

Who encourages us to cycle? A novel approach to researching social influence in UK cycling



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Understanding & Motivating Cycling seminar, 10th Dec 2010

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- Literature Review
- Methodology – why chosen?
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The PhD Research Project

- Topic: exploratory study to understand gender differences and social influence in cycling
- 3 yr f/t EPSRC (Engineering & Physical Sciences Research Council) funded project (Dec '08 – Nov '11)
- Cross-disciplinary team & fields:
FH&LS (Dr Jane Powell (DoS), Dr Paul Pilkington)
FET (CTS) (Prof. Graham Parkhurst)
- Part of iConnect consortium (www.iconnect.ac.uk), a group of 8 Universities which aims to measure and evaluate the changes in travel, physical activity and carbon emissions associated with Sustrans' Connect2 programme (www.sustransconnect2.org.uk)
- Study area = Cardiff (People's Bridge Connect2 project)

Literature Review: Cycling & Gender

- Inequitable distribution of cycling in UK; 30% of trips by women (age & ethnicity)
- Low levels of cycling (UK, USA) = low inclusivity
- High levels of cycling (N. Europe) = cycling for all
- Greater safety concerns (traffic/personal)
- Cycling perceived as a 'dangerous' and/or 'sporty' activity – requiring special/protective clothing.
- Concerns over personal appearance, esp. younger age groups; in London 25's & under who cycle: 2% girls 11% boys
- Wider social norms about culturally 'acceptable' activities for girls and boys (& men and women)



Literature Review: Social Influence

- White et al.'s 2009 study of recycling found that the 'visibility' of a behaviour which was being encouraged was important. Wider visibility also important also for female cyclists? Champions/role models.
- Health field - many recent behavioural change programmes i.e. PEACH at UoB (smoking, drug and alcohol abuse, diet, exercise and healthy lifestyle)
- Are there gender differences in how social/peer pressure operates?
- Gatersleben - affective factors relating to car use were gender differentiated, likely to be similar for cycle usage also (Gatersleben, 2007).

Research Design: why & how?

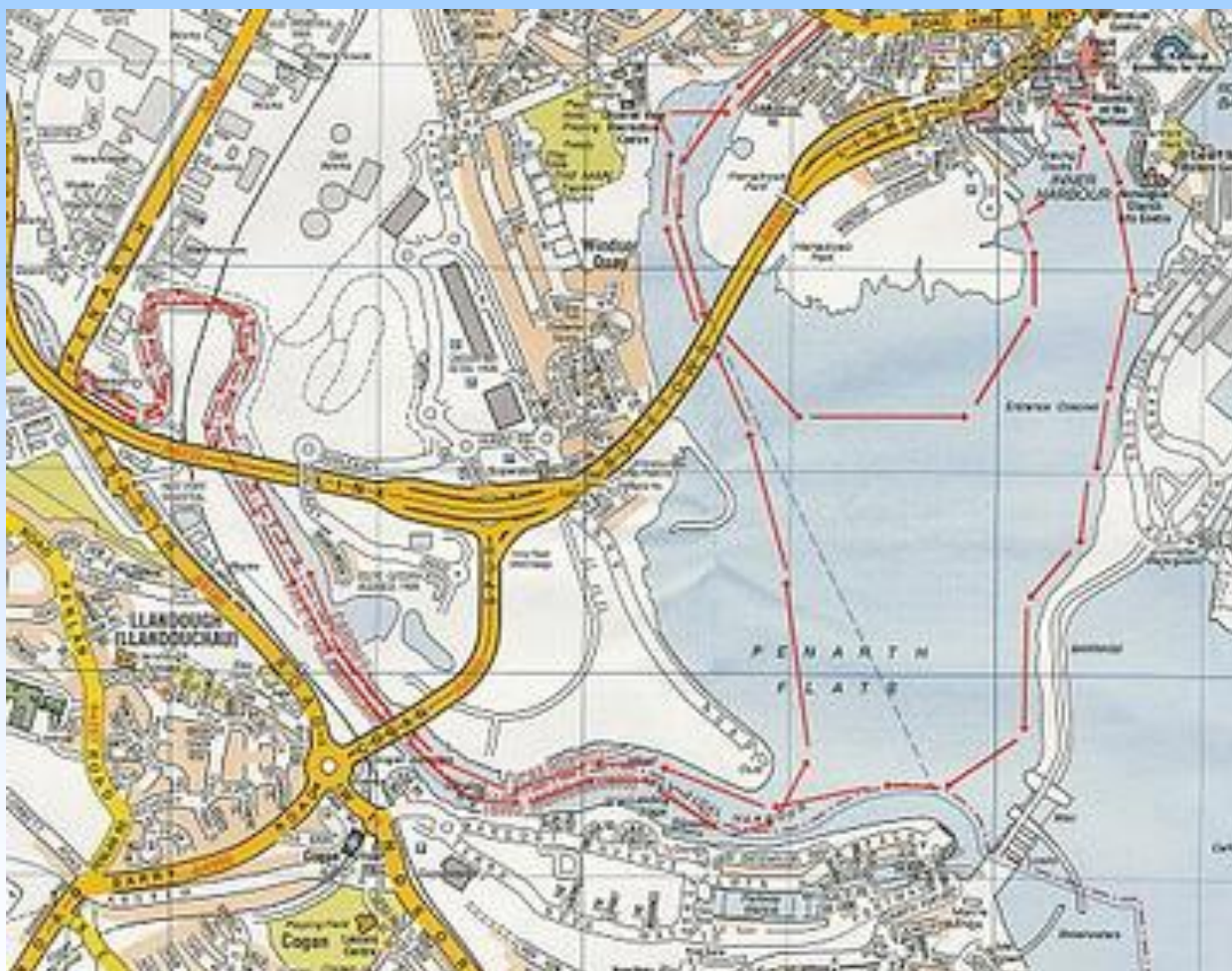
- Exploratory study: Gap in literature around qualitative perspective on gender, cycling & social influence
- Taking account of other current research work: currently several large-scale surveys underway on walking & cycling
- **Phase 1:** Exploratory pilot study (May – Sept 2010, Bristol)
- **Phase 2:** In-depth interviews with 'egos'
(SNA (social network analysis) approach & social mapping)
Current cycling patterns, social influence effects & gender
(Oct '10 – Jan '11, Cardiff)
- **Phase 3:** Social reference focus groups with 'alters'; family, friend/peer & colleague networks (image prompts)
Perceptions of the ego's cycling behaviour, degree of influence. (Oct '10 – Jan '11, Cardiff)
- **Phase 4:** Secondary quantitative data analysis

Methodology - study location

Case Study Connect2 site:
The People's Bridge / Pont y Werin - Cardiff to Penarth





Methodology: Cardiff Bay/Penarth



Methodology: recruitment strategy

- Purposive sampling: Recruited via bike shops & places of work & study
- Paper flyers distributed
- Emails via 'gatekeepers'
- Initial contact from participant:
 - Info sheet (in advance)
 - Consent form
 - Mini Questionnaire
 - Incentives & info pack
- Interview - themed semi-structured questions
- Ask if willing to take part in second stage – contacts asked for & invited to FG



connect  University of the West of England

**Cycling stories:
what are your Bristol
cycling experiences?**

Do you cycle in Bristol?

Would you be happy to be interviewed about your cycling experiences
by a researcher from the University of the West of England?

It will take no more than an hour and you will be given a £10 voucher as
a thank you for your contribution.

Interviews can take place at a time and place within Bristol to suit you.

If you are interested, simply get in touch with me, Anja Dalton:

TEL: 07963 831882 EMAIL: ANJA2.DALTON@UWE.AC.UK

POST: ROOM 4Q53, UNIVERSITY OF THE WEST OF ENGLAND, FRENCHAY CAMPUS,
COLDHARBOUR LANE, BRISTOL, BS16 1QY

Methodology: Interview & Focus Group question themes

- General/childhood cycling
- Current cycling patterns & how feel about them
- Inward & outward social influence
- Gender
- Degree of multi-modality
- Cycling with children
- Barriers & enablers & facility types preferred
- Interviews – Social mapping
- Focus Groups – Image prompts & ask about original cyclist

Methodology in practice – review

- Phase 1: Exploratory study
 - Completed: 8 interviews & 2 focus groups (Bristol May – Sept 2010)
- Phase 2: In-depth interviews with adult f & m cyclists (egos)
 - Goal: minimum 20 interviews (15 completed, 9 arranged)
 - (Cardiff Sept 2010 – Jan 2011)
- Phase 3: Focus groups with people they know: family, friends or colleagues (alters)
 - Goal: 5 – 10 focus groups (3 currently being arranged)
 - (Cardiff Sept 2010 – Jan 2011)
- Phase 4: Secondary quantitative
 - Goal: analyse gender and social influence patterns in:
 - Sustrans route-user monitoring programme
 - iConnect pre- (April 2010) & post-intervention (April 2011) surveys
 - Cycling Demonstration Towns & City survey

Bristol (P1) data collection record of interviews & focus groups

Pseudonym	Date	Location	Place	Age	H'hold (£)
Tristan Evans	29 Apr	Bristol Uni	Work	37	50,000+
Kay Owens	5 May	Redland	Home	51	15,000 – 29,999
John Chancer	21 May	Clifton	Public	34	50,000+
Toby Hislop	25 May	BRI	Work	42	50,000+
Lucy Minty	23 June	Filton	Home	26	30,000 – 49,999
Ellen Fowler	30 June	Bishopston	Home	55	30,000 – 49,999
Molly Jenkins	19 July	Westbury	Home	61	30,000 – 49,999
Catherine Church	9 Sept	Cotham	Home	49	30,000 – 49,999

Lucy's friends x 5 (FG) 29th June 2010 Horfield

- (Sarah Ubley, Hayley Carter, Ellie Prescott, Amber Little, Jane Potter)

Molly's friends x 3 (FG) 3rd Sept 2010 Westbury-on-Trym

- (Adam Garrett, Kirsten Holme & Paula Krisp)

Social influence themes 1 – direct social ties

- **John:** *"One of the immediate stimulus's (sic), was one of the **bosses** in work said, 'Oh, I've cycled in today John' and I was thinking, wait a minute, a fifty year old cycling in, I should be cycling in..."*
- **Toby:** *"So I've had a couple of **university friends** who simultaneously got into cycling as a sport over the last 5 years. And through them we've cycled a lot recreationally...so definitely they have been influential."*
- **Molly:** *"Again, through my **daughter**. She had all this sort of information... that in some ways made it very difficult for me to say no."*
- **Lucy:** *"My **housemates** definitely encouraged me..."*

Social influence themes 2 – wider identification

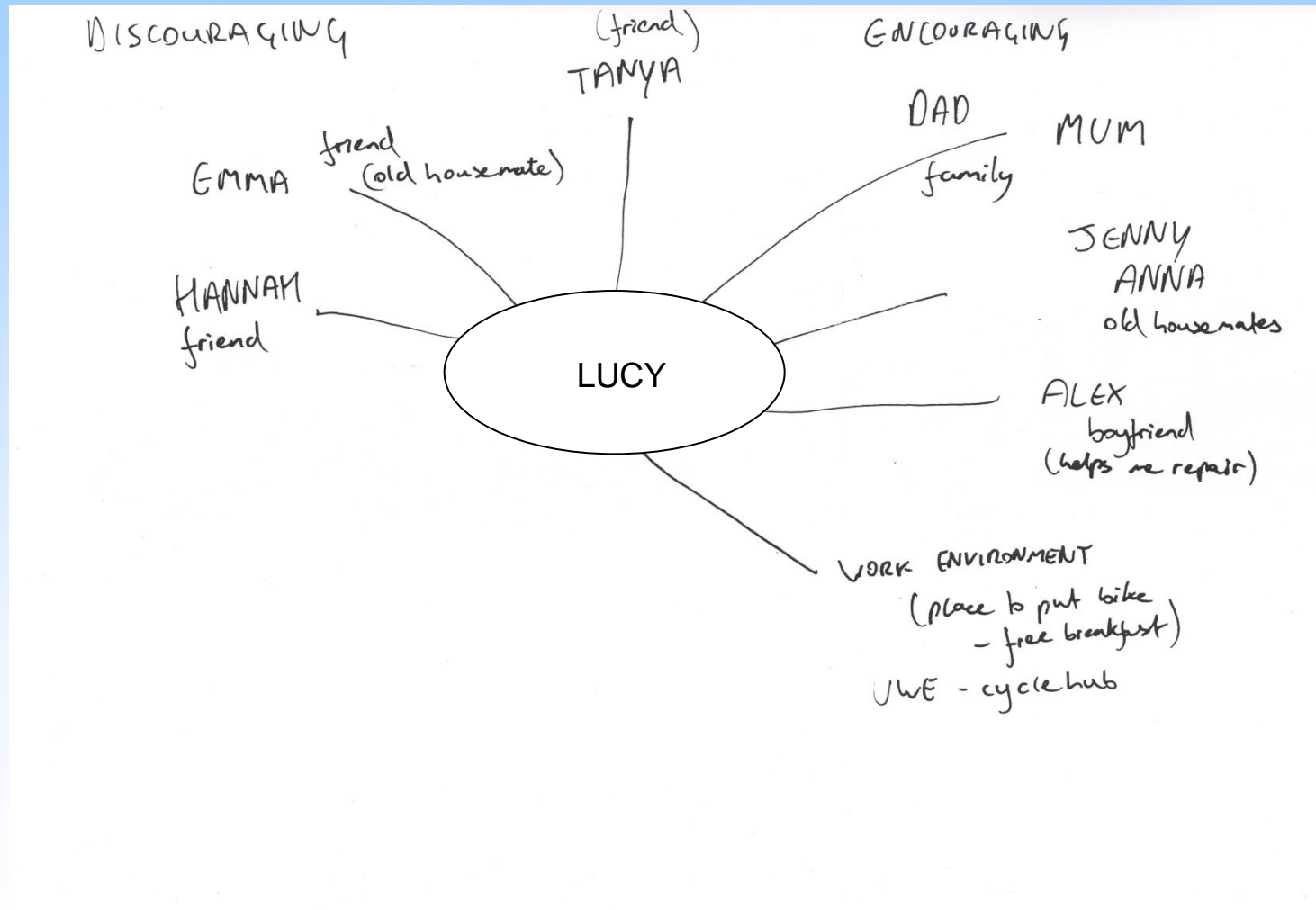
- **Ellen:** *"So, I went up and collected it and bought it there and then because I very much felt I wanted to be identified with that sort of a, you know, road warrior kind of thing."*
- **Molly:** *"Yes; my daughter, who is a very keen cyclist and who is very green, and I tried to be green too, so she knows it's... So yes, she persuaded me to start cycling."*
- **Tristan:** *"Bike Radar and things like that... kind of sustains you because people share experiences. And that's been really important because it makes you feel part of a wider community of cyclists."*

Social influence themes 3 – life stage (magic 30!)

- **Kay:** *"I think it was a combination of meeting someone who was into cycling, the idea of then travelling by bicycle and the thing, you know I am 30, it's time to do a bit of exercise."*
- **Tristan:** *"...but I just didn't do any exercise, you know, beer and cigarettes and student life, so. And that lasted for ten years really, so. It's only when you start approaching your late twenties that you suddenly think, hang on, this can't go on forever. (laughs) So you start thinking about getting back on the bike. So that's I guess the process."*
- **John:** *"A fitness thing as well, cos I was getting older and feeling fatter."*

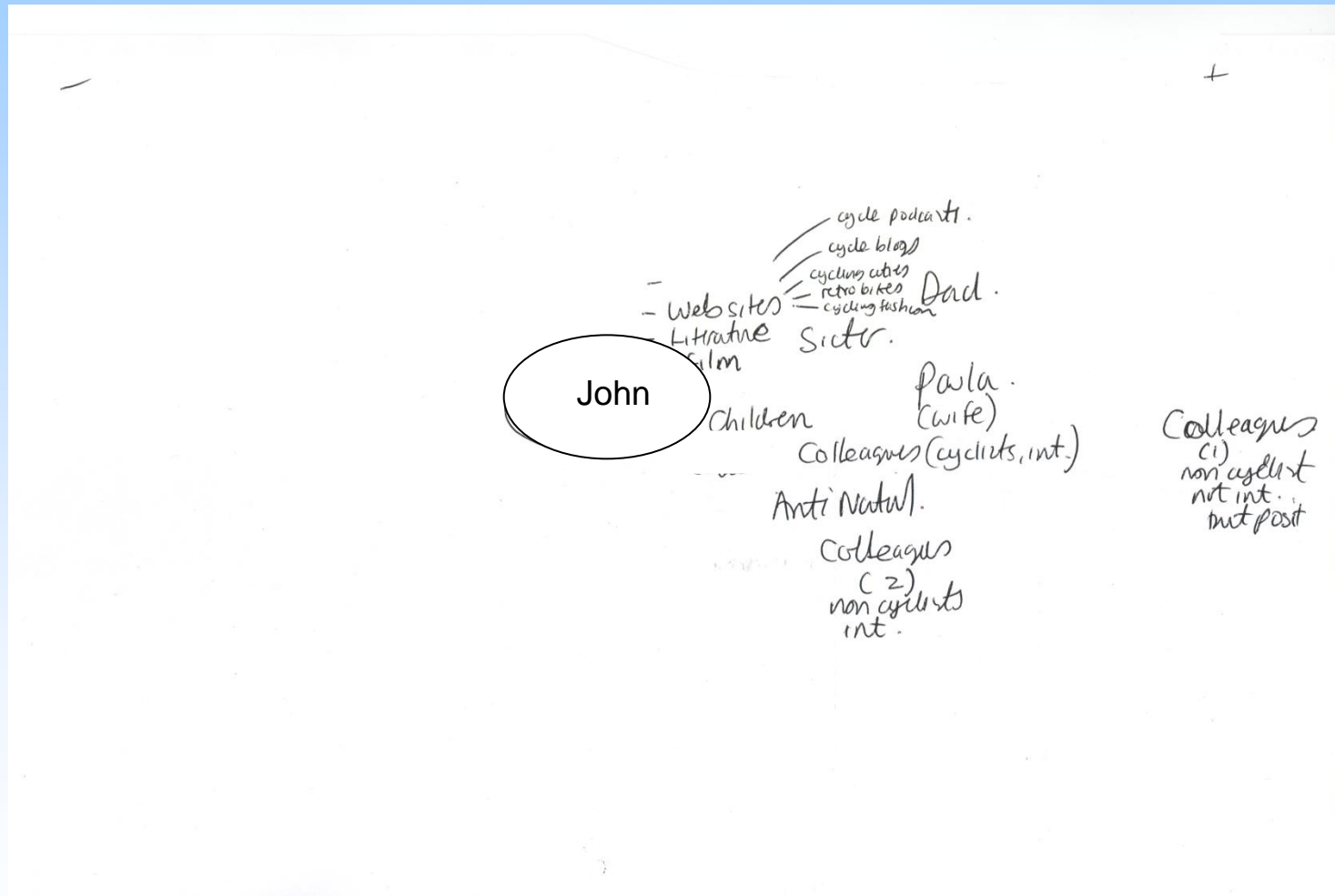
Initial results: Social maps

Lucy Minty, 26yr f, June 2010



Initial results: Social maps

John Tranter, 34 yr m, May 2010



Emerging findings

- People don't have any/many discouraging or negative influences – why?
 1. May selectively remember (cognitive dissonance)
 2. Spend more time on positive things which reinforce our existing behaviour (Kelly – personal construct theory)
 3. Only those who have a pre-disposing social circle of influence / social norms do cycle
 4. Data collection technique / Cialdini (2008) – social influence under-detected
- “I like to persuade myself that my approach to cycling is relatively individual and rational” Neil Webster, 6/12/10, Cardiff

Methodology in practice: strengths of approach

- Generates volume and diversity of data; audio files, transcripts, reflexive diary notes & social maps.
- Enjoyable process for researcher
- Novel/creative – trying & testing a new method
- Flexible design & interview structure enables adaptation & improvement throughout process and gives researcher high degree of control
- Low cost (but time intensive)

Methodology in practice: challenges

- Difficulties of moving to FG stage/gaining social contacts
- Reluctance may be due to: Not wanting to be discussed, Not wishing to 'inconvenience' others, Hassle/practical difficulties (am asking why)
- Potential ways to increase: using a more pro-active approach on flyers/emails , having smaller groups/paired interviews, asking for contacts at the stage of social mapping
- Data collection tends to be 'boom and bust' rollercoaster
- Requires & generates lots of material; audio files, transcripts, reflexive diary notes & social maps.
- Need to be participant-focussed & bespoke

Example contact sheet - Interviewee 7: Ellen Fowler

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From	To	Date	Format	Contents
EF	AD	08/06/2010	Email	Offering to be interviewed
AD	EF	08/06/2010	Email	Acceptance -suitable dates?
EF	AD	09/06/2010	Email	Next Weds, phone to confirm
AD	EF	11/06/2010	Email & Phone	Attached information sheet Weds no good - Mon/Tues? Phoned but didn't hear for 2 wks
EF	AD	23/06/2010	Email & Phone	30 th June, at participants home.
AD	EF	24/06/2010	Email	Date is fine. Please send address.
EF	AD	24/06/2010	Email	Address sent, confirmed 7.30pm. What drink would I like?
AD	EF	25/06/2010	Email	Confirmation, tea please! Gave mobile no. for any problems.
AD	EF	30/06/2010	Verbal	Interview takes place.
AD	EF	30/06/2010	Email	Thank you for interview. Invitation to 2nd stage.
EF	AD	07/07/2010	Email	Prefer not continue to 2nd stage. Wishes to be sent research results.
AD	EF	11/07/2010	Email	Thank you again for participating. Will send results summary.
AD	EF	August 2011	Email	Remember to send results.

Analysis – currently underway

- Interviews listened through, comprehensive transcription, entered into Nvivo (qualitative analysis package)
- Thematic analysis approach being used
- Bristol exploratory study data has been initially (open) coded – large list of codes (hundreds!)
- Next step – developing larger themes and coding structure which will be used for Cardiff data
- Also think about how best to connect all of the data together (maps & narrative)



Conclusions / next steps

- Gender and social influence do seem to be significant factors in cycling, difficult to detect & define
- Chosen methodology can make a contribution to knowledge in this area but data access is difficult
- Further investigation into cyclists social sphere/social mapping needed
- Social influence mechanisms may have a gender dimension



Thank you for listening

- Any questions?



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