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The research

Masters by Research with Training



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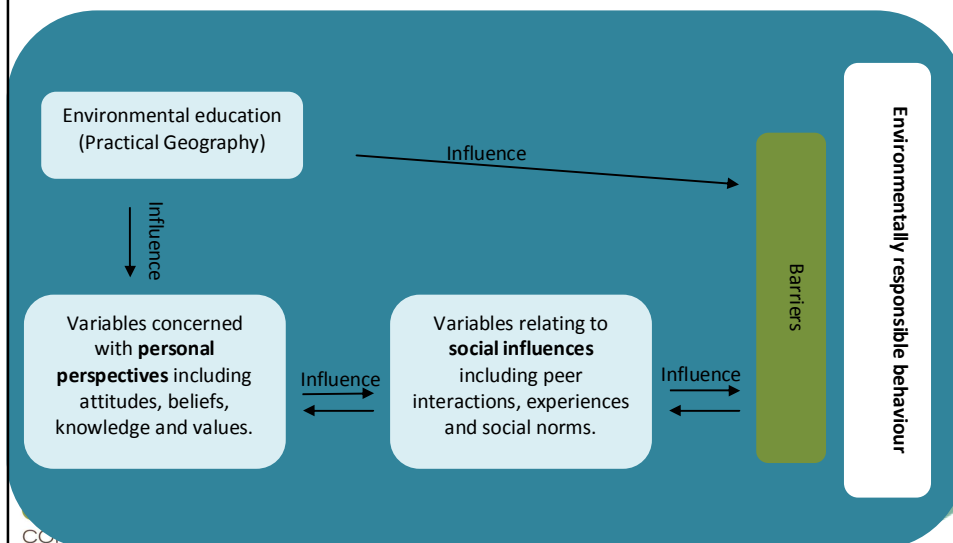
The research

Barriers to environmental behaviour change:
A case study of the behaviours and attitudes of year 11 and 12 practical geography students.

- The students' views of the relationships
- Their perspectives on the barriers & motivators to enviro behaviour change



Conceptual framework



Variable sets

Variable set (influencing factors)	Aspects of variable
Individual and personal perspectives	Attitudes, beliefs, knowledge, values.
Social influences	Peer interaction, social norms.
Formal environmental education	Practical Geography.



Data collection method	Time	Constructs/ focus	Purpose
Questionnaire	Week 1	Self-reported environmental attitudes & behaviours.	Collect initial data on students' reported environmental attitudes and behaviours for comparison between year groups, over time and between attitude and behaviour.
Questionnaire Retest	Week 12	Self-reported environmental attitudes & behaviours.	Collect follow-up data on students' reported environmental attitudes and behaviours for comparison between year groups, over time and between attitude and behaviour.
Focus Group 1	Week 15	Data from questionnaires 1 and 2.	Students interpret and discuss data results from questionnaires.
Focus Group 2	Week 16	Influences on environmental attitudes & behaviours. Barriers to ERB.	Students consider and discuss their environmental attitude and behaviours and reflect on what influences them. Identify barriers and motivators to environmentally responsible behaviours in various social settings.

Participants

	Questionnaire	Retest questionnaire	Focus Group	Focus Group 2
Year 11s	n=15	n=12	n=15	n=14
Year 12s	n=16	n=18	n=18	n=16
Total	n= 31	n=30	n=33	n=30

Questionnaires

What I think

	Strongly agree			Strongly disagree	NA
1. If no-one else is watching TV, turn it off when you leave the room.		✓			
2. Spend less than 5 minutes in the shower.				✓	
3. Walk to your friends' houses, if it is less than 10 minutes walk.	✓				

Questionnaires

What I do

	Almost always			Almost never	NA
1. If no-one else is watching TV, turn it off when you leave the room.					
2. Spend less than 5 minutes in the shower.					
3. Walk to your friends' houses, if it is less than 10 minutes walk.					



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Item	Statement	Rating
A09	Buy eco-friendly products	1
A10	Recycle at home	2
A12	Recycle at school	3
A14	Encourage family to recycle at home	4
A05	Bring own drink bottle	5
A17	Participate environ activities in free time	6
A04	Use both sides of the paper	7
A13	Encourage others to recycle at school	8
A15	Tell friends about practical geography lessons	9
A03	Walk to friend's house (<10 mins)	10
A01	Turn off TV when leave the room	11
B10	Recycle at home	12
A06	Refuse plastic bags	13
A16	Pick up litter	14
A11	Tell parents about practical geography lessons	15

Item	Statement	Rating
B03	Walk to friend's house (<10 mins)	16
B01	Turn off TV when leave the room	17
A02	Spend <5 mins in shower	18
B14	Encourage family to recycle at home	19
B13	Encourage others to recycle at school	20
B04	Use both sides of the paper	21
B15	Tell friends about practical geography lessons	22
B12	Recycle at school	23
B11	Tell parents about practical geography lessons	24
B09	Buy eco-friendly products	25
B05	Bring own drink bottle	26
B06	Refuse plastic bags	27
B17	Participate environ activities in free time	28
B02	Spend <5 mins in shower	29
B16	Pick up litter	30

Interesting bits

• *Recycling at home* quite an “easy” behaviour - more likely to do that than agree to the idea of:

- *Refusing plastic bags*
- *Picking up litter*
- *Telling parents about PG lessons*
- *Spending less than 5 mins in shower.*



Interesting bits

- *Spending <5mins in shower* was by far the behaviour most unlikely to be agreed to.

The 3 least likely behaviours were:

- *Participate environ activities in free time*
- *Spend <5 mins in shower*
- *Pick up litter*



What does this suggest?

- Appears much easier to agree with (attitude) that to do a behaviour
- Each environmental behaviour has its own barriers based on different variables
- There is a relationship between attitude & behaviour but it's not predictive.



Item	Statement	Att loc	Behav loc	Difference
9	Buy eco-friendly products	-1.50	1.09	2.59
17	Participate environ activities in free time	-0.86	1.50	2.35
5	Bring own drink bottle	-0.90	1.24	2.14
16	Pick up litter	-0.34	1.78	2.13
12	Recycle at school	-1.23	0.79	2.02
6	Refuse plastic bags	-0.53	1.32	1.85
2	Spend <5 mins in shower	0.16	1.75	1.59
4	Use both sides of the paper	-0.84	0.63	1.47
15	Tell friends about PG lessons	-0.81	0.64	1.44
14	Encourage family to recycle at home	-1.04	0.39	1.44
13	Encourage others to recycle at school	-0.84	0.58	1.41
11	Tell parents about PG lessons	-0.31	0.90	1.21
10	Recycle at home	-1.45	-0.56	0.89
1	Turn off TV when leave the room	-0.66	0.13	0.80
3	Walk to friend's house (<10 mins)	-0.80	-0.22	0.59

Focus groups

Does your attitude match your behaviour towards the environment?

Some parts match, like recycling, but I take long showers. So it doesn't all match. (Year 11 student)

Yeah, my behaviour doesn't really reflect my attitude, I know some things I should do, but don't do them. (Year 11 student)

It could be good at school but change when you get out. Depending where you are and who you're with. At school you're not doing anything for the environment because you're lazy. (Year 11 student)

Focus groups

Does your attitude match your behaviour towards the environment?

Your attitude can be different. When you're with different people, your attitude changes. (Year 11 student)

Yeah, I have long showers but I do recycling. (Year 11 student)

No. Because I want to save the earth but can't be bothered. I want to recycle but... (Year 12 student)

No, I sometimes have bad behaviour, but I'd feel better if people did more. (Year 12 student)

Yeah absolutely, I've been into the environment since I was little. (Year 12 student)

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Reason	% of responses	Example responses
Lack of motivation	18%	"We're lazy."
Socially unacceptable	14%	"...at school if you were like "c'mon, lets all recycle", people would just give you that look."
No choice	12%	"You might want to get driven, but parents might say no, make you walk".
Unrealistic	8%	"You can't have a 5 minute shower"
No opportunity	8%	"If something came up I might, but you never hear about things like that."
No-one else does	4%	"Everyone agrees but no-one does it."
No reward/ recognition	4%	"No one recognises that you've done anything."
No time	4%	"You want to go out on the weekend and work Saturdays, so not really the time."
Not my responsibility	4%	"People should take responsibility for their own things."
Habit	4%	"Just a habit of putting it in the bin." (not recycling)
Don't want to	4%	"We are told to do it, but stuff it."
I've done enough	2%	"I've done enough."
Ineffective/won't	1%	"It won't work."

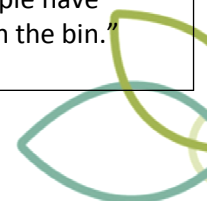
Influence	Example response
Practical geography teacher	I think we're influenced by Mr X. (Year 12 student)
	Mr X influences us. (Year 11 student)
	Mr X tells us, but we respect him. We get rewards. But we don't get a choice. He's so down to earth. Coz he is more like a friend than a teacher, so you listen to him more. (Year 11 student)
	They (<i>teachers</i>) are sort of our role models. We're here 5 days a week so if they're always pushing us to do it, then it get drills in harder.
Family/upbringing	Media, family, learning about it. (Year 12 student)
	Your upbringing. Your parents and your family affects a lot the way you think. (Year 12 student)
Knowledge	It depends on how much knowledge you have to how much you are influenced. (Year 12 student)
	Friends more when I was younger and more naive. But now I know what is right and wrong. (Year 12 student)
Participation in research project	Even having your survey and you coming to talk to us. Like, it lets us share ideas and stuff. Just like creating an awareness. (Year 12 student)

Common Theme	Examples
Roles & Outcomes	<p>"I don't see the point in just me doing it. If I knew everyone was doing it, then I'd do it. Otherwise you feel a bit ripped off, like you're busting your guts and no-one else is doing it"</p> <p>"I feel like if I just do it, it's not going to make a difference – on a global scale. It's not like everyone is going to do it."</p> <p>"There is a cleaner anyway, at school the cleaner will pick it up. But if you go to the beach, and you see a bottle, then you'd pick it up."</p>
Social trends	<p>"Probably just the way that people look at each other. People often try to outmatch each other (through consumption)."</p> <p>"Society – socially. You wouldn't go plant trees for fun."</p> <p>"Habits." "Laziness." "Too lazy."</p>
Others perception	<p>"Reputation. People don't like to be called a hippy."</p> <p>"The fear of being labelled a nerd (at home)."</p> <p>"Peer pressure – it's uncool. You don't tell people to pick up litter."</p>

Common Theme	Examples
Lack of opportunity /control	“Sometimes we’re not in control of those things (at home).” “Not enough opportunities. Especially as a teenager (in the community).”
Infrastructure	“No bins between the school and Carousel (shopping centre).” “We need more bins in parks and on the main street.”
Personal choice	“I don’t like using 2 sides of the paper.” “Picking up other people’s rubbish is gross.”
Disempowerment	“One of the worse things you can do is get kids to pick up litter. It just makes them want to rebel.”
Lack of knowledge	“I don’t know how (to print of both sides of the paper).”

Ways to encourage ERB @ school

Common Theme	Examples
Knowledge	“Teach us more about it. Coz nobody outside this class knows anything about it. People don’t like to know about how bad the problems are, so then they don’t care.” “Awareness”
Infrastructure	“It would be good if we had recycle bins here because so may people do buy drinks from the vending machine and so many people have bottles and they just get chucked in the bin.” “Give us recycling bins at school.”



Common Theme	Examples
Staff involvement	<p>“We are the only class that recycles. If there were more teachers, then there’d be more classes doing it (recycling).”</p> <p>“None of the other teachers care. If you don’t put it in the recycling bin. If you just put it in the normal bin, they just say “whatever”.”</p> <p>“Even if they (other teachers) don’t care, they should (encourage recycling) especially the art and IT teacher.”</p> <p>“They (<i>teachers</i>) are sort of our role models. We’re here 5 days a week so if they’re always pushing us to do it, then it get drills in harder.”</p>
Wider student involvement	<p>“I reckon it shouldn’t only be practical geography (that learns about environmental stuff).”</p> <p>“We have conventions for other things, but not for the environment. And if it’s about the environment, it’s not compulsory.”</p> <p>“They should introduce more volunteer programs. People are looking for experience to put on their resumes.”</p>

Limitations & future direction

- Limited time frames (12 wks)
- No pre-PG data or control group
- Small sample



Best bits

- Inclusion of students in analysing their questionnaire data
- Students are acutely aware that there needs to be a whole school approach
- Many of the barriers stated could be easily addressed



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Questions ?

thank you...



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