

Cycle safety in the media

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Project

- Ongoing
- With Anna Goodman (LSHTM), Alex Roberts (Birmingham), James Woodcock (CEDAR), Alex Macmillan (Auckland), Charlotte Owen (Westminster)
- Looking at changes in reporting of cycle deaths in the media, focusing on London
 - Quant (finished) & qual (in progress)

Data sources: deaths - Stats19

- In London, we extracted all 1218 (325 cyclist, 893 motorcyclist) fatalities between 01/01/1992 and 31/12/2012 in which the casualty was travelling by bicycle or by motorcycle/moped.
- We assigned a ‘strike mode’ to each fatality, defined as the largest other vehicle involved . This could include ‘no other vehicle’.
- This was also done for cities outside London as comparators

Data sources: media (London)

- We studied articles in the Evening Standard, London's most widely-distributed city-specific daily paper.
- We performed a search of the archives for January 1992 – April 2014, looking for cycle/motorcycle deaths, and got 860 cycle articles and 1809 on the motorcyclist search.
- Articles were linked to an individual case based on time, date, gender, age, strike mode and local authority. The individual did not have to be named but there did have to be enough information to identify the case specifically.
- We also looked at Bristol, Birmingham and Cambridge but did not find the same relationships.

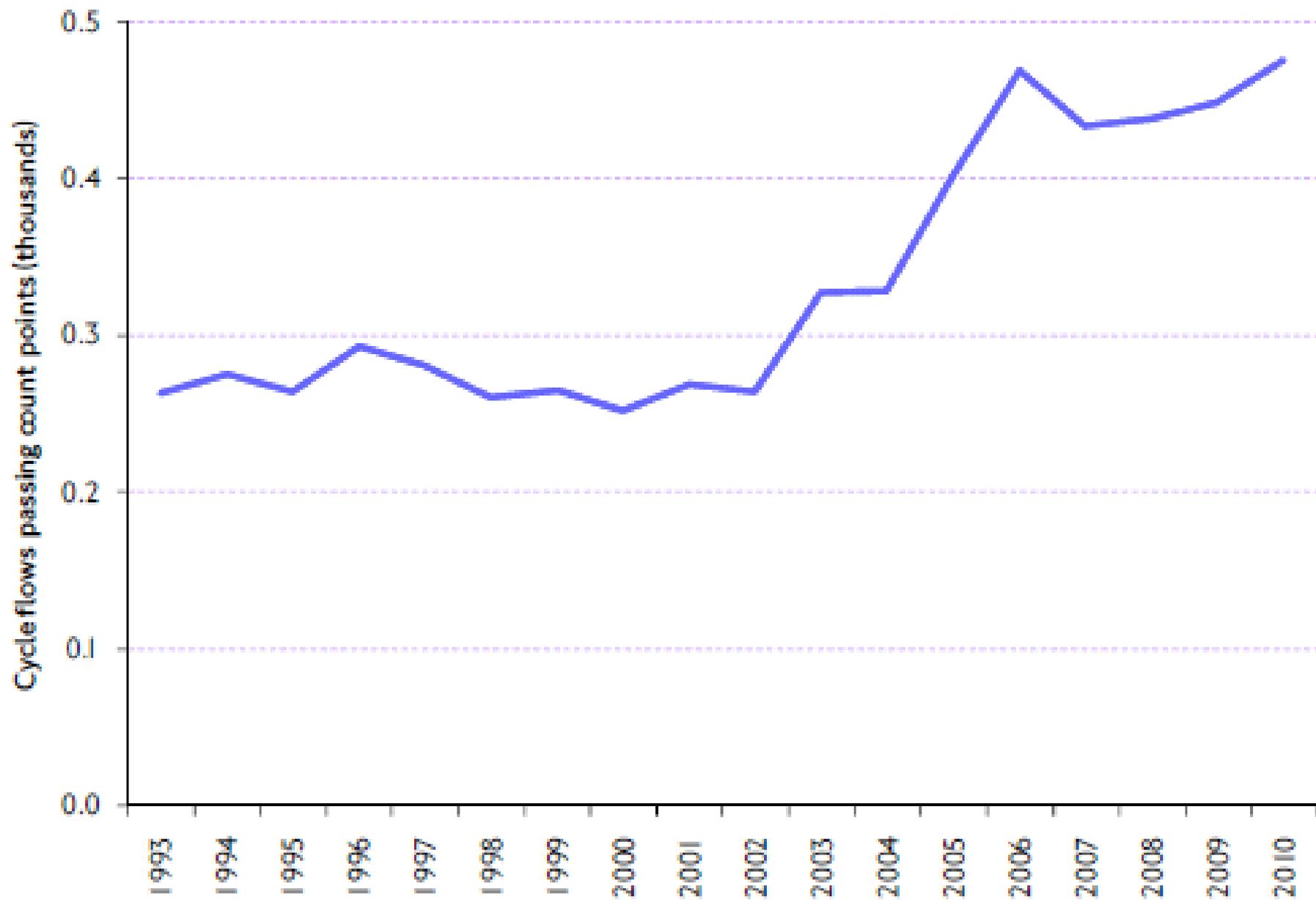
Analysis

- Our pre-specified primary outcome was ‘receiving any media coverage within two years of fatality’.
- Our secondary outcome was the mean number of articles reported within two years, for each fatality who received any coverage.
- Our primary predictor of interest is the year in which the fatality took place, and we examined how this was associated with our primary outcome in analyses stratified by city and by travel mode.
- These tests for interaction were performed using univariable and multivariable regression models.

Results

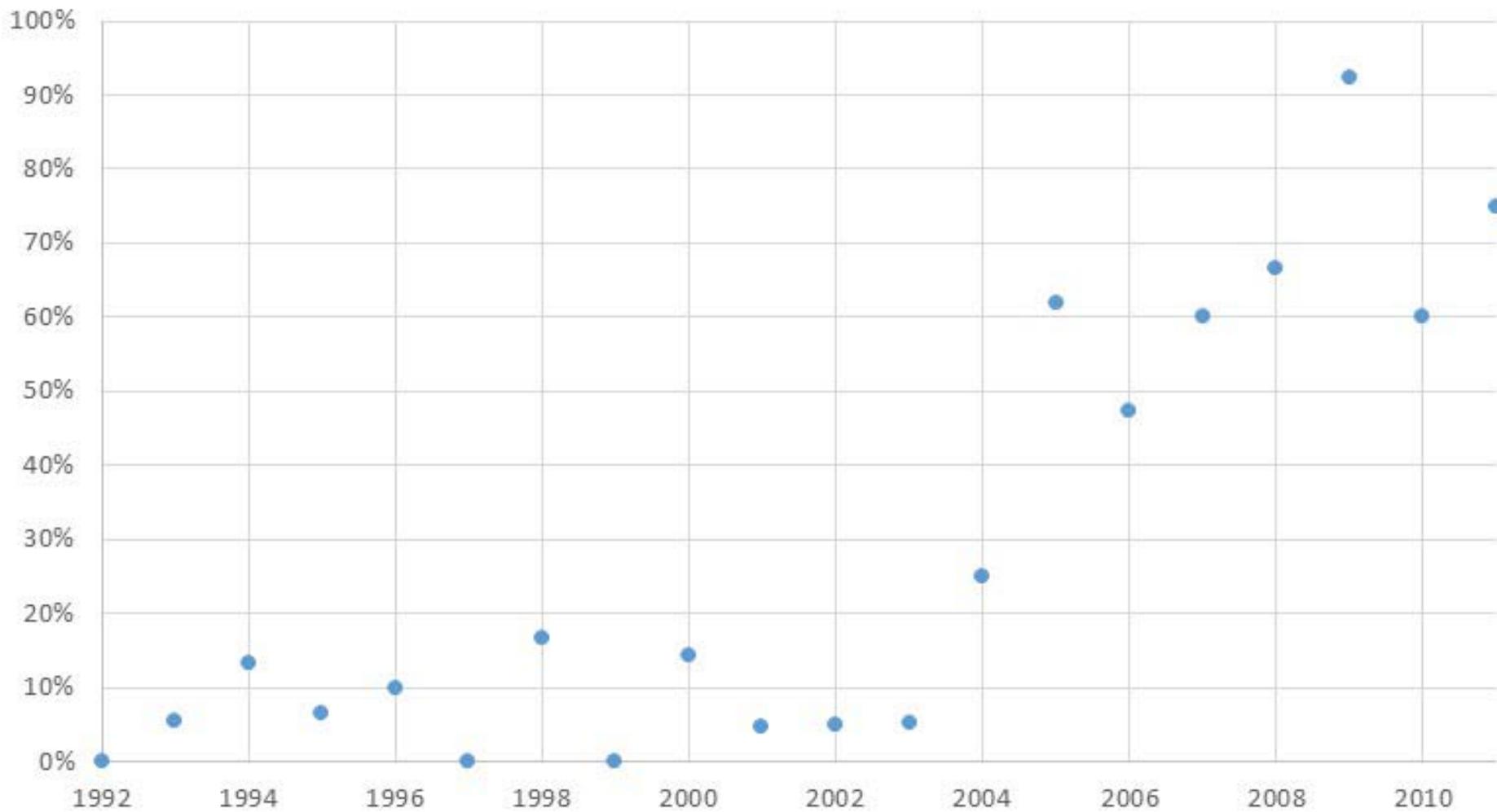
- In London, the prevalence of cycling has doubled in the last 20 years. Simultaneously, the proportion of cyclist fatalities covered in the largest London newspaper has increased ten-fold, though the absolute number of cyclist fatalities remained stable. Coverage of motorcyclist fatalities remained low throughout the study period.
- It seems plausible that the change in coverage for cyclist fatalities reflects cycling becoming more ‘newsworthy’ –
 - cycling levels were rising
 - promoting cycling was an increasingly prominent transport goal for London policy-makers.

Figure 3.13 Trends in cycle flows on major roads in London.



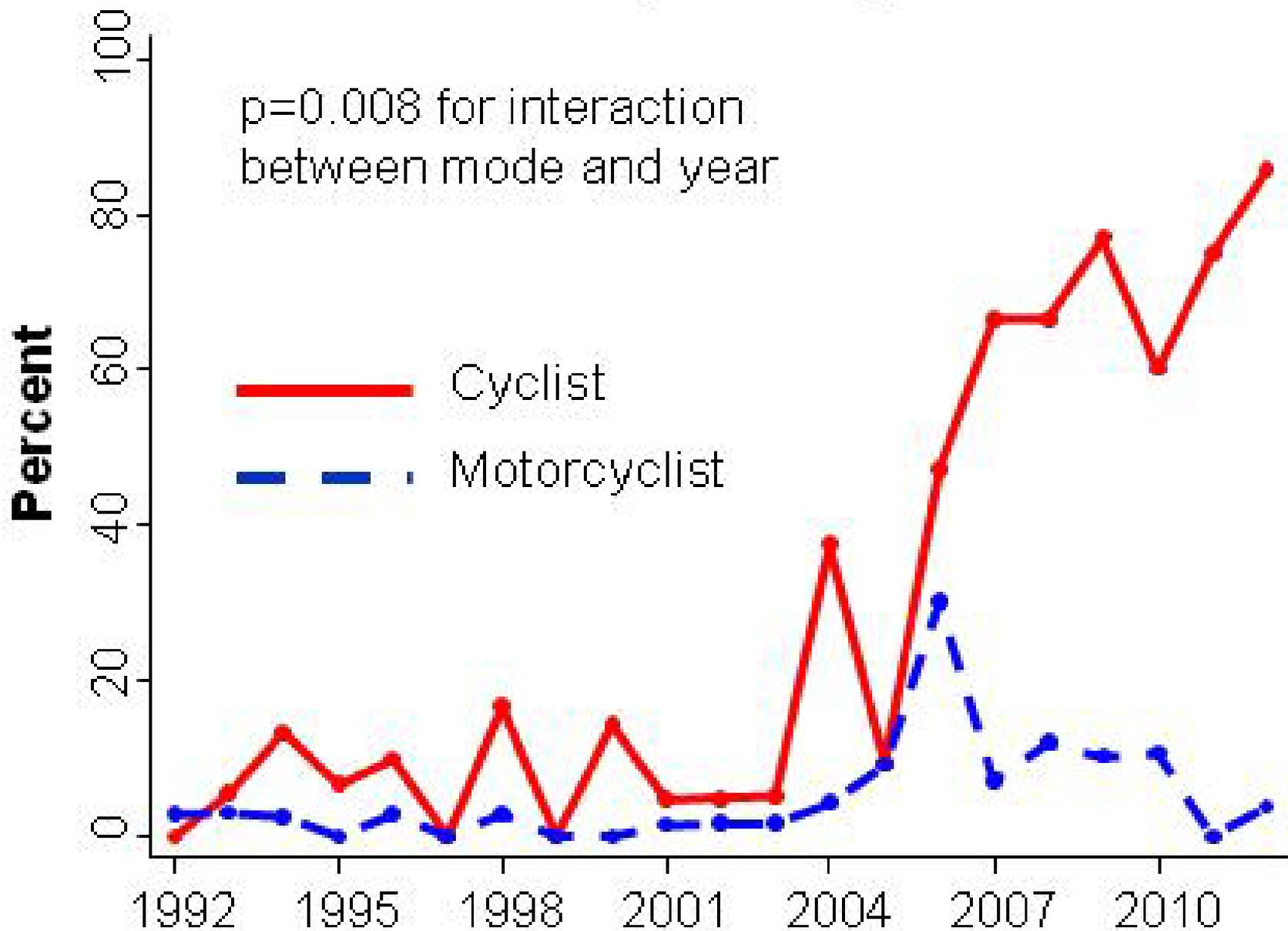
Source: Department for Transport.

Percent cycle fatalities in Evening Standard, by year

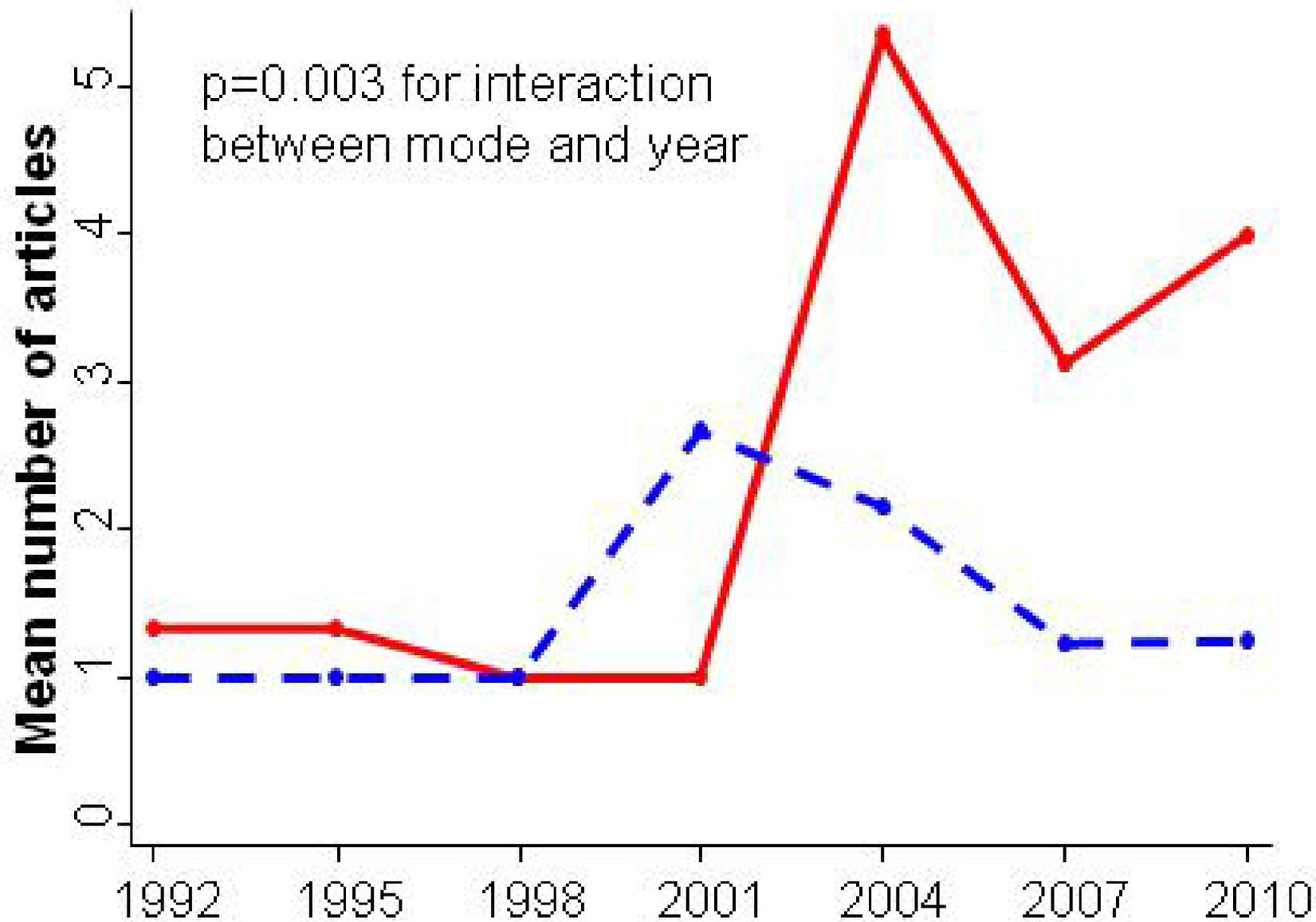


Part A: percent of fatalities receiving any coverage

$p=0.008$ for interaction between mode and year



Part B: mean number of articles per fatality, among fatalities receiving any coverage



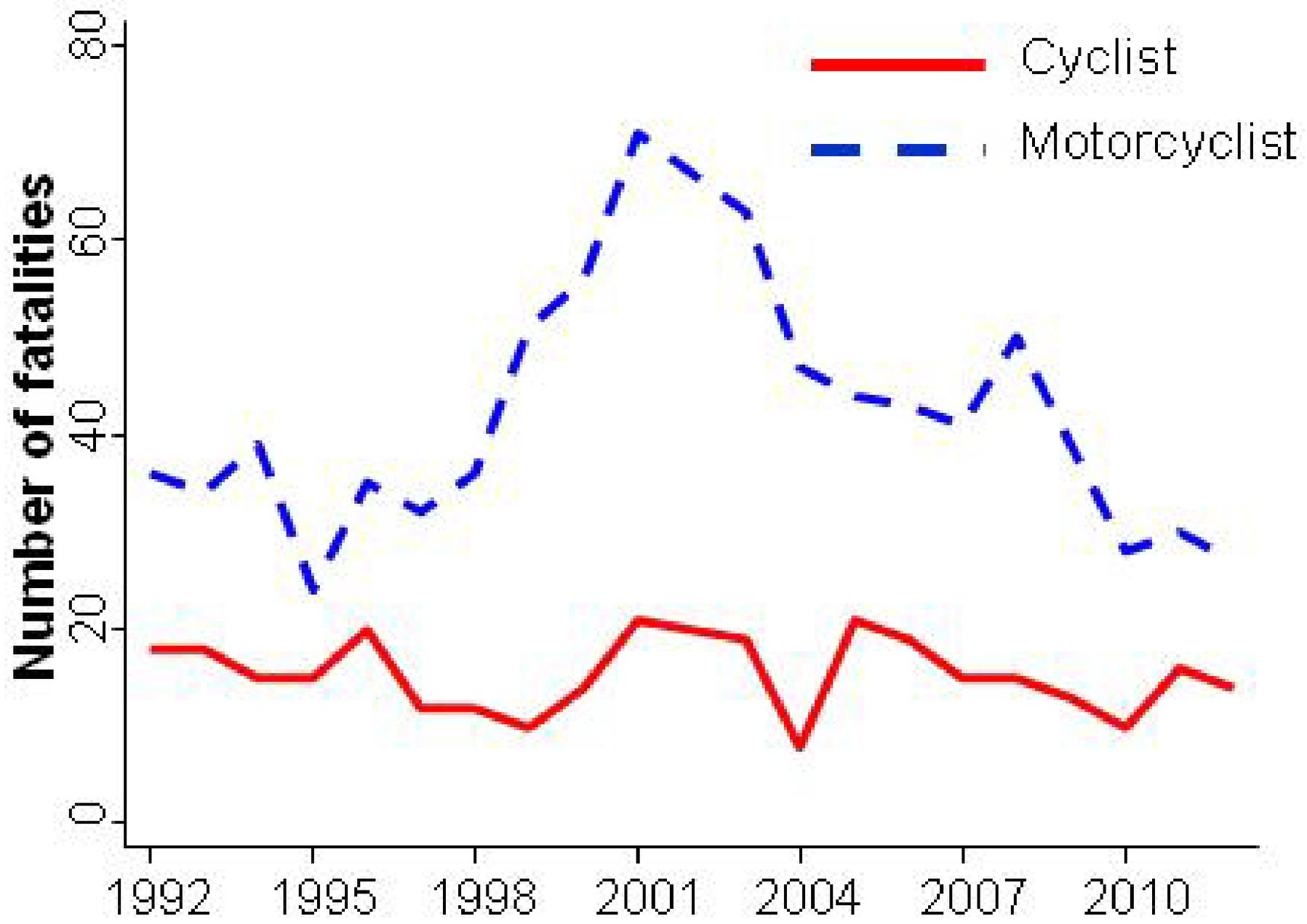


Table S1: Predictors of any London Evening Standard newspaper coverage among cyclist fatalities 1992-2012 (N=325)

		N fatalities	% receiving any coverage	Risk ratio (95% CI)	
				Minimally-adjusted	Mutually-adjusted
Year	1992-1994	51	6%	1***	1***
	1995-1997	47	6%	1.09 (0.23, 5.13)	1.07 (0.22, 5.12)
	1998-2000	36	11%	1.89 (0.45, 7.95)	1.74 (0.42, 7.16)
	2001-2003	60	5%	0.85 (0.18, 4.04)	0.78 (0.17, 3.63)
	2004-2006	48	29%	4.96 (1.52, 16.21)	4.97 (1.49, 16.55)
	2007-2009	43	70%	11.86 (3.88, 36.24)	10.77 (3.57, 32.53)
	2010-2012	40	75%	12.75 (4.19, 38.84)	12.09 (3.93, 37.15)
Region	Outer	126	20%	1**	1
	Inner	136	27%	1.25 (0.87, 1.81)	1.11 (0.73, 1.68)
	Central	63	40%	1.71 (1.21, 2.43)	1.40 (0.92, 2.14)
Gender	Male	232	23%	1*	1
	Female	93	37%	1.36 (1.03, 1.79)	1.19 (0.90, 1.57)
Age	<18	38	24%	1.02 (0.72, 1.44)	1.57 (0.94, 2.65)
	18-34	118	34%	1**	1**
	35-64	123	28%	0.85 (0.62, 1.17)	0.97 (0.68, 1.38)
	≥65	37	8%	0.39 (0.14, 1.09)	0.51 (0.18, 1.46)
Strike mode	Car/Taxi	112	19%	1†	1
	Heavy Goods	140	30%	1.65 (1.12, 2.43)	1.48 (0.94, 2.34)
	Light Goods	23	30%	1.79 (0.89, 3.59)	1.98 (0.98, 4.01)
	Bus	20	40%	1.86 (1.16, 3.00)	1.60 (0.94, 2.71)
	Other/No other vehicle	30	30%	1.51 (0.94, 2.44)	1.38 (0.80, 2.38)

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001, using tests for heterogeneity for gender and strike mode, and tests for trend for year, region and age. Minimally-adjusted analyses adjust for year group. Mutually-adjusted analysis additionally adjust for all variables displayed in the table.

Table S2: Predictors of any London Evening Standard newspaper coverage among motorcyclist fatalities 1992-2012 (N=893)

		N fatalities	% receiving any coverage	Risk ratio (95% CI)	
				Minimally-adjusted	Mutually-adjusted
Year	1992-1997	200	2%	1***	1***
	1998-2003	344	1%	0.58 (0.15, 2.30)	0.58 (0.14, 2.31)
	2004-2006	134	14%	7.09 (2.47, 20.39)	7.03 (2.37, 20.82)
	2007-2009	130	10%	5.00 (1.67, 15.01)	5.11 (1.67, 15.68)
	2010-2012	85	5%	2.35 (0.60, 9.20)	2.46 (0.63, 9.68)
Region	Outer	530	4%	1*	1*
	Inner	292	7%	1.88 (1.05, 3.37)	1.82 (1.00, 3.30)
	Central	71	4%	1.59 (0.50, 5.09)	1.70 (0.54, 5.31)
Gender	Male	865	5%	1*	1†
	Female	28	14%	3.01 (1.21, 7.50)	2.72 (0.99, 7.44)
Age	<34	591	5%	1	1
	≥35	284	6%	1.12 (0.62, 2.01)	1.05 (0.58, 1.91)
Strike mode	Car/Taxi	422	5%	1	1
	Heavy Goods	91	7%	1.18 (0.51, 2.76)	1.15 (0.49, 2.74)
	Light Goods	69	4%	0.79 (0.25, 2.47)	0.76 (0.24, 2.42)
	Bus	35	6%	1.10 (0.28, 4.35)	1.04 (0.27, 4.04)
	Other/No other vehicle	276	4%	0.71 (0.35, 1.41)	0.73 (0.36, 1.48)

Key quant findings

- Since 1990, cycling levels have doubled in London, and fatality rates remained fairly constant
- Media coverage of the cycling fatalities has increased markedly
 - There are differences by gender, by location, by strike mode
- The increased coverage was specific to cyclists, and not seen for motorcyclists
- Evidence suggests this shift may not apply to cities other than London

Final thoughts

- Qualitative work currently looking at shifts in discourse and framing
- Would also be good to do more research on how people perceive, understand and remember different story types
- Different types of impact of media coverage
 - Impact on people cycling
 - Impact on policy-makers and planners

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