

# Rachel Hollis

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*Encouraging individuals to choose  
more environmentally friendly  
products - the role of big data*

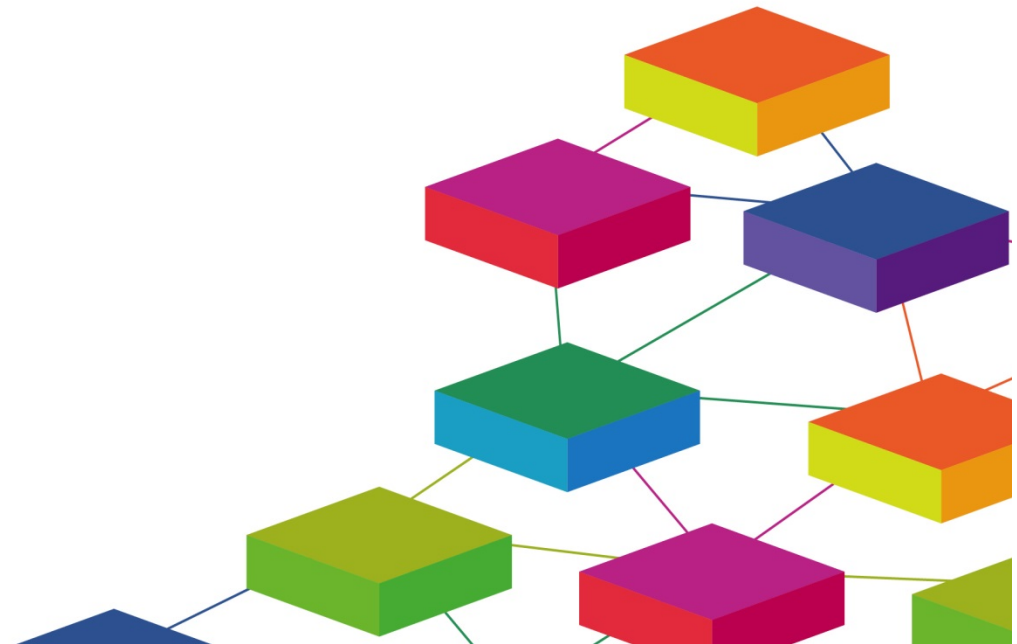


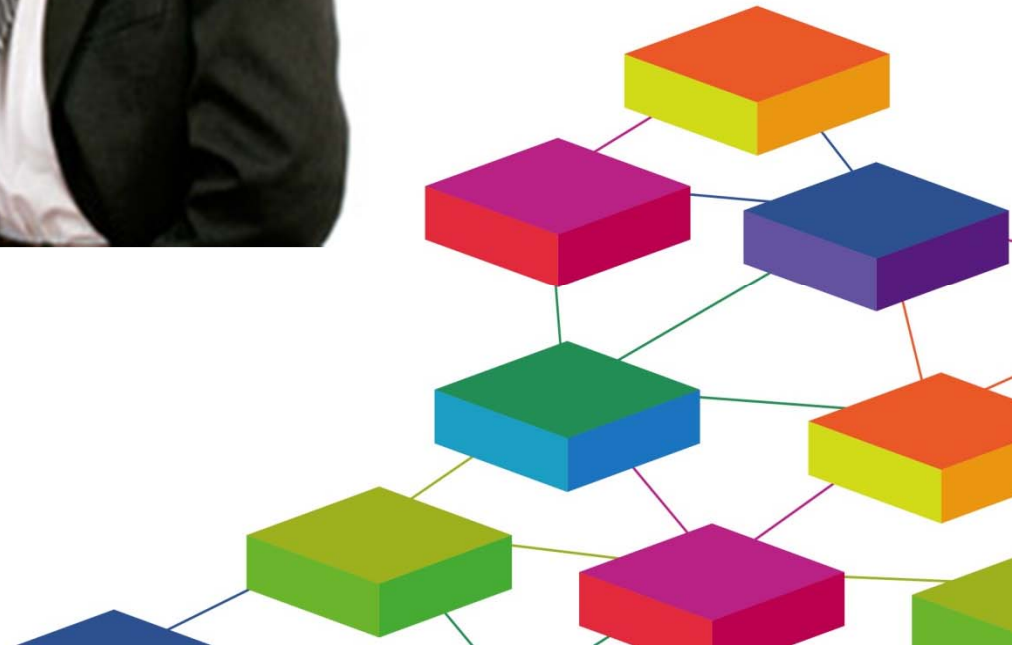
# My background

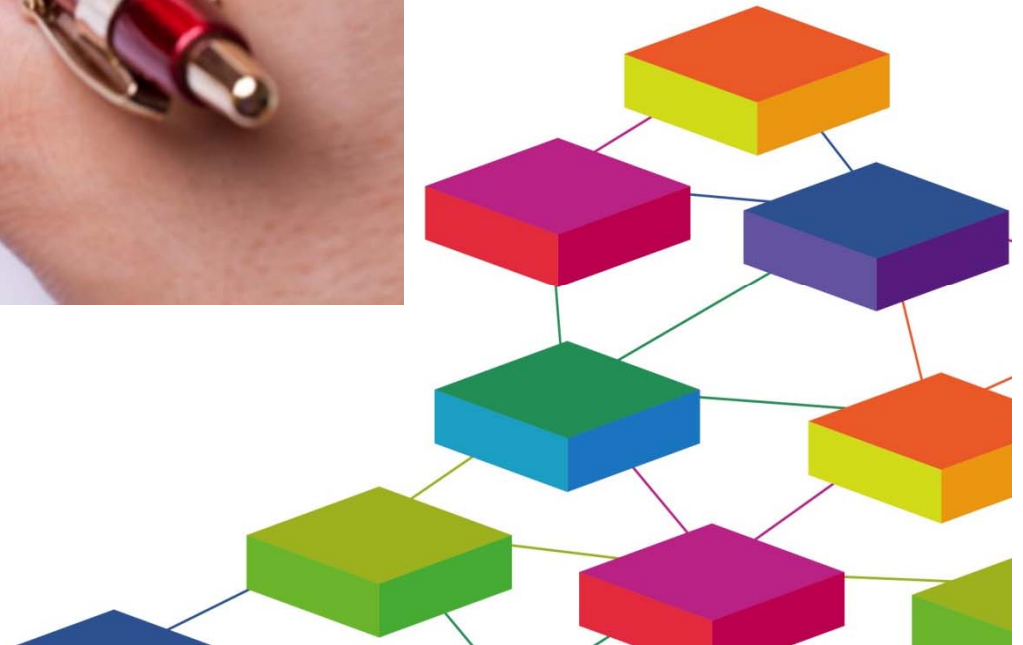
- BSc Psychology (2011-2014)
- MSc Business Analytics and Decision Sciences (2014-2015)
- PhD “Changing the behaviours, habits and practice around the use of household surface cleaning products to reduce associated environmental and health problems.” (2015+)

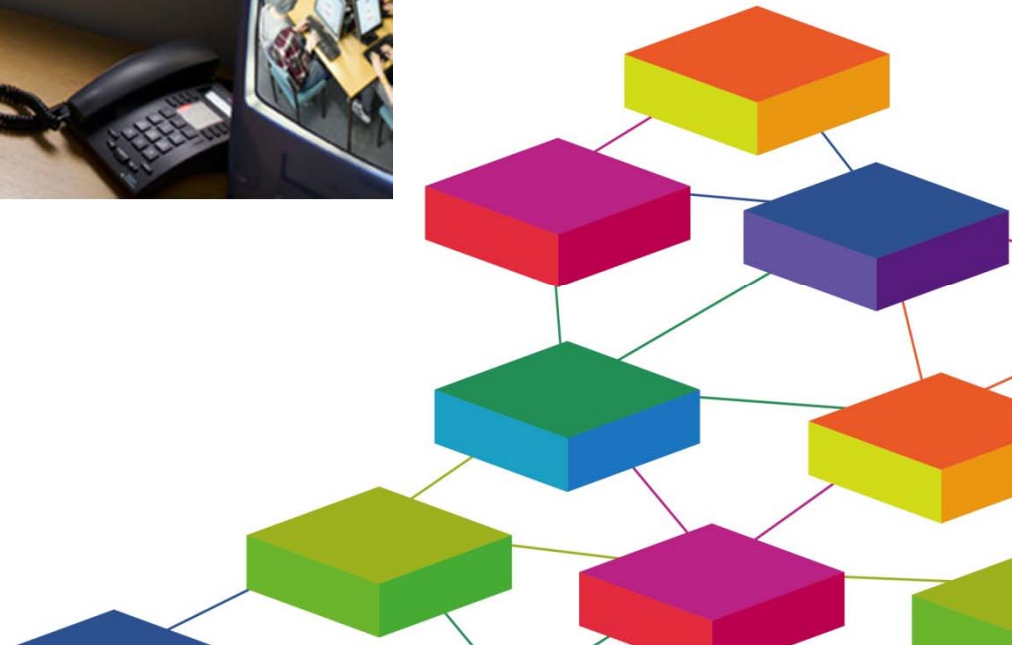


# Traditional Social Science Research Methods









# Limitations of Social Science Methods

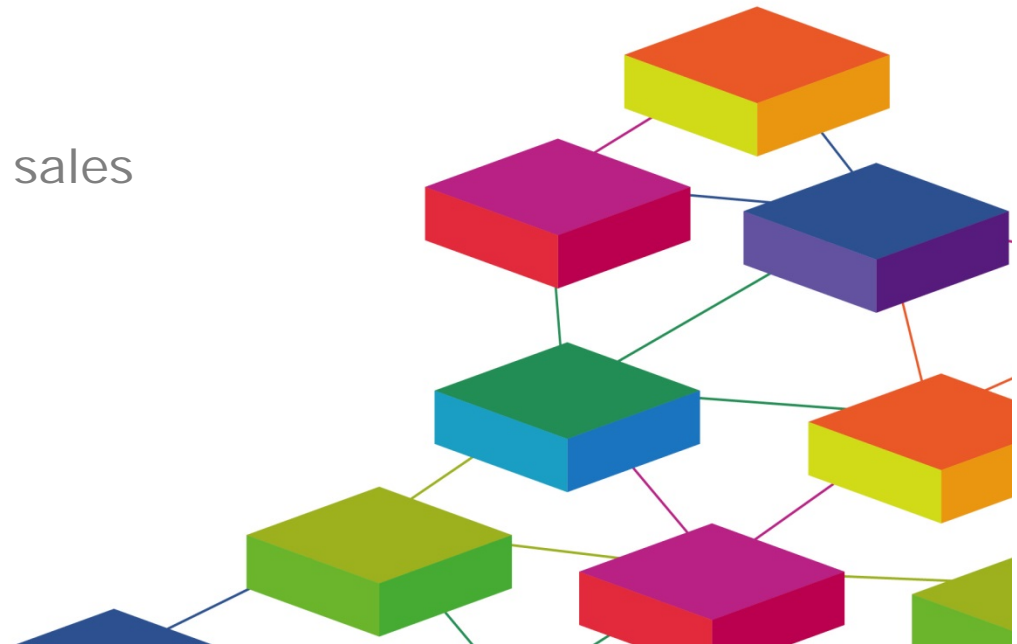
- Social desirability bias
- Demand characteristics
- Behavioural intentions as a proxy
- Self-reported behaviour
- Attitude-Behaviour gap
- Problems with context



# The Role of Big Data

## Sales Data:

- Monitor sales of green products against conventional products
- Track the success of interventions
- Validate survey results
- Assess influencing factors on sales





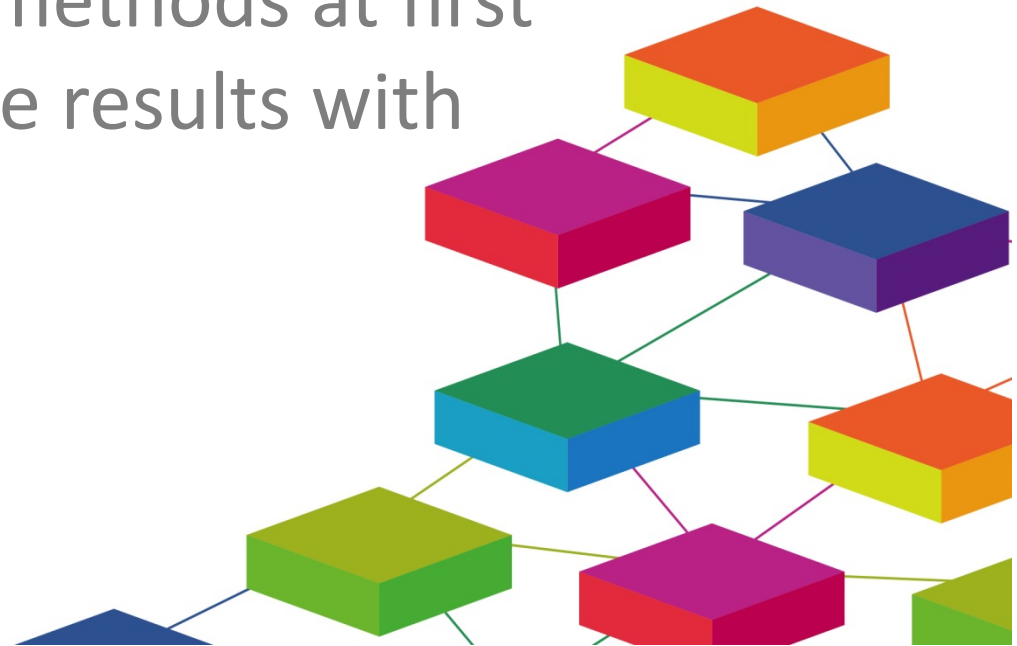
# Limitations of Big Data

- Scope of research is limited by the type and format of data you have access to
- Correlation doesn't equal causation
- Doesn't allow for a detailed understanding of consumer product choice



# A Combination Approach

- Use the strengths of each approach to overcome the limitations of another
- Using social science methods at first and then validating the results with big data



# My Project

- Encouraging consumers to choose more environmentally friendly cleaning products
- Using data from major supermarket retailers to track the success of behaviour change interventions
- In the process of working out what type of interventions are likely to be most successful



What factors influence whether  
a consumer chooses a green  
product or not?



- Demographics
- Environmental/other values
- Price
- Brand loyalty
- Information
- Context of purchase
- Perceptions of green products



What do people think of environmentally friendly cleaning products?





Consumer  
Data  
Research  
Centre

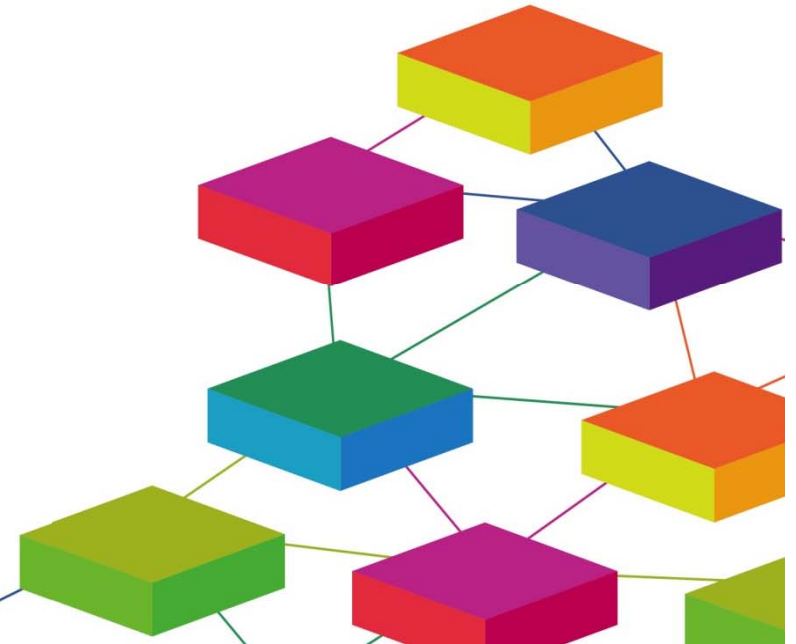
An ESRC Data  
Investment





Consumer  
Data  
Research  
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An ESRC Data  
Investment





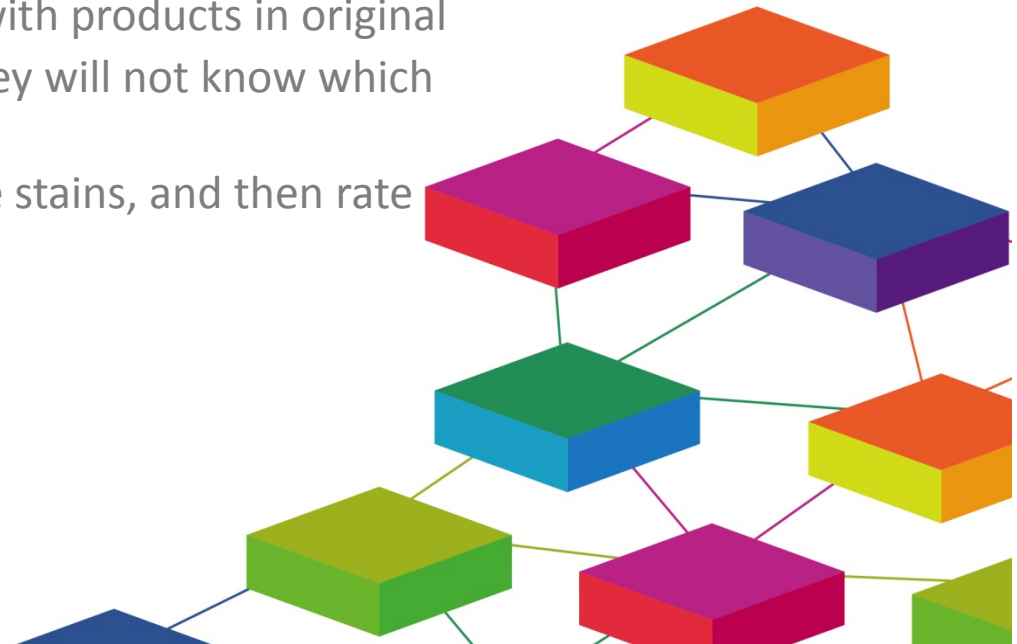
What can be done to encourage consumers to purchase more environmentally friendly cleaning products?



# My Project

Are green cleaning products worse than conventional cleaning products, or do people just perceive them to be worse?

- Currently running a study to assess this.
- Half of participants will be presented with products in original packaging, half in plain bottles where they will not know which product is which.
- Participants will have to clean the same stains, and then rate the products on a number of attributes
- Ratings assessed across each condition



# My project and Big Data

- Using traditional social science methods to investigate the factors that influence consumer buying behaviour, and designing interventions based on these
- Using sales data from stores to assess whether the interventions are successful in the context of a supermarket.



# Questions?

