



**cycle BOOM**  
DESIGN FOR LIFELONG HEALTH & WELLBEING


**Reflections on cycling experience in later life: diaries and discussions**

BSG Conference | Newcastle | 1 July 2015  
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**EPSRC** Pioneering research and skills  
**Lifelong Health & Wellbeing** Research for Healthy Ageing  
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**CARDIFF UNIVERSITY** PRIFYSGOL CARDIFF  
**University of Reading**  
**UWE BRISTOL** University of the West of England

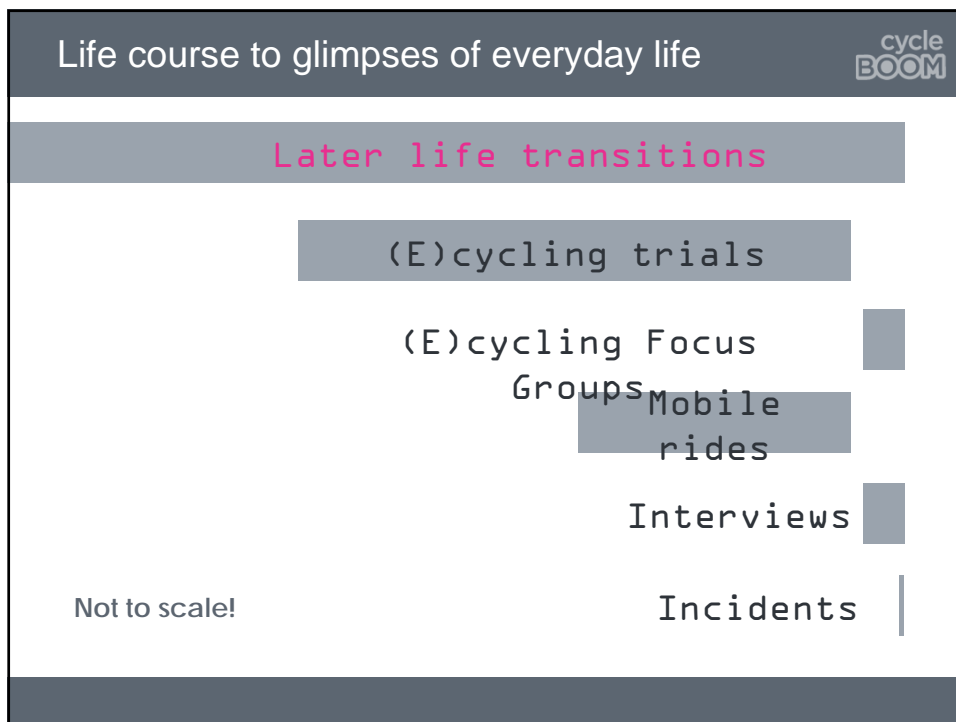
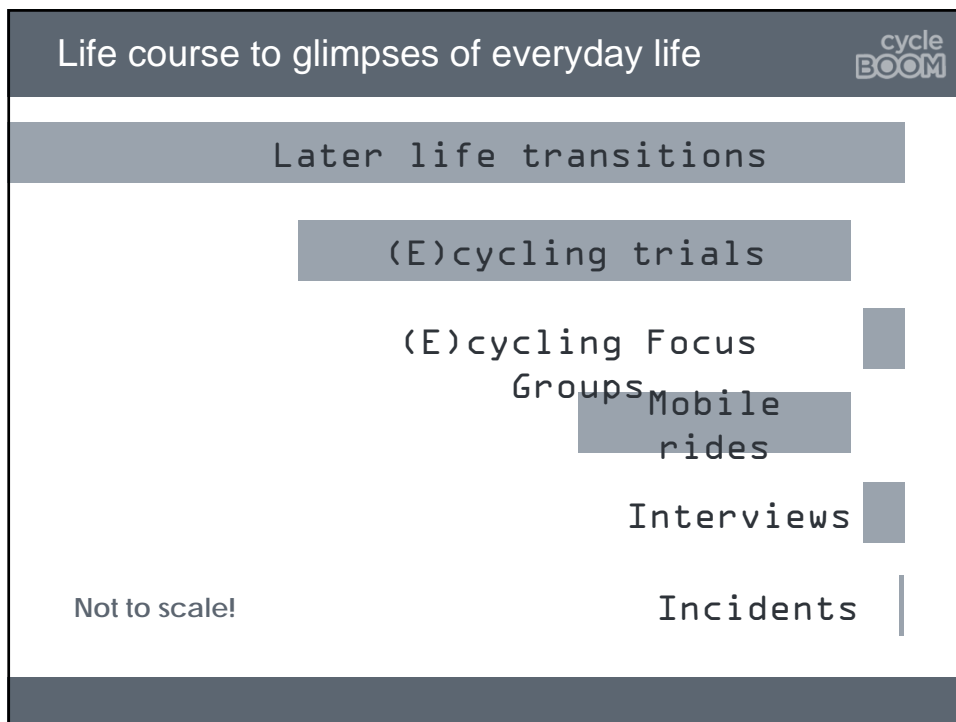
**Focus** cycle BOOM

**WHO?**  
240  
People aged 50-59 and 60+



**CARDIFF**  
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**READING**





## Life history interview: Rationale



**Ecological model** of human behaviour; longitudinal framework to consider the impact of **multiple layers of influence** over the life span.

Individual cycling behaviour a **developmental trajectory** that encompassed a person's thoughts, feelings, capabilities and activities related to cycling.

An individual's cycling status in mid and later life is viewed *"dynamically as the consequence of past experience and future expectation as well as the integration of internal motive and external constraint"* (Giele and Elder, 1998).

## Life history interview: Objectives



Through individual life histories of cycling reveal

- Whole-life view on engagement with cycling
  - Behaviour change and continuity in relation to life events and transitions and evolving social and physical settings
  - Practice of contemporary cycling
- Experience and narratives of cycling and ageing
  - How cycling is affected by later adulthood transitions?  
e.g. changing work patterns, family structure, roles, health
  - Adaptive, restorative and diminishing changes
  - Outlook for future cycling

# Cycling Life History: Grid



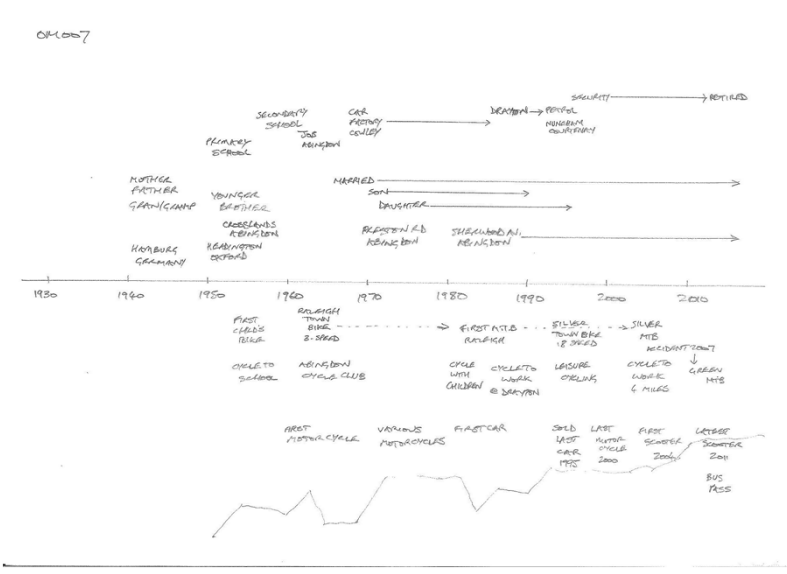
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Life History Grid

Year of birth	1940s	1940s	1950s	1960s	1970s	1980s	1990s	2000s	2010s
Residence		Horfield Bristol St Annes Bristol	Gastville Bristol Clifton Bristol	Custom Bristol Lockleaze Bristol	Lockleaze Bristol	Horfield Bristol Patchway Bristol	Redden, Stoke Bristol	Redden, Stoke Bristol	Redden, Stoke Bristol
Household		Mum, Dad Older sister	Mum, Dad Sister Husband	Husband + 4 children	Husband 4 children 1999-Divorce	Self + daughter 1988 Husband and Husband	Husband	Husband	Husband
Education / work (paid / unpaid)		Primary School	1952 Secondary School Bristol 1991-Divorce	Caring for family	PT Youthwork PT Welfare ASST	1981 Bristol University 1982-83 1984-85 1986-87	1986-87 1988-89 1990-91 1992-93 1994-95 1996-97 1998-99 2000-01 2002-03 2004-05 2006-07 2008-09 2010-11 2012-13 2014-15	1996-97 1998-99 2000-01 2002-03 2004-05 2006-07 2008-09 2010-11 2012-13 2014-15	2016-17 2018-19 2020-21 2022-23 2024-25
Activities / hobbies / leisure		Family cycle rides (Mum on crossbar)	Swimming Athletics	Supporting children's football / rugby etc Self employed dressmaking + hairdressing	Children's	1982-Gave up smoking - took up running 1983-84 1985-86 1987-88 1989-90 1991-92 1993-94 1995-96 1997-98 1999-00 2001-02 2003-04 2005-06 2007-08 2009-10 2011-12 2013-14 2015-16 2017-18 2019-20 2021-22 2023-24 2025-26	1986-87 1988-89 1990-91 1992-93 1994-95 1996-97 1998-99 2000-01 2002-03 2004-05 2006-07 2008-09 2010-11 2012-13 2014-15 2016-17 2018-19 2020-21 2022-23 2024-25	2016-17 2018-19 2020-21 2022-23 2024-25	
Transport			Bus	Car	Car	Bus / car to uni	Car	Car / walk	Car / walk Cycle
Cycling - owned or had access to a bike		Tricycle (on local pavements)	Rough bike for growing up	Kids all had bikes			Bought bike for leisure + Marathon training	the 1st bike on holiday	Leisure + to shops locally
Cycling - activity			Rode for pleasure					Cycle on holiday	


(See Harrison, Veeck & Gentry, 2011)

# Cycling Life History: Timeline



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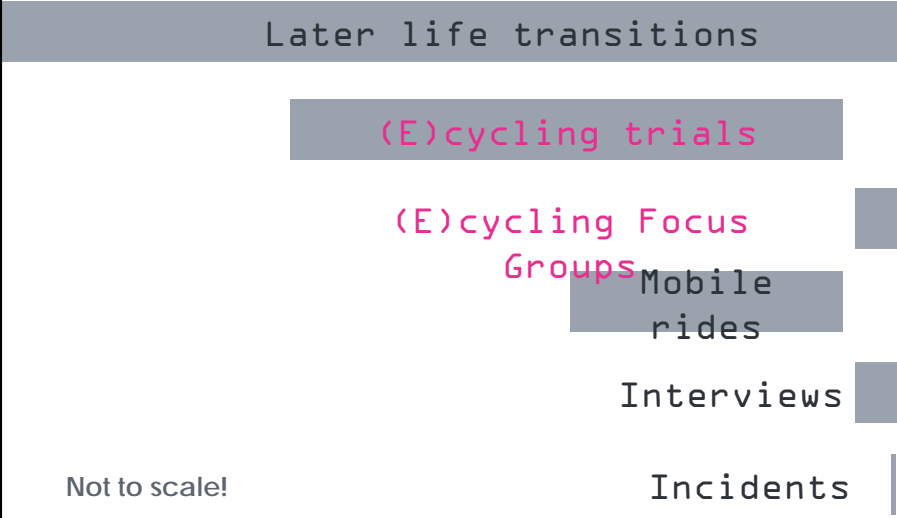
## Life History Interviews: Emerging themes



- Heterogeneity in past cycling trajectories:  
continued | expanded | diminished | rediscovered | discontinued | new | stopped | absent
- Heterogeneity in future cycling trajectories:  
continue | increase | decrease | uncertain | start | behind me
- Later life:  
transitions: retirement | residential moves | family roles | body | motivation  
Niches: established and evolved
- Cycling niche:  
enduring: knowledge | skills  
adapting: bike | kit | timing | skills | company | routes  
explorative: geography | mentors

cycle  
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## Life course to glimpses of everyday life



Later life transitions

(E)cycling trials

(E)cycling Focus  
Groups

Mobile  
rides

Interviews


Incidents

Not to scale!

Integrated methods cycle  
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Life history interview

E-cycling wellbeing trial



*How has their cycling status arisen over their life course*

*Experiences of and responses to 8 weeks E-cycling in later life*

(E)cycling - eight week trial: background cycle  
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**Objective:**  
To test the impact of (re)discovering cycling on physical activity, mental health and wellbeing in older adults.

*“work on well-being and mobility should consider both the objective and the subjective and the hedonic and eudaimonic dimensions of well-being, and should pay detailed attention to the multiple ways in which well-being and its linkages to mobility are context-dependent and shaped by the particularities of time and place”*  
(Nordbakke & Schwanen 2014)



**(E)cycling - eight week trial: background**cycle  
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## Measures:

1. Cognitive function (Executive function tasks)
2. Eudaimonic wellbeing (actualizing inherent potentials)
3. Hedonic wellbeing (maximizing pleasure moments)
4. Physical health (self-reported)

Tools – Psychological wellbeing (PWB) questionnaire (Ryff, 1989); Health Survey SF36v2. Exec function tasks: MMSE; CERAD I & II; Verbal fluency; Plus minus; RVIP; Stroop; Letter Memory; Dot probe; Go-No-Go... Diary entries

Sample of E-bike (n=40); pedal cycle (n=40); control group (n=20) matched on age, sex, SES, educational from Oxford and Reading areas.

Exposure - (Re)Engaging with cycling at least 3 times per week for at least 30 minutes during the 8-week period.

**(E)cycling - eight week trial**cycle  
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### Life History Interview Cycling assessment

Pre-tests

Diary

GPS/Odometer verification

Post-tests

Focus group

Follow-up (?)



(E)cycling - eight week trial



- Life History Interview
- Cycling assessment
- Pre-tests
- Diary
- GPS/Odometer verification
- Post-tests
- Focus group
- Follow-up (?)

(E)cycling trial – diary example



WEEK 1						WEEK 1								
1. Cycling/physical activity description	2. Start time	3. End time	4. Level of intensity	5. Purpose	6. (If a journey) From	7. (If a journey) To	8. (If cycling) Cycle used	9. (If e-bike) Proportion of time at each power setting				10. Personal reflection on cycling/physical activity		
								OFF	Eco	Tour	Sport	Turbo		
<b>Qualitative</b>														
MON	CYCLING	13-40	13-30	M	R									
CYCLE NOT YET DECID.														
TUES	CYCLING	15-10	15-30	M	R	STAND BLAGOJE IGA STATION	MANLEY PARK	R	0	0	100	0	0	PLEASD TO HAVE BANG
	CYCLING	15-40	15-40	V	R	MANLEY PARK	MANLEY PARK	R	0	0	100	0	0	CONFIDENT
	POKERBALL	16-40	17-00	V	R	MANLEY PARK	MANLEY PARK	R	0	0	100	0	0	PLAYER BANG GOOD
	POKERBALL	16-40	17-00	V	R	MANLEY PARK	MANLEY PARK	R	0	0	100	0	0	CONFIDENT
WED	CYCLING	10-09	11-00	M	P	OXLEY BKT	OXLEY BKT	R	0	100	0	0	0	PLANNED FEEL TIME ON
	FRIBLING GYM	12-15	12-45	M	P									DON'T ENJOY WORKING ON
	FRIBLING GYM	12-15	12-45	M	P									ON ANOTHER TRITITION
	FRIBLING GYM	12-15	12-45	M	P									BIKE USE
THU	BARBATHON	12-00	11-45	V	R									NOT TOO EASY
	CYCLING	15-25	17-15	M	R	OXLEY BKT	OXLEY BKT	R	0	0	75	25	0	PLANNED FEEL TIME ON
	CYCLING	15-25	17-15	M	R	OXLEY BKT	OXLEY BKT	R	0	0	75	25	0	DON'T ENJOY WORKING ON
	CYCLING	15-25	17-15	M	R	OXLEY BKT	OXLEY BKT	R	0	0	75	25	0	ON ANOTHER TRITITION
FR	CYCLING	15-40	16-30	M	P	OXLEY BKT	OXLEY BKT	R	0	0	100	0	0	PLANNED FEEL TIME ON
	CYCLING	15-40	16-30	M	P	OXLEY BKT	OXLEY BKT	R	0	0	100	0	0	DON'T ENJOY WORKING ON
	CYCLING	15-40	16-30	M	P	OXLEY BKT	OXLEY BKT	R	0	0	100	0	0	ON ANOTHER TRITITION
RI	POKERBALL	18-30	20-15	V	R									NOT TOO EASY
	POKERBALL	18-30	20-15	V	R									PLANNED FEEL TIME ON
	POKERBALL	18-30	20-15	V	R									DON'T ENJOY WORKING ON
SAT	CYCLING	09-05	11-30	V	R/P	OXLEY BKT	OXLEY BKT	R	0	0	8	5	2	PLANNED FEEL TIME ON
	CYCLING	09-05	11-30	V	R/P	OXLEY BKT	OXLEY BKT	R	0	0	8	5	2	DON'T ENJOY WORKING ON
	CYCLING	09-05	11-30	V	R/P	OXLEY BKT	OXLEY BKT	R	0	0	8	5	2	ON ANOTHER TRITITION
	CYCLING	09-08	11-45	M	R/P	OXLEY BKT	OXLEY BKT	R	0	0	97	2	1	PLANNED FEEL TIME ON
	CYCLING	09-08	11-45	M	R/P	OXLEY BKT	OXLEY BKT	R	0	0	97	2	1	DON'T ENJOY WORKING ON
	CYCLING	09-08	11-45	M	R/P	OXLEY BKT	OXLEY BKT	R	0	0	97	2	1	ON ANOTHER TRITITION



E-cycling trials – initial findings		cycle BOOM
PHASE	EXPERIENCE	
Beginning	Excitement Preparation: kit   routes Familiarisation: cycle training   practicing	
Experiencing	<b>Body/mind</b> Enjoyment   thrill Confidence: ability   equipment   safety Motivation: cycle BOOM   cycling benefits <b>Geographies/infrastructure/environment</b> Expansion of cycling: topography   distance   discovery   leisure & practical Environmental challenges: weather   darkness   traffic   infrastructure <b>Technology</b> Bike problems: gears   posture   electrics   punctures   weight Positive comparison to driving: speed   convenience   flexibility   cost Clothing and 'clobber': gloves   jackets   helmets   locks <b>Social interactions</b> Accompanied cycling   social access   pedestrians   other cyclists	
Ending	Appreciation: mobility   health   social Planning: e-bike   pedal	

E-bike opportunities		cycle BOOM
"same amount of exercise but more pleasure because going further than my usual boundaries"	Mobility practices	
	<ul style="list-style-type: none"> <li>▪ Geographies – rediscovered   extended   deepened</li> <li>▪ Additional journeys   replacing car</li> <li>▪ Learning effect &gt; novelty (Fyrhi &amp; Fearnley 2015)</li> </ul>	
"Instead of 'closing down' at our ages we're thinking of exciting and challenging things to do"	Health and wellbeing	
	<ul style="list-style-type: none"> <li>▪ Greater (cycling) confidence</li> <li>▪ Spatial awareness and control</li> <li>▪ Independence &amp; social contact</li> <li>▪ Exercise and enjoyment</li> <li>▪ Engagement with the unknown: 'mobility of the self' (Schwanen &amp; Ziegler 2011a)</li> </ul>	

**E-bike challenges** cycle  
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"how is that going to help?...  
I imagined a little scooter that you switch on and it goes"

"Oxford is a dangerous city to cycle round"

E-bikes: image/nature | weight | cost | security | stranding | technical support

Unsupportive environments: roads | traffic | cycle tracks

**Life course to glimpses of everyday life** cycle  
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Later life transitions

(E)cycling trials

(E)cycling Focus Groups

Mobile rides


Interviews

Incidents


Not to scale!

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## ‘Naturalistic’ rides : background



- ‘New mobilities paradigm’ exploring mobile bodies in mobile contexts
- Approaches that diverge from traditional methods – research ‘on the move’. (Sheller and Urry, 2006)
- Mobility not just movement between A and B (Cresswell, 2006)
- Interest in affect, place, meaning, culture and representation




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## Integrated methods

Life history interview

➔

Naturalistic ride and video elicitation interview



*How has their cycling status arisen over their life course*

*Practices and experiences of everyday later life cycling*

Mobile naturalistic ride observation

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Mobile naturalistic ride interview

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## Mobile naturalistic rides – initial findings

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Temporal & spatial flexibility /  
discretion (fair-weather / seasonal)  
Competence: expert manoeuvres |  
reactivity  
Awareness of risks and capabilities  
Detailed knowledge of (changing)  
environment  
Avoiding conflict: observing etiquette  
Transgressions: justified &  
confessional

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## Summary

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**Temporal experience:** life course to cycling  
incidents | reflection

**Later life transitions:** retirement | residential  
moves & environment | family roles | body |  
motivations | changing 'embodied capacities'  
(Schwanen & Ziegler 2011b)

**E-bikes:** image and marketing | loans | design |  
social & technical support | 'learning effect'

**Unsupportive environments:** roads | traffic | cycle  
tracks | storage



## References

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