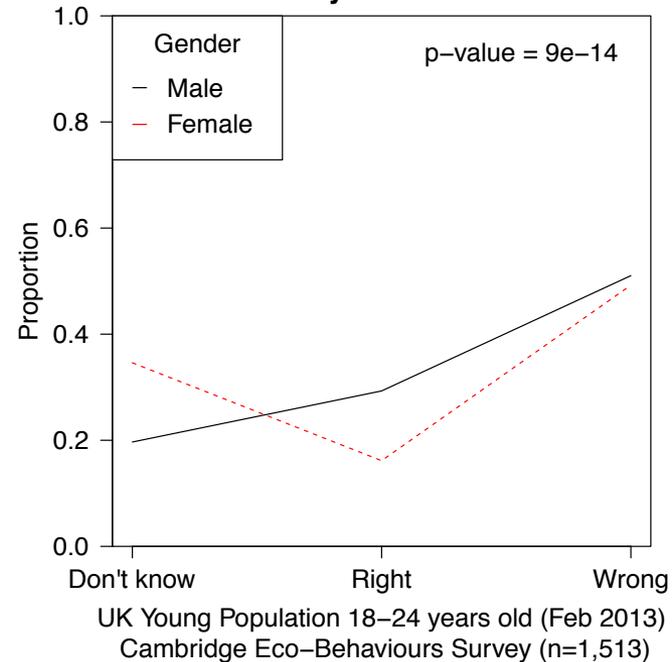
Energy Knowledge



Energy Sources Knowledge by Gender



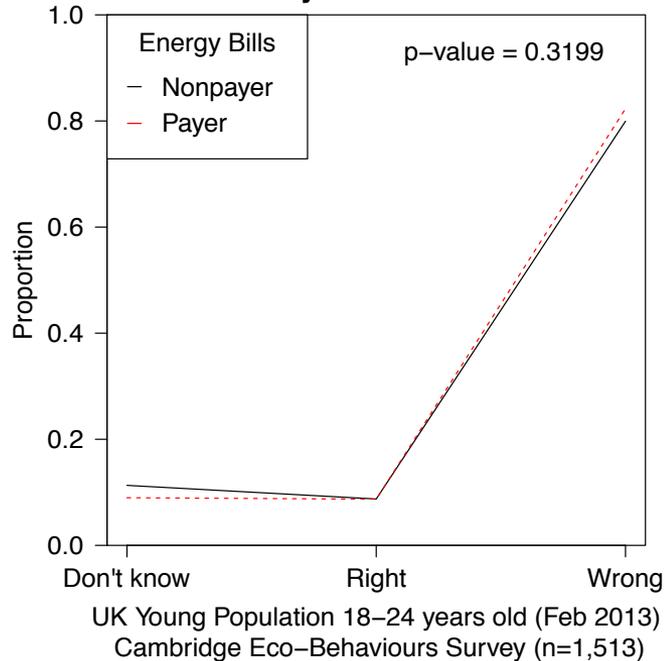
Energy label Literacy by Gender



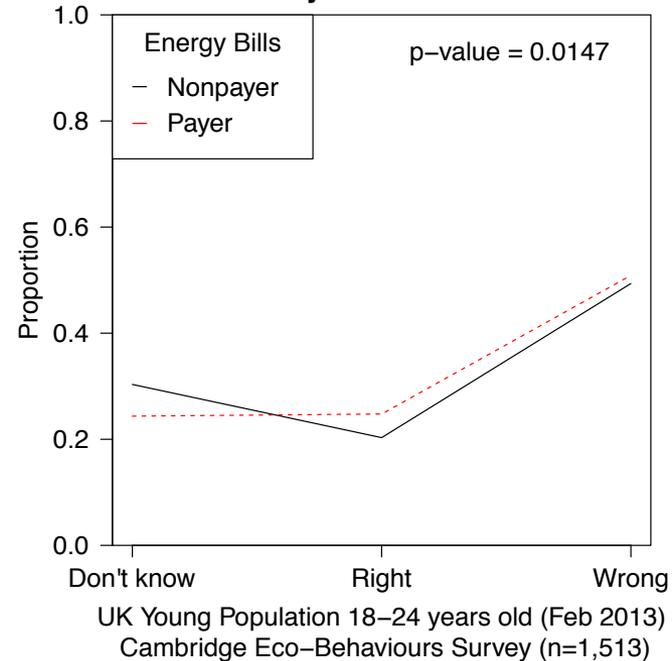
Energy Knowledge



Energy Sources Knowledge by Consumer



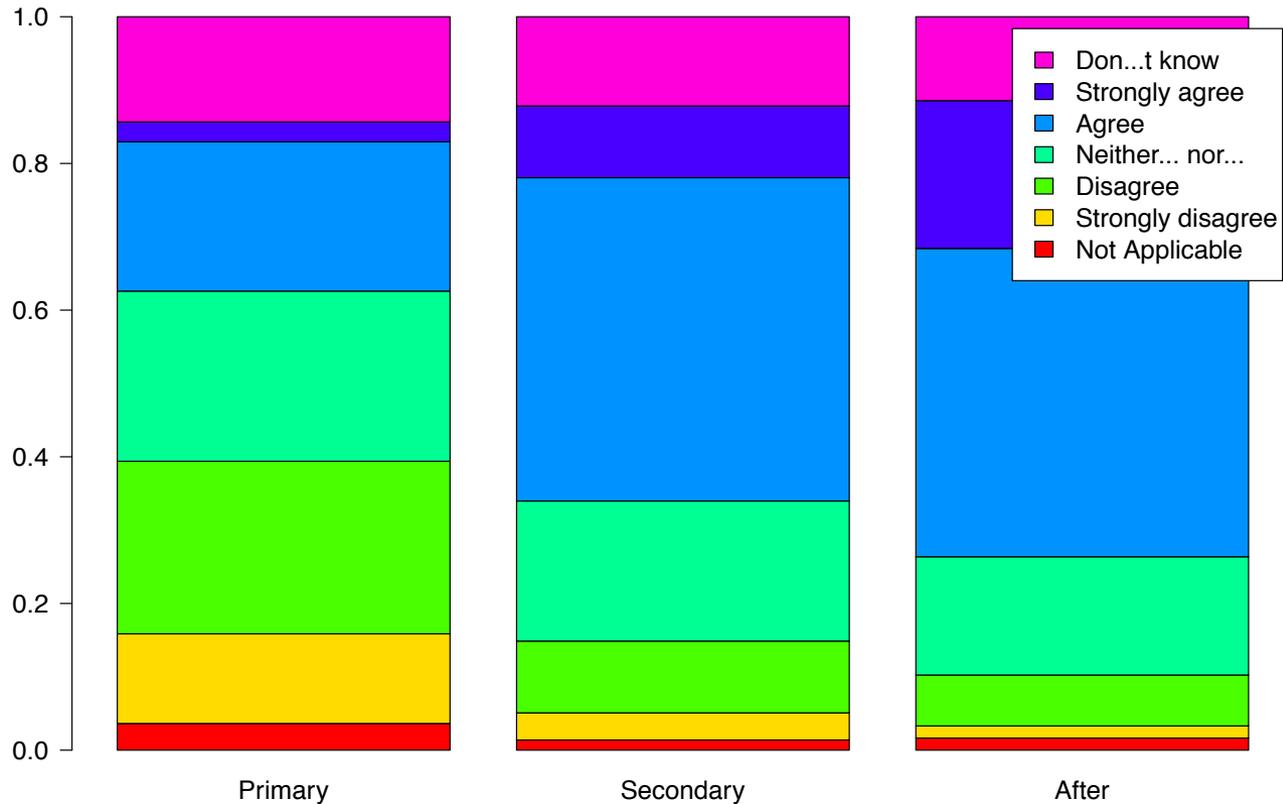
Energy label Literacy by Consumer



Environmental Views



Did your schools shape your views about the environment?

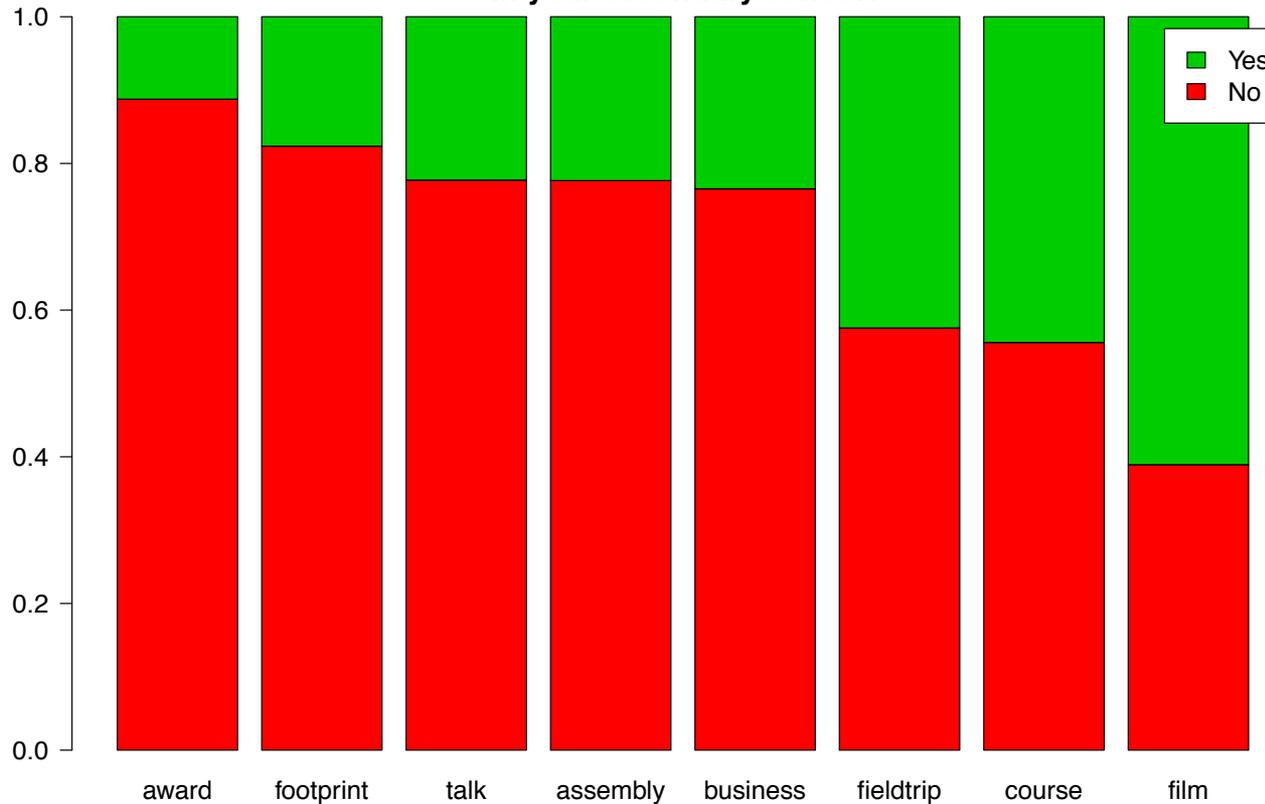


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School Activities



Did you do any of the following activities
in your secondary school?

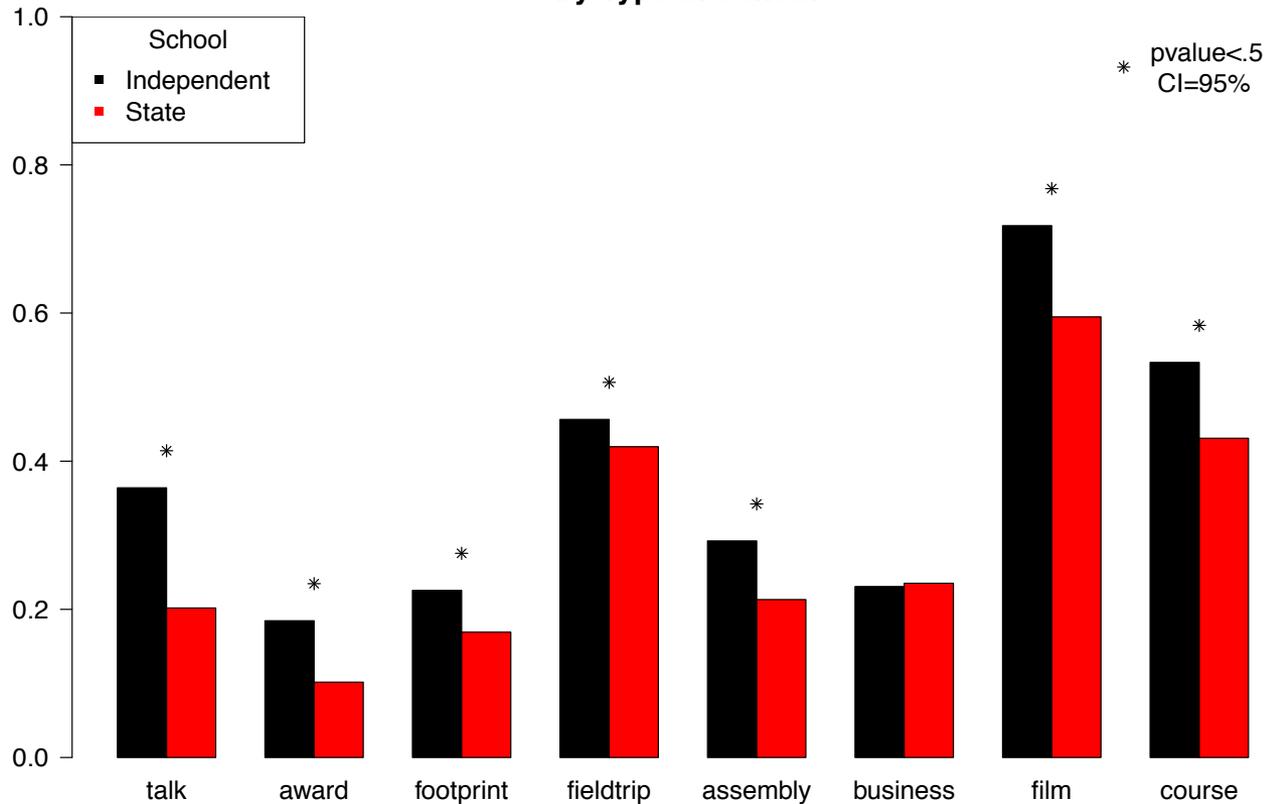


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School Activities



Did you do any of the following activities in your secondary school?
by Type of School

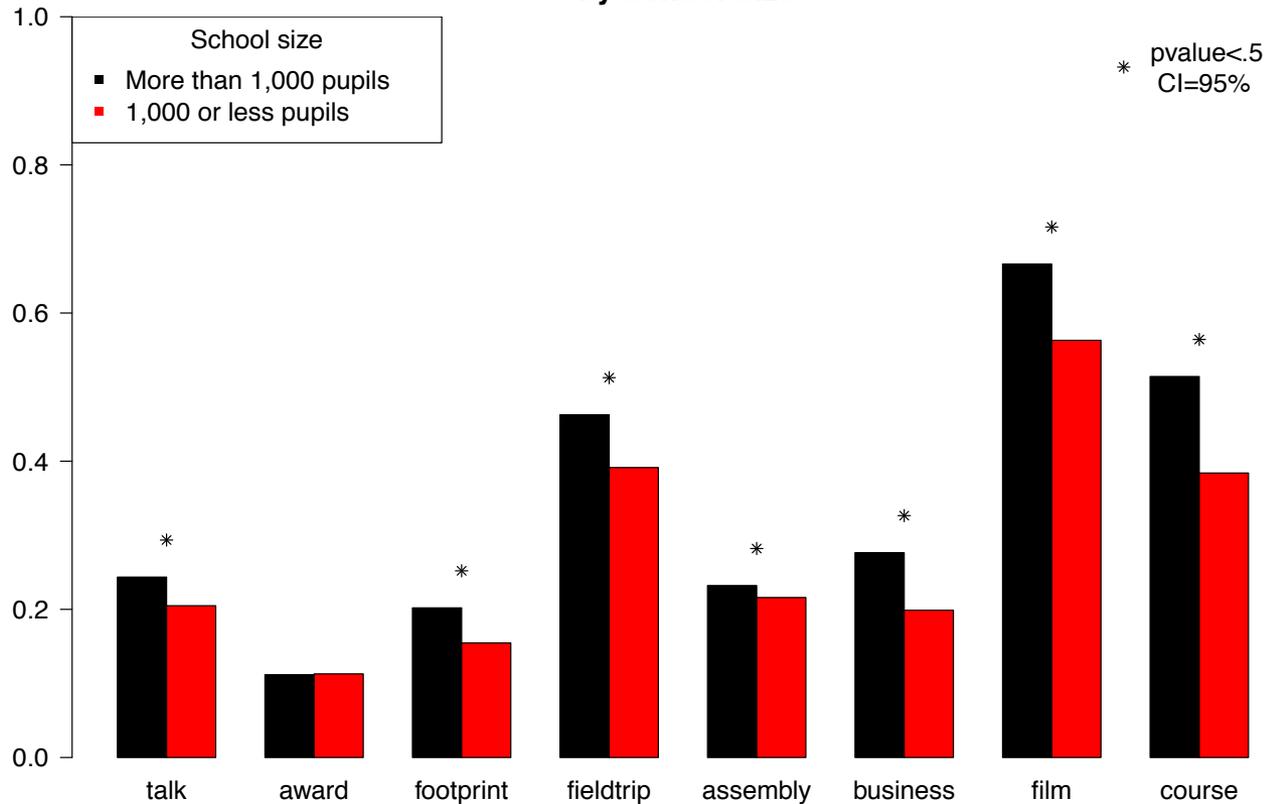


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School Activities



Did you do any of the following activities in your secondary school?
by School Size

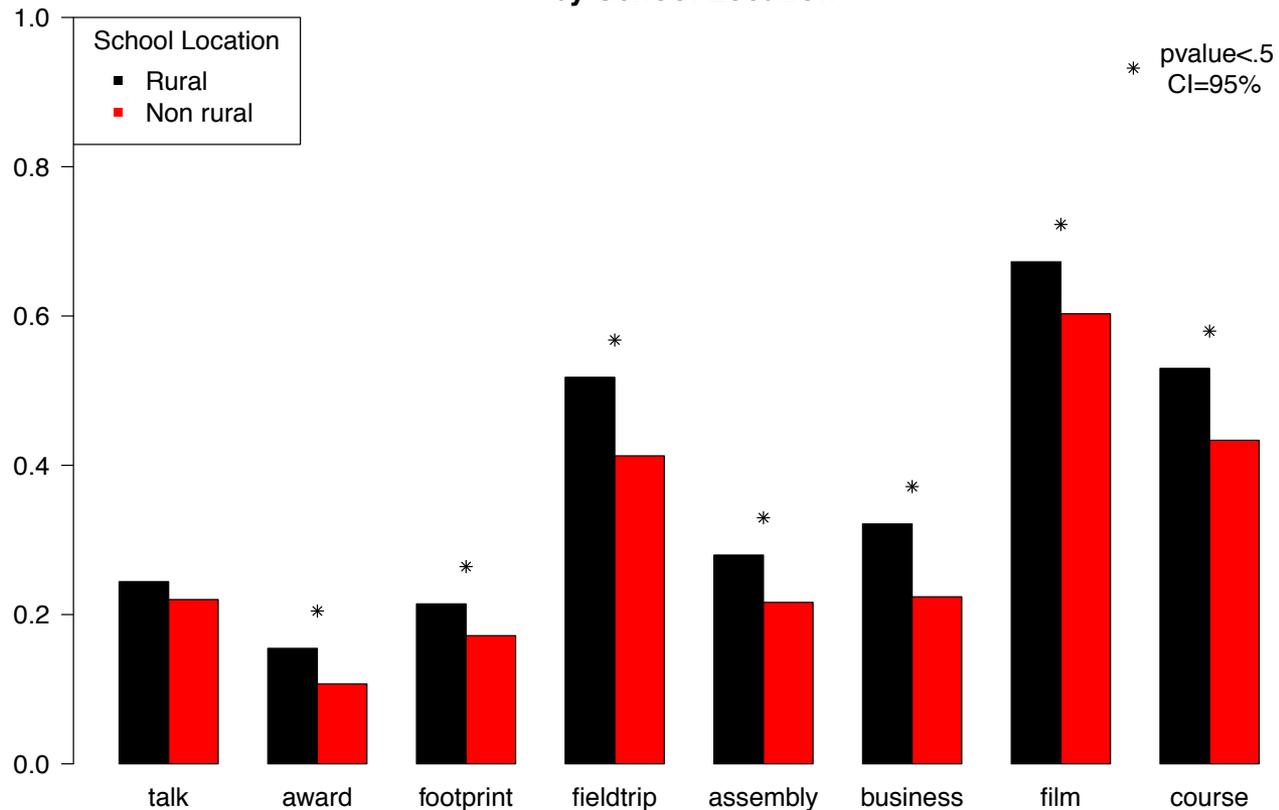


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School Activities



Did you do any of the following activities in your secondary school?
by School Location

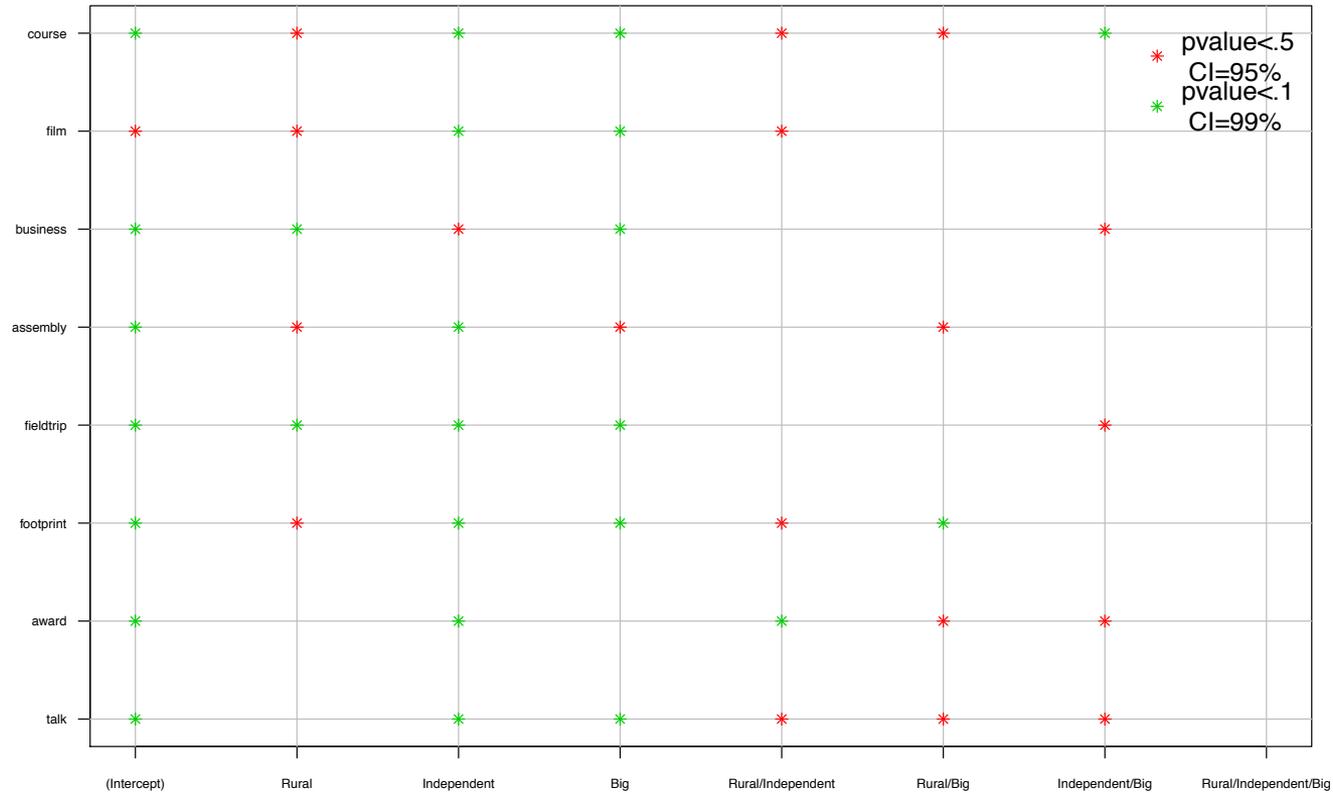


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School Activities



Statistical significance of Activities by School Profile (Size, Location and Type)

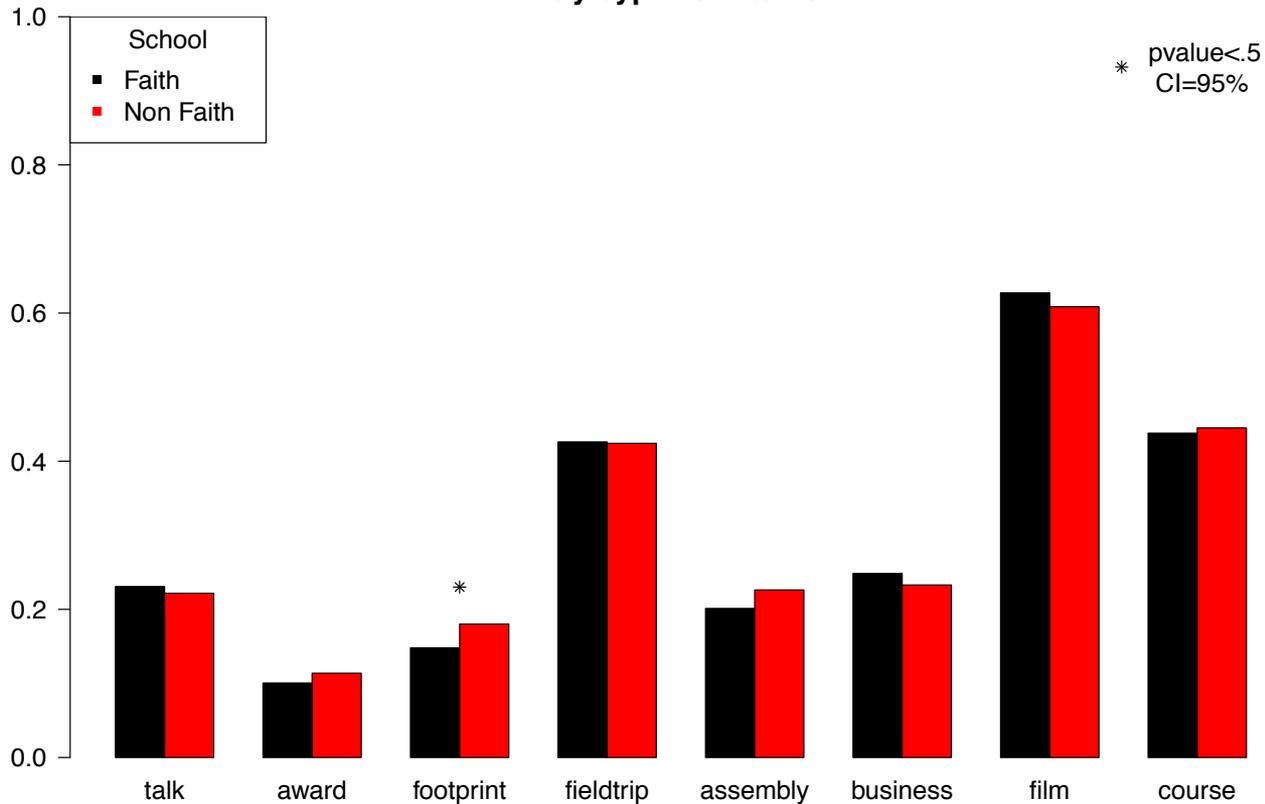


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School Activities

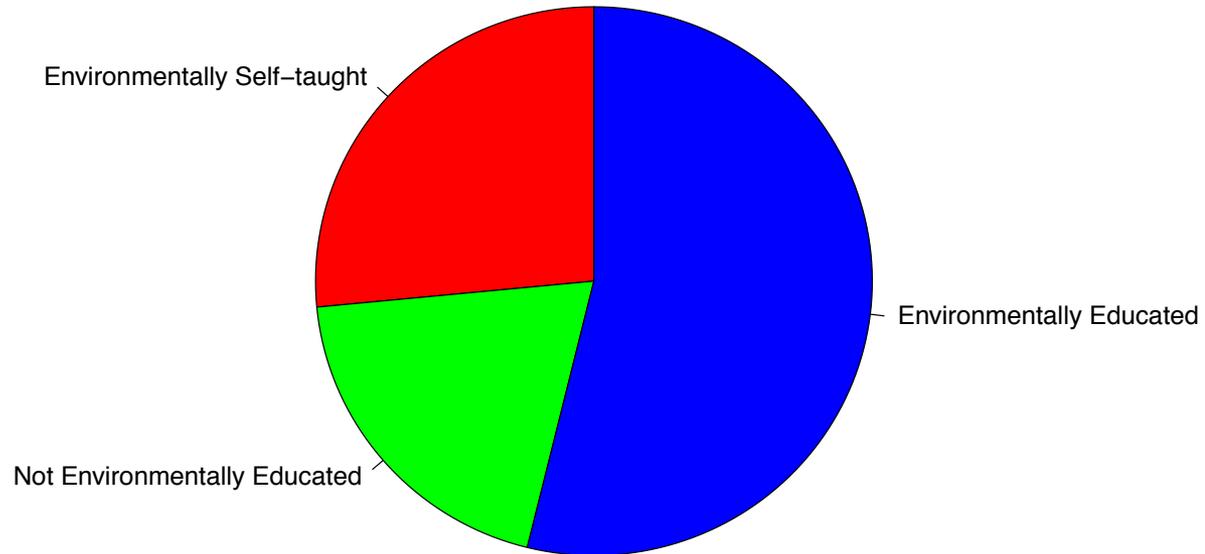


Did you do any of the following activities in your secondary school?
by Type of School



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Profiles of Young People



UK Young Population 18–24 years old (Feb 2013)
Cambridge Eco-Behaviours Survey (n=1,513)

20% Not Environmentally Educated



- Lack of energy knowledge and literacy
- ~4/10 don't know about the influence of schooling on their environmental views
- Large majorities don't know how environmentally friendly their school was
- Lowest rate of activities in secondary school
- >4/5 Lack of background in science subjects
- Lowest frequency of environmental habits

27% Environmentally Self-taught



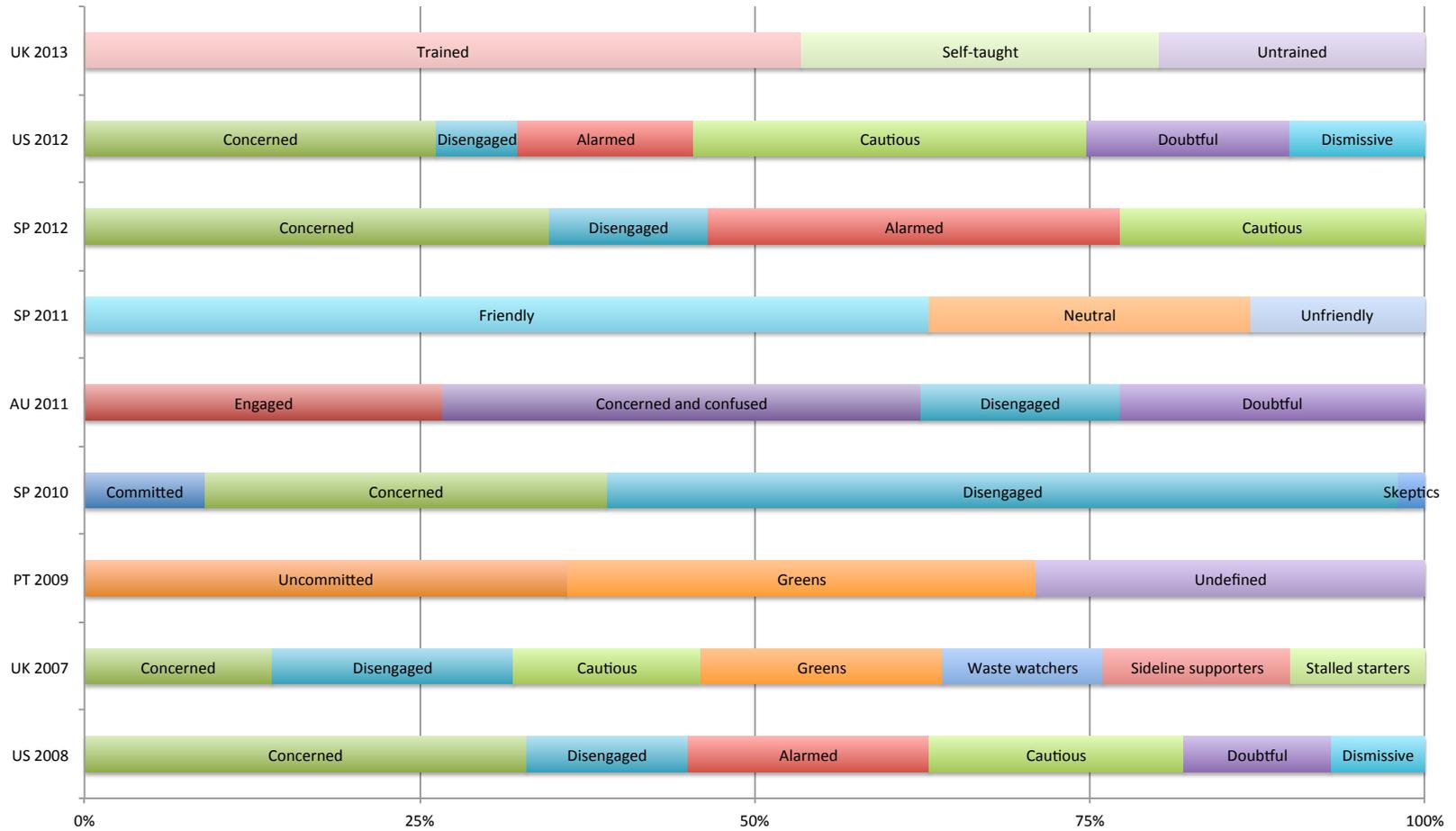
- >8/10 energy misunderstandings
- Environmental views recently shaped
- More disagreement than agreement that their schools were environmentally friendly
- Lower rate of activities in secondary school than *environmental educated people*
- More scientifically literate than *non environmental educated people*
- Highest frequency of environmental habits

54% Environmentally Educated



- >8/10 energy misunderstandings
- Environmental views shaped throughout schooling and afterwards
- More agreement than disagreement that their schools were environmentally friendly
- Higher rate of activities in secondary school than *self-taught people*
- More scientifically literate than *non environmental educated people*
- Higher frequency of environmental habits than *non environmental educated people*

Country Profiles





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Visit the CEBRG Website

<http://www.educ.cam.ac.uk/research/projects/ecobehaviours>