



Public opinion on doping in cycling

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Thomas More and University of Louvain)



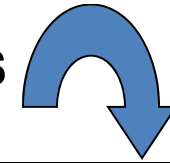


Kick-off question:

**What sports do you
associate most with
doping?**



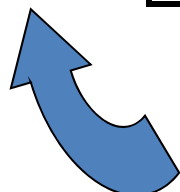
OFFICIAL DATA FLANDERS (2011-2012)



What do the data tell us?

Athletics	86	43,0%
Cycling	42	21,0%
Weightlifting	9	4,5%
Football	9	4,5%
Skating	8	4,0%
Swimming	7	3,5%
Skiing	4	2,0%
Horse racing	4	2,0%
Gymnastics	4	2,0%
Boxing	4	2,0%
Tennis	4	2,0%
Baseball	3	1,5%
Inline skating	3	1,5%
Ice hockey	3	1,5%
Basketbal	2	1,0%

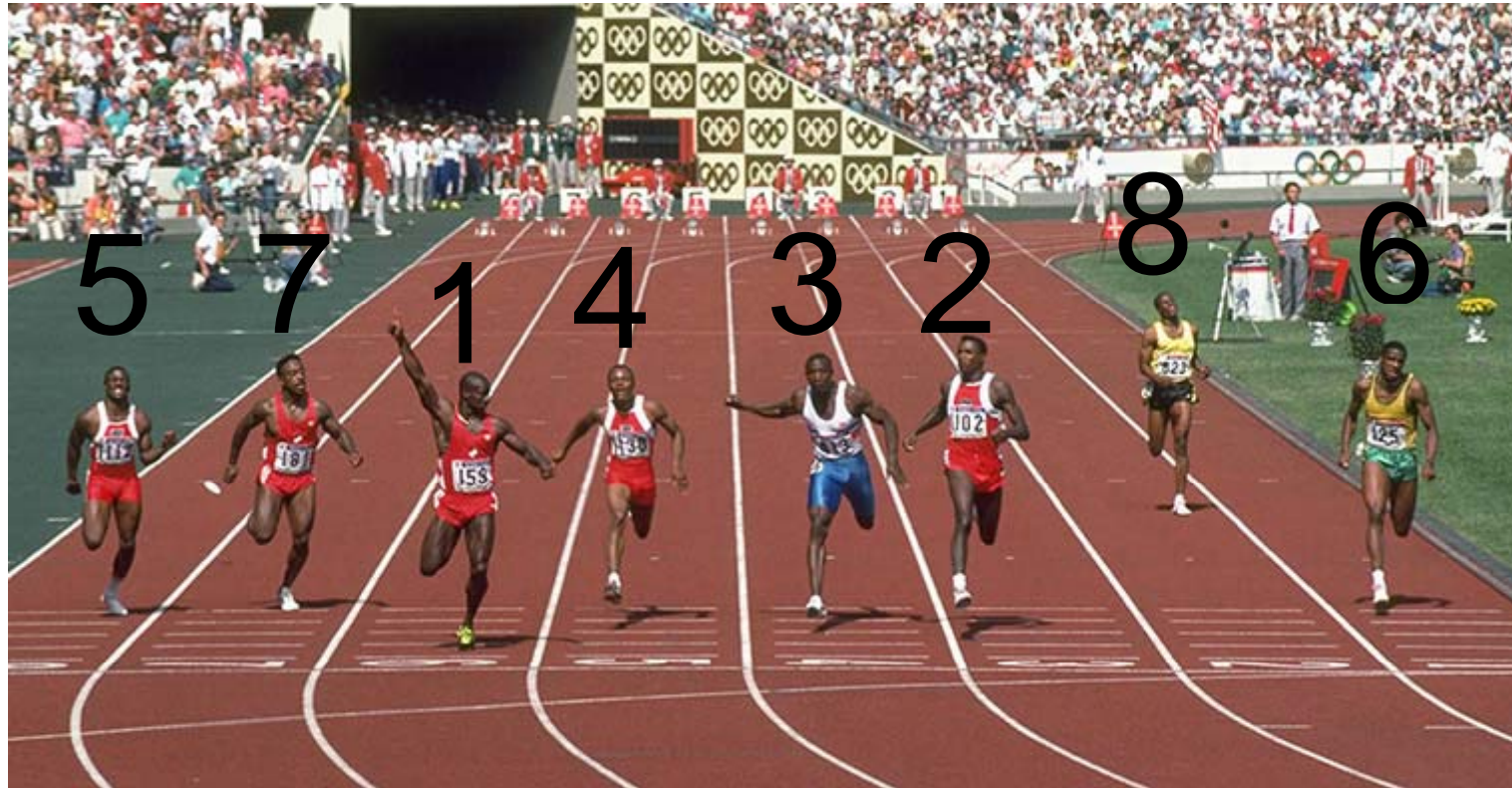
	Controls	Positive	%
Bodybuilding	71	26	36,62%
Indoor football	30	9	30,00%
Fitness	196	44	22,45%
American football	18	4	22,22%
Ju-jitsu	30	5	16,67%
Rugby	12	2	16,67%
Waterskiing	20	3	15,00%
Ice hockey	30	3	10,00%
Shooting	10	1	10,00%
Taekwondo	20	2	10,00%
(Kick)boxing	252	24	9,52%
Karate	24	2	8,33%
Weightlifting	100	7	7,00%
Baseball	18	1	5,56%
Horse racing	18	1	5,56%
Judo	110	3	2,73%
Cycling	1694	33	1,95%
Athletics	463	5	1,08%
Football	468	4	0,85%
Basketball	154	1	0,65%
TOTAL	5690	184	3,23%



**NEWSPAPER ARTICLES
HOLLAND / FLANDERS
(May 2012 – today)**



Olympic 100m final, Seoul 1988



The dirtiest race in history

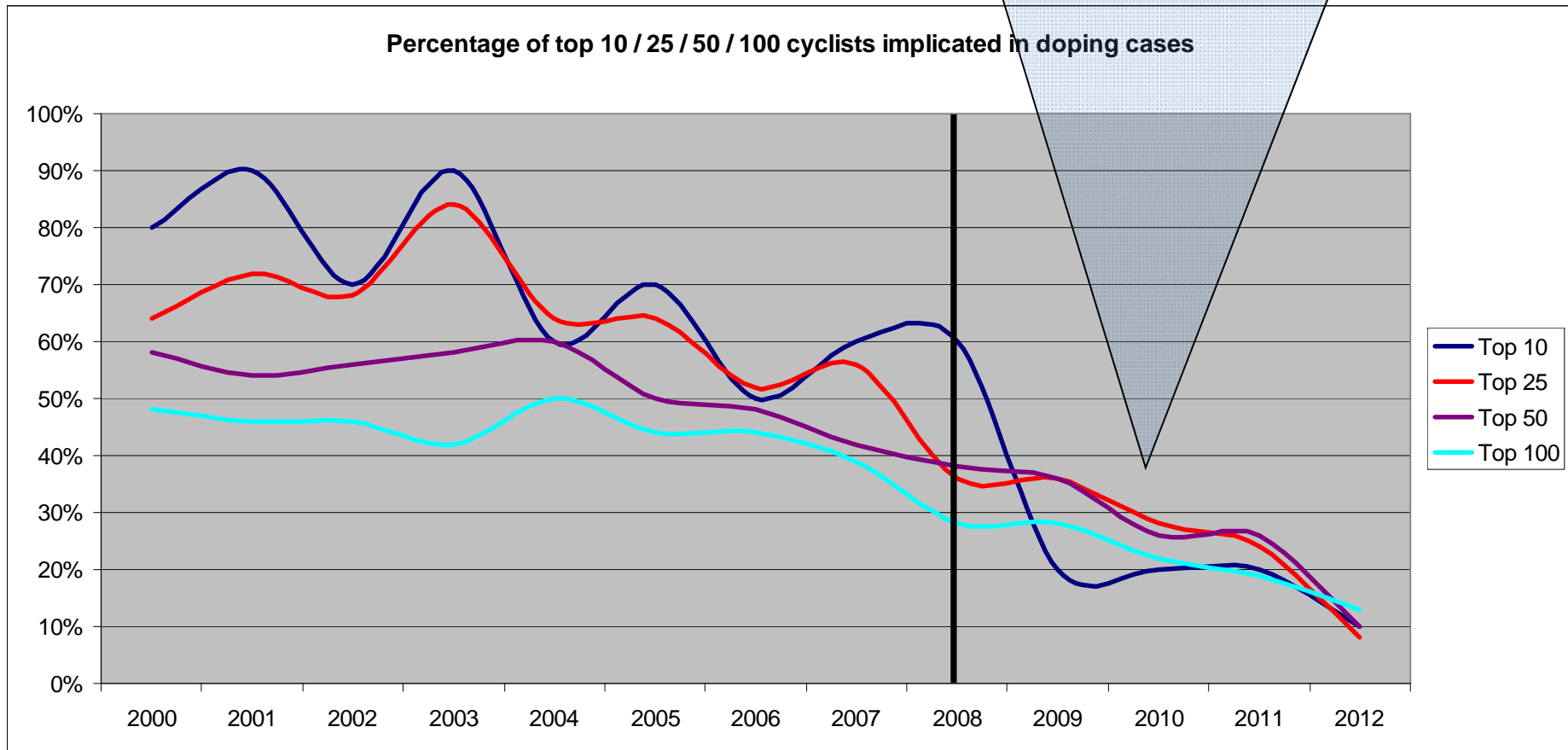


TOP 30 CYCLISTS & DOPING (2000-2012, CQ-RANKING)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	CASAGRANDI Francesco	ZABEL Erik	ZABEL Erik	BETTINI Paolo	CUNEGO Damiano	BOONEN Tom	BOONEN Tom	EVANS Cadeł	VALVERDE BELMONTE Alejandro	VALVERDE BELMONTE Alejandro	NBAU Vicente	GLBERT Philippe	RODRIGUEZ OLIVER Jaesun
2	VANSTENG Romens	REBELLIN Davide	ARMSTRONG Lance	ZABEL Erik	BETTINI Paolo	PETACCHI Alessandro	VALVERDE BELMONTE Alejandro	DE LUCA Danilo	CONTRON VLAJSSO Aleks	CONTRON VLAJSSO Aleks	CONTRON VLAJSSO Aleks	CONTRON VLAJSSO Aleks	WIGGINS Bradley
3	ARMSTRONG Lance	SMITH Graham	MCEWEN Robbie	PETACCHI Alessandro	ZABEL Erik	DE LUCA Danilo	BETTINI Paolo	VALVERDE BELMONTE Alejandro	REBELLIN Davide	EVANS Cadeł	RODRIGUEZ OLIVER Jaesun	RODRIGUEZ OLIVER Jaesun	BOONEN Tom
4	ZABEL Erik	DEKKER Erik	CIPOLLINI Marco	SMITH Graham	FRIERE GOMEZ Oscar	ARMSTRONG Lance	SANCHEZ GONZALEZ Samuel	REBELLIN Davide	EVANS Cadeł	CAVENDISH Mark	GLBERT Philippe	EVANS Cadeł	VALVERDE BELMONTE Alejandro
5	HENAO HERNANDEZ Roberto	ARMSTRONG Lance	BETTINI Paolo	REBELLIN Davide	VALVERDE BELMONTE Alejandro	MCEWEN Robbie	ZABEL Erik	CONTRON VLAJSSO Aleks	CANCELLARA Fabian	GLBERT Philippe	SANCHEZ GIL Luis Leon	VOKOLER Thomas	SAGAN Peter
6	ULLRICH Jan	ULLRICH Jan	FREGO Denis	VALVERDE BELMONTE Alejandro	REBELLIN Davide	VINDOUCROV Alexander	MCEWEN Robbie	FRIERE GOMEZ Oscar	CUNEGO Damiano	BOASSON HAGEN Edvald	EVANS Cadeł	MARTIN Tony	BOASSON HAGEN Edvald
7	REBELLIN Davide	BOGGERO Michael	GRANAZZI JANEZ Greg	VINDOUCROV Alexander	ARMSTRONG Lance	JAUCH Barry	SAGAN Peter	ROUSEY Denis	LEPHEMER Laurent	SANCHEZ GONZALEZ Samuel	FARRAR Tyler	SAGAN Peter	NBAU Vicente
8	JALABERT Laurent	DEVILLA BERRA Oscar	HENAO HERNANDEZ Roberto	ARMSTRONG Lance	O'GRADY Stuart	CUNEGO Damiano	HUSHOVD Thor	MENCHOV Denis	KIRCHEN Ken	CANCELLARA Fabian	SANCHEZ GONZALEZ Samuel	SANCHEZ GONZALEZ Samuel	GRIEPEL Andre
9	BETTINI Paolo	BETTINI Paolo	CASAGRANDI Francesco	BOGGERO Michael	PETACCHI Alessandro	SAGAN Peter	SCHEDECK Andy	BOONEN Tom	GLBERT Philippe	FARRAR Tyler	CANCELLARA Fabian	CAVENDISH Mark	DEGENOLB John
10	SAGAN Peter	CASAGRANDI Francesco	REBELLIN Davide	DE LUCA Danilo	BOONEN Tom	FISCHER Mario Alberto	CUNEGO Damiano	SANCHEZ GONZALEZ Samuel	BALLAN Alessandro	GRIEPEL Andre	GRIEPEL Andre	SCARFON Michal	MARTIN Tony
11	FRIERE GOMEZ Oscar	BELOU DORRONGORO Jaesun	BELOU DORRONGORO Jaesun	MAYOCHZ Ivan	SAGAN Peter	ZABEL Erik	SCHLECK Frank	CUNEGO Damiano	SASTRE CANDEL Carlos	BOONEN Tom	GESHW Robert	CANCELLARA Fabian	FROOME Chris
12	TCHMAL Andre	VOGT Jens	BARTOLI Michele	CASAGRANDI Francesco	HONER Chris	MENCHOV Denis	VINDOUCROV Alexander	VOGT Jens	BOONEN Tom	MENCHOV Denis	SCARFON Michal	BOASSON HAGEN Edvald	COSTA Rui Alberto Faria
13	BELLI Vladimir	KIRSPIJAU Jan	JALABERT Laurent	HAMILTON Tyler	MARTIN PERDUGUERO Miguel Angel	BETTINI Paolo	EVANS Cadeł	LEPHEMER Laurent	GRIEPEL Andre	HUSHOVD Thor	VINDOUCROV Alexander	WIGGINS Bradley	GERRANS Simon
14	BARTOLI Michele	VANSTENG Romens	DE LUCA Danilo	ULLRICH Jan	MENEGHO PEREZ Francisco	VALVERDE BELMONTE Alejandro	BALLAN Alessandro	BETTINI Paolo	FRIERE GOMEZ Oscar	CUNEGO Damiano	CAVENDISH Mark	ROADS Gil Jaesun Jaesun	CONTRON VLAJSSO Aleks
15	GARZELLI Danilo	MELLAER David	BOTERO DE VEYREY Santiago	FREGO Denis	ULLRICH Jan	REBELLIN Davide	CANCELLARA Fabian	PETACCHI Alessandro	SCHLECK Frank	SCHLECK Andy	BOASSON HAGEN Edvald	SCHLECK Frank	VOKOLER Thomas
16	KLODEN Andreas	MATTAN Nico	BOGGERO Michael	CELESTINO Mike	MCEWEN Robbie	ULLRICH Jan	HINCAPIE George	KIRCHEN Ken	GESHW Robert	HAUSLER Heinrich	SCHLECK Andy	VINDOUCROV Alexander	URBAN URBAN Rigmund
17	OLANO MANDANO Abraham	LEPHEMER Laurent	ZJILE Alex	NEAL VE GA Denis	HENAO HERNANDEZ Roberto	KIRCHEN Ken	HONER Chris	BENNETT Dennis	VAN AVERMAET Greg	POZZATO Filippo	HESJEDAL Ryder	VAN AVERMAET Greg	MORENO FERNANDEZ Daniel
18	DEKKER Erik	ZIERIG Bast	PETACCHI Alessandro	VAN PETEGEM Pieter	DEKKER Erik	LEPHEMER Laurent	SASTRE CANDEL Carlos	KAMPITS Vladimir	DEVOLDER Stijn	SANCHEZ GIL Luis Leon	HONER Chris	GOSS Matthew	CAVENDISH Mark
19	TOMKOV Pavel	ELIASO NARANJO	COOSE Bastien	BOGGERO PEREZ Francisco	VOGT Jens	MENEGHO PEREZ Francisco	VOGT Jens	ZABEL Erik	GASPARROTTO Enrico	ZIERIG Bast	HUSHOVD Thor	CUNEGO Damiano	HESJEDAL Ryder
20	MERCKX Axel	JALABERT Laurent	VAN PETEGEM Pieter	GARZELLI Danilo	HUSHOVD Thor	HUSHOVD Thor	GLBERT Philippe	BOUO Riccardo	VINDOUCROV Alexander	DAVIS Allan	FRIERE GOMEZ Oscar	GRIEPEL Andre	HENAO MONTOVA Sergio Luis
21	MORLAO Christophe	GONZALEZ DEL GALERANO FRANCISCA Greg	DEVILLA BERRA Oscar	ANTHONY HERRANDEZ Greg	HAMILTON Tyler	VOGT Jens	REBELLIN Davide	MCEWEN Robbie	CAVENDISH Mark	BRESCHEL Matt	SCHLECK Frank	SCHLECK Andy	SANCHEZ GONZALEZ Samuel
22	VAN PETEGEM Pieter	HONER Chris	SAVOLELLI Paolo	HENAO HERNANDEZ Roberto	SMITH Graham	HINCAPIE George	BENNETT Dennis	DEKKER Thomas	POZZATO Filippo	GESHW Robert	VINDOUCROV Alexander	NBAU Vicente	GLBERT Philippe
23	BROUHAUD Laurent	DOMINGUEZ DOMINGUEZ Juan Carlos	BROUHAUD Laurent	ROGERS Michael	MAYOCHZ Ivan	ROGERS Michael	PETACCHI Alessandro	BALLAN Alessandro	LARSSON Gustav Erik	CHAVANEL Sylvain	PETACCHI Alessandro	MULLERWAS Beate	ROGERS Michael
24	ELIASO NARANJO	FIGUEROA Guiberto	MUSELUN John	BROUHAUD Laurent	KLODEN Andreas	FRIERE GOMEZ Oscar	LEPHEMER Laurent	CANCELLARA Fabian	ROADS Gil Jaesun Jaesun	KNELDIGER Roman	ROGERS Michael	LEPHEMER Laurent	VAN GARDESEN Tjap
25	ESCAPIRIN COTT Fernando	BARTOLI Michele	FRIERE GOMEZ Oscar	VOKOLER Thomas	FUCHS GANNON Juan Antonio	SMITH Graham	FRIERE GOMEZ Oscar	GLEYE Vladimir	LOPWIJST Thomas	GARZELLI Danilo	MARTIN Tony	WINDTTO Marco	POZZOVOLO Domenico
26	BELOU DORRONGORO Jaesun	ROADS Gil	ZARRABETTA UFRANGIA Muel	MCEWEN Robbie	BOGGERO Michael	SAVOLELLI Paolo	GARZELLI Danilo	HUSHOVD Thor	RODRIGUEZ OLIVER Jaesun	PETACCHI Alessandro	SAGAN Peter	OSO ACERO Juan Jaesun	MOSER Marco
27	VINDOUCROV Alexander	MICHAEL MARTIN Juan Miguel	GONZALEZ DE SALCANDO AMANDELA Greg	COOSE Bastien	MENCHOV Denis	FLADA MELNIK Ruben	O'GRADY Stuart	POZZATO Filippo	BENNETT Dennis	SCHLECK Frank	ANTON HERNANDEZ Greg	WITTEL Michael	SANCHEZ GIL Luis Leon
28	FREGO Denis	FREGO Denis	DEKKER Erik	PIOLAN Luca	DAVIS Allan	DEKKER Thomas	MENEGHO Christophe	SCHALCHER Stefan	MENCHOV Denis	KOJENOV Alexander	BRAKOVIC Janez	MARTIN Daniel	CANCELLARA Fabian
29	NARDELLO Davide	AZVEDO Jose Benito Carvalho	EVANS Cadeł	BARTOLI Michele	PEREZ FERNANDEZ Santiago	SCHLECK Frank	POZZATO Filippo	O'GRADY Stuart	BRESCHEL Matt	NBAU Vicente	SAGAN Peter	LEUKOWAS Beate	CHAVANEL Sylvain
30	PETOLI Leonardo	MORLAO Christophe	ELANCKAERT JI	KIRSPIJAU Jan	JAUCH Barry	PEREIRO SIO Oscar	PEREIRO SIO Oscar	SASTRE CANDEL Carlos	PELLOTTI Franco	PELLOTTI Franco	MOSQUERA HERNANDEZ Jaesun	HUB FELIX Roman	BOOM Lars



Is cycling cleaner now (after introduction biological passport in 2008)
OR
is it because riders of current generation are not yet caught ?



RESEARCH MOTIVATION

- Despite the enormous amount of public discussion that goes on around anti-doping policies in cycling, little is known about how the general public thinks about doping.
- It is even more unclear how public opinion might be divided and how doping perception differs between groups of people. Are cycling fans, for instance, more lenient towards doping than non-cycling fans and what about the people who are active cyclists themselves?



METHODOLOGY

- Research questions
 - What is public opinion on doping in cycling?
 - How is public opinion different between population groups based on certain personal and behavioral characteristics or knowledge?
- Research outlay
 - Questionnaire approach.
 - Two sorts of questions: opinion questions and profiling questions.
- Data collection
 - Online (Qualtrics software) (about 4/5 of the dataset)
 - Hands on collecting of data (about 1/5 of the dataset)
 - Data analysis with SPSS software



2 SORTS OF QUESTIONS: opinion questions

- 26 statements to be evaluated on a Likert scale (1 to 5 from totally disagree to totally agree).
- With a varimax principal component analysis these questions were grouped along 6 dimensions:
 - *acceptability of doping use (5 questions)*
 - *reasons to fight doping (4 questions)*
 - *motivations of cyclists to use doping (4 questions)*
 - *sanctions for the use of doping (7 questions)*
 - *impact of doping on the image of cycling (3 questions)*
 - *different treatment between cycling and other sports (2 questions)*



2 SORTS OF QUESTIONS: profiling questions

- We define population segments based on:
 - Gender
 - Age
 - Cycling activity
 - Cycling interest
 - Doping knowledge
- For *cycling interest* and *doping knowledge*, behavioral and knowledge questions were used to identify the population segments, to avoid the problems associated with self-selection. We thus work with some sort of “revealed” population segments that should be more reliable. (= key element in our research)



QUESTIONS MEASURING CYCLING INTEREST

- Two knowledge questions:
 - E.g. Identify two American riders out of a list of 7 riders
- Two behavioral questions:
 - E.g. viewing behavior for Tour de France stages
- Both elements were weighed equally to obtain a score from 0 to 10 and cut-off value of 5 out of 10.



QUESTIONS MEASURING DOPING KNOWLEDGE

- Two knowledge questions:
 - Identify which product is not prohibited (out of a list of 3)
 - Identify five riders who have been suspended officially (out of a list of 10 suspected riders)
- Answers to both questions were combined to obtain a score from 0 to 6 and cut-off value of 4 out of 6.



DATASET

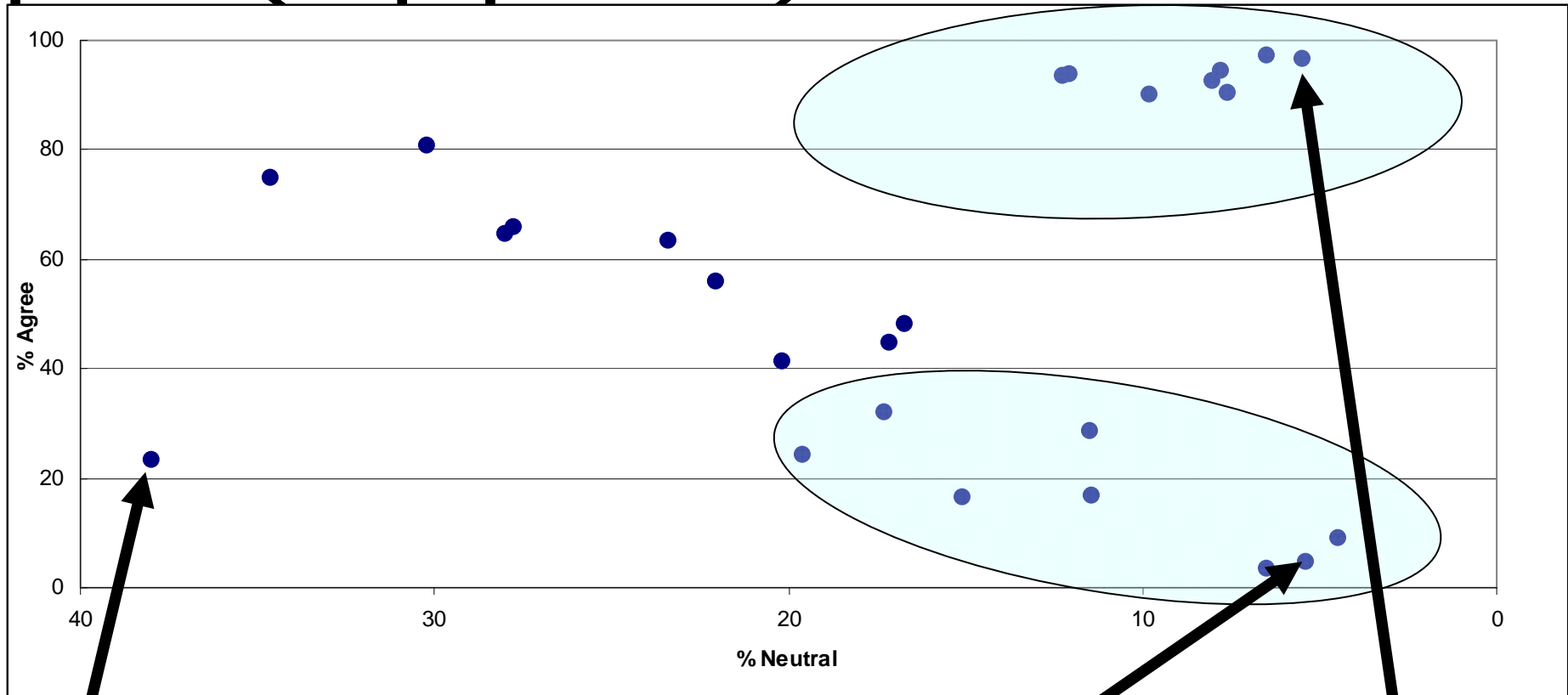
	Surveys...		
	started	completed	withheld
Number of respondents	2045	1968 (96,2 %)	1949 (95,3 %)



DESCRIPTION RESPONDENTS

Gender	Male 1,266 65.0%	Female 683 35.0%	
Age	Young 845 43.4%	Middle-aged 631 32.4%	Old 473 24.2%
Cycling activity	Competitive 174 8.9%	Recreational 423 21.7%	Inactive 1,352 69.4%
Cycling interest	Yes 846 43.4%	No 1,103 56.6%	
Doping knowledge	High 714 36.6%	Low 1,235 63.4%	

STATEMENTS: analysis of strength of opinion (all population)



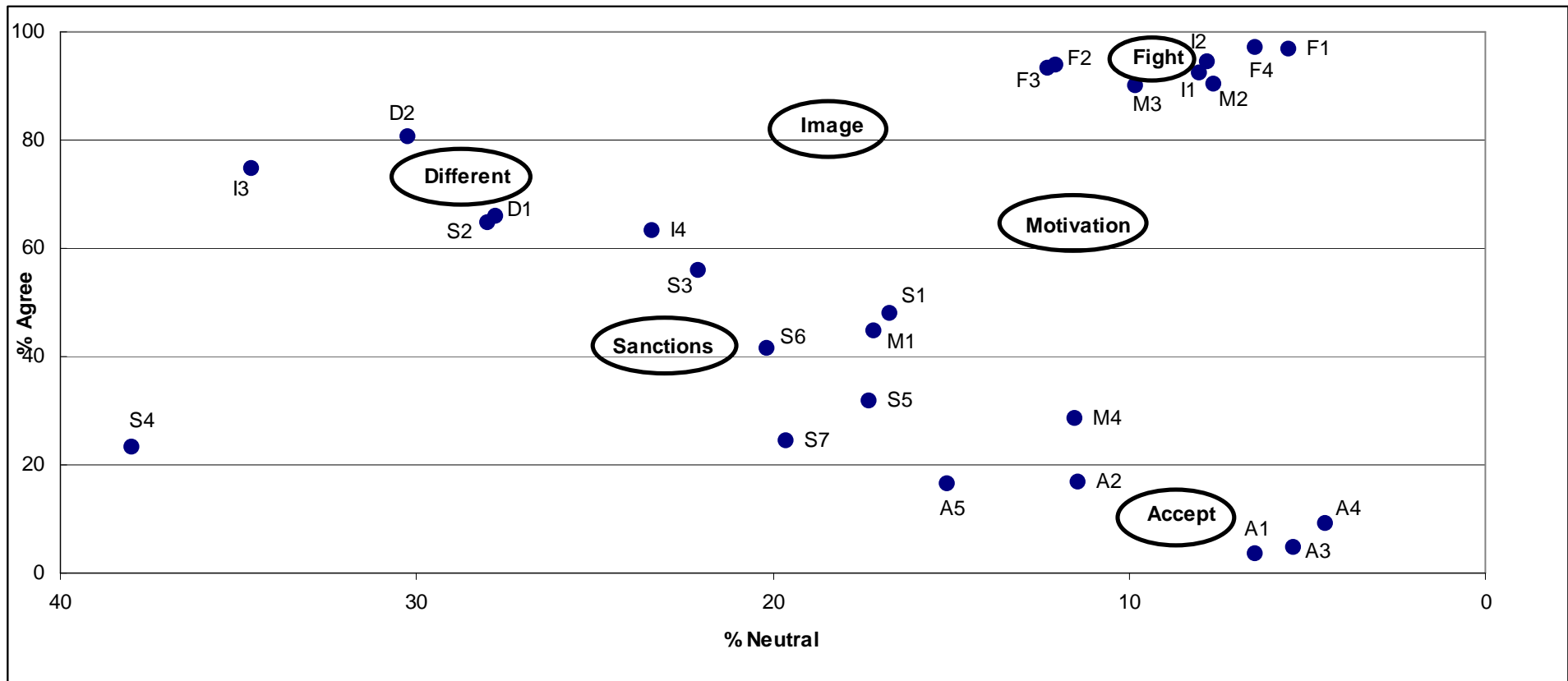
Doping is a mere sporting problem and society therefore uses too much money fighting it.

Doping use is not a problem if everybody else is doing it.

The fight against doping is necessary because doping contradicts the principle of fair play.



STATEMENTS: analysis of strength of opinion (all population)



QUESTIONS ON THE ACCEPTABILITY OF DOPING USE

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
Doping use should be admitted freely.	A1	<u>1,4</u>	<u>1,3</u>	1,3	1,4	1,4	<u>1,3</u>	<u>1,5</u>	<u>1,4</u>	<u>1,3</u>	<u>1,5</u>	<u>1,3</u>	<u>1,5</u>
Doping use is acceptable under strict medical supervision, so that health risks are limited.	A2	<u>2,1</u>	<u>1,7</u>	1,9	2,0	2,1	<u>1,8</u>	<u>2,2</u>	<u>1,9</u>	<u>1,8</u>	<u>2,2</u>	<u>1,8</u>	<u>2,2</u>
Doping use is not a problem if everybody else is doing it.	A3	<u>1,4</u>	<u>1,3</u>	1,4	1,3	1,3	1,3	1,4	1,4	1,3	1,4	1,3	1,4
Only the sporting result is of importance, not the way this result is achieved.	A4	1,7	1,6	1,6	1,6	1,7	1,6	1,6	1,7	1,6	1,7	1,6	1,7
Cyclists are adults and can therefore decide themselves on what substances to use, bearing in mind the impact doping use might have on their health.	A5	2,1	2,1	<u>2,2</u>	<u>1,9</u>	<u>2,0</u>	2,1	2,0	2,1	2,1	2,1	2,1	2,1

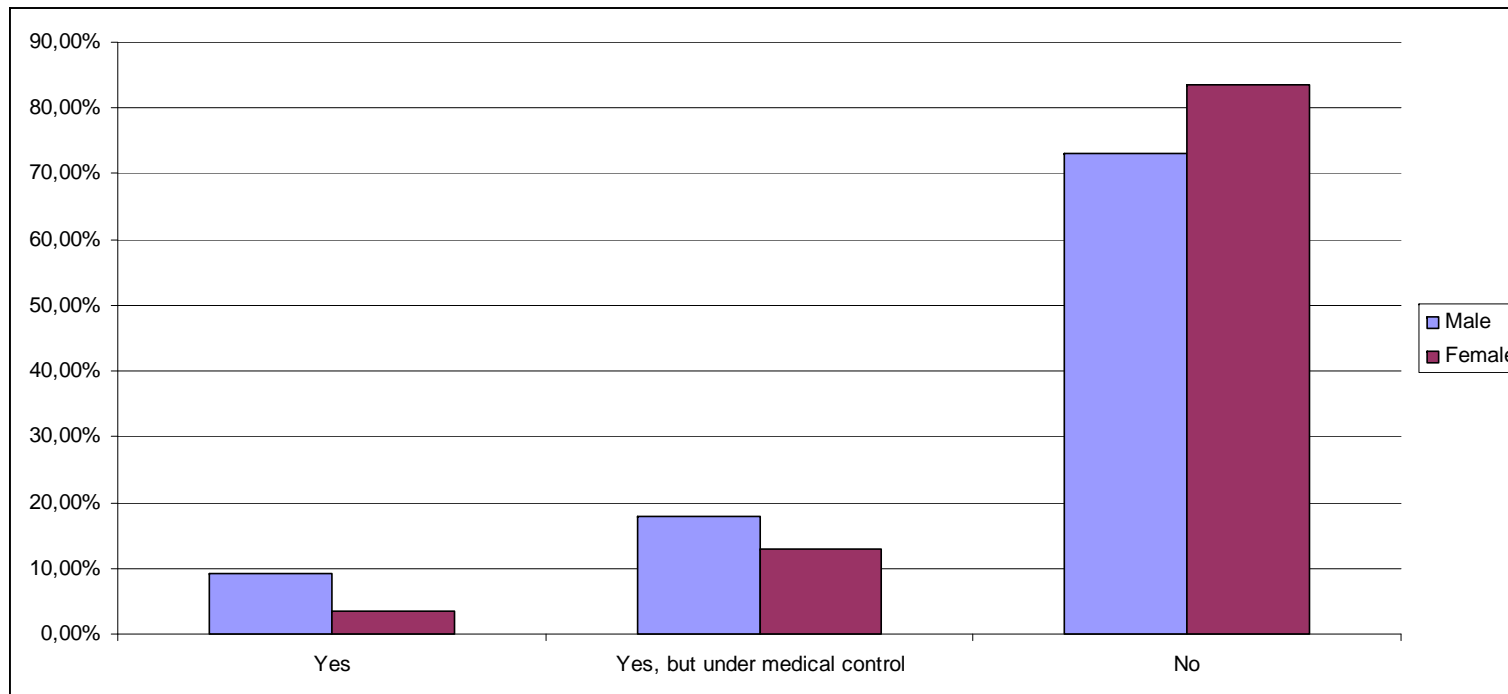
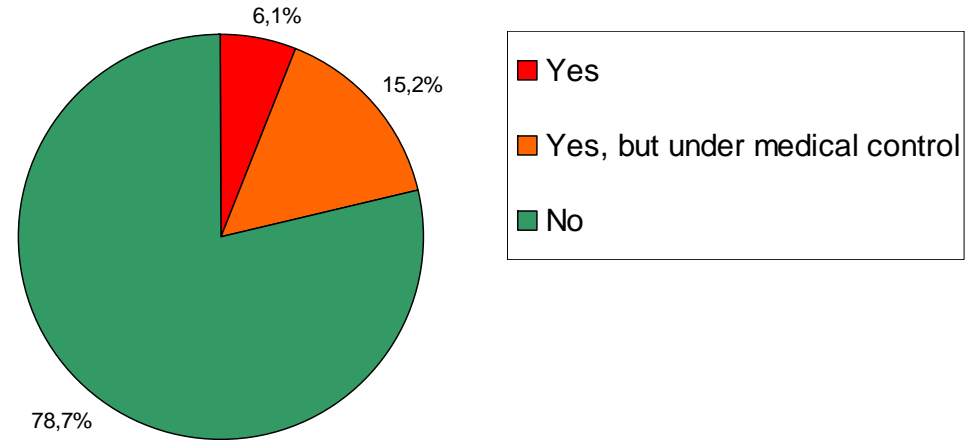
→ Recreational cyclists, cycling fans and persons with a greater doping knowledge are more willing to accept doping under medical supervision than others.

→ Women are less willing to allow doping use (free or under medical supervision) than men.



DOPING USE SHOULD BE ADMITTED?

Source: Dutch newspaper questionnaire
(February 2013)



QUESTIONS ON THE MOTIVATIONS FOR THE USE OF DOPING

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
Cyclists use doping because races are too hard.	M1	<u>2,7</u>	<u>3,0</u>	2,8	2,8	2,9	<u>2,3</u>	<u>2,7</u>	<u>3,0</u>	<u>3,0</u>	<u>2,6</u>	<u>3,0</u>	<u>2,7</u>
Cyclists use doping as a result of the pressure to perform put upon them.	M2	<u>4,0</u>	<u>4,2</u>	4,1	4,2	4,1	<u>3,8</u>	<u>4,1</u>	<u>4,1</u>	<u>4,2</u>	<u>4,0</u>	4,1	4,0
Cyclists use doping to create a level playing field with the other riders.	M3	4,1	4,1	<u>4,0</u>	<u>4,2</u>	<u>4,2</u>	<u>3,9</u>	<u>4,2</u>	<u>4,1</u>	4,1	4,0	4,1	4,1
Doping use is necessary to deliver top results in cycling.	M4	<u>2,4</u>	<u>2,2</u>	<u>2,2</u>	<u>2,5</u>	<u>2,4</u>	2,2	2,5	2,3	2,3	2,4	2,3	2,4

→ Competitive cyclists and recreative cyclists do not agree with “popular blief” that doping is used because races are too hard.

→ Competitive cyclists are also less convinced than other people that doping use is a result of the pressure that is put upon them or because of the idea of creating a level playing field with the other doped riders



So I did it, but I didn't feel totally guilty about it because everybody else seemed to be doing it. — Frankie Andreu

I never cheated. — Jan Ullrich



➔ The use of doping substances was quite natural to cyclists.



QUESTIONS ON SANCTIONS FOR DOPING USE

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
Riders found guilty on the use of doping should be banned for life.	S1	3,1	3,0	<u>2,9</u>	<u>3,2</u>	<u>3,1</u>	3,1	3,1	3,0	3,1	3,0	3,1	3,0
Doping is a problem that concerns society as a whole and therefore belongs in criminal law.	S2	<u>3,3</u>	<u>3,5</u>	<u>3,1</u>	<u>3,3</u>	<u>3,7</u>	3,2	3,3	3,4	<u>3,5</u>	<u>3,2</u>	<u>3,5</u>	<u>3,1</u>
To be effective, anti-doping measures may violate privacy rights from cyclists.	S3	<u>3,1</u>	<u>3,3</u>	<u>2,9</u>	<u>3,2</u>	<u>3,5</u>	3,0	3,2	3,2	<u>3,3</u>	<u>3,0</u>	<u>3,3</u>	<u>3,0</u>
Doping is a mere sporting problem and society therefore uses too much money fighting it.	S4	2,5	2,6	2,6	2,5	2,5	<u>2,2</u>	<u>2,5</u>	<u>2,6</u>	2,6	2,5	<u>2,6</u>	<u>2,4</u>
Regular health controls with short suspension periods are preferable to strict doping controls with two-year suspensions.	S5	<u>2,4</u>	<u>2,7</u>	<u>2,4</u>	<u>2,5</u>	<u>2,7</u>	<u>2,2</u>	<u>2,3</u>	<u>2,6</u>	<u>2,6</u>	<u>2,3</u>	<u>2,6</u>	<u>2,3</u>
The fight against doping is unfair because it privileges wealthy cyclists who have themselves defended better and more easily escape prosecution.	S6	<u>2,8</u>	<u>2,6</u>	2,7	2,7	2,8	<u>3,1</u>	<u>2,9</u>	<u>2,7</u>	<u>2,6</u>	<u>2,9</u>	<u>2,7</u>	<u>2,9</u>
Anti-doping measures should be strict, even if this results in an innocent rider being suspended every now and then.	S7	<u>2,3</u>	<u>2,5</u>	<u>2,3</u>	<u>2,5</u>	<u>2,6</u>	<u>2,1</u>	<u>2,4</u>	<u>2,5</u>	<u>2,5</u>	<u>2,3</u>	<u>2,5</u>	<u>2,2</u>

→ Women, elderly people, people with a small cycling interest and people with little doping knowledge are more convinced doping belongs in criminal law and that privacy rights of cyclists can therefore be violated.





What if... we would have sanctioned doping use in the past like we sanction it today?

1966	Sanremo						
1967	Sanremo					WC	
1968		Roubaix		Giro			
1969	Sanremo	Flanders	Liège-B.-L.		Tour		
1970		Roubaix		Giro	Tour		
1971	Sanremo		Liège-B.-L.		Tour	WC	Lombardia
1972	Sanremo		Liège-B.-L.	Giro	Tour		Lombardia
1973		Roubaix	Liège-B.-L.	Giro	Vuelta		
1974				Giro	Tour	WC	
1975	Sanremo	Flanders	Liège-B.-L.				
1976	Sanremo						





The victory list of Eddy Merckx would have looked like this...

1966	Sanremo						
1967	Sanremo					WC	
1968		Roubaix		Giro			
1969	Sanremo	Flanders	Liège-B.-L.	CAUGHT	Tour		
1970		Roubaix		Giro	Tour		
1971	Sanremo		Liège-B.-L.		Tour	WC	Lombardia
1972	Sanremo		Liège-B.-L.	Giro	Tour		Lombardia
1973		Roubaix	Liège-B.-L.	Giro	Vuelta		CAUGHT
1974				Giro	Tour	WC	
1975	Sanremo	Flanders	Liège-B.-L.				
1976	Sanremo						

QUESTIONS ON THE REASONS TO FIGHT DOPING

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
The fight against doping is necessary because doping contradicts the principle of fair play.	F1	<u>4,6</u>	<u>4,7</u>	4,6	4,6	4,6	4,7	4,6	4,6	4,6	4,6	4,6	4,6
The fight against doping is necessary because doping damages a cyclist's health.	F2	<u>4,3</u>	<u>4,5</u>	<u>4,2</u>	<u>4,4</u>	<u>4,5</u>	4,4	4,3	4,3	4,3	4,3	4,3	4,3
The fight against doping is necessary because doping harms financially cyclists that ride clean.	F3	<u>4,4</u>	<u>4,3</u>	<u>4,2</u>	<u>4,5</u>	<u>4,6</u>	<u>4,5</u>	<u>4,5</u>	<u>4,3</u>	<u>4,3</u>	<u>4,5</u>	<u>4,3</u>	<u>4,5</u>
The fight against doping is necessary because doping produces bad role models to young riders.	F4	4,6	4,6	<u>4,4</u>	<u>4,7</u>	<u>4,7</u>	4,7	4,6	4,6	4,5	4,6	4,6	4,6

➔ The health argument against doping is much more important to women than to men and to middle-aged / older people than to young people.

➔ Cycling fans and cycling active people give the same importance to the health argument as non-cycling fans and cycling inactive people.



QUESTIONS ON THE IMPACT DOPING USE HAS ON THE IMAGE OF CYCLING

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
Doping use will never disappear completely from cycling.	I1	<u>4,2</u>	<u>4,1</u>	4,2	4,2	4,2	4,1	4,3	4,2	4,2	4,3	<u>4,1</u>	<u>4,3</u>
The doping problem damages cycling's credibility.	I2	4,3	4,4	4,3	4,4	4,4	4,3	4,3	4,3	<u>4,4</u>	<u>4,3</u>	<u>4,4</u>	<u>4,2</u>
The doping problem makes it more difficult to find sponsors interested in cycling.	I3	<u>3,7</u>	<u>3,4</u>	<u>3,5</u>	<u>3,7</u>	<u>3,7</u>	<u>3,7</u>	<u>3,8</u>	<u>3,5</u>	<u>3,3</u>	<u>3,9</u>	<u>3,4</u>	<u>3,9</u>
The doping problem damages cycling's popularity.	I4	3,3	3,4	<u>3,2</u>	<u>3,4</u>	<u>3,7</u>	3,4	3,4	3,4	<u>3,5</u>	<u>3,3</u>	<u>3,4</u>	<u>3,3</u>

→ Although there is a rather strong consensus that cycling's credibility is at stake, there is less evidence that doping hurts cycling's popularity in Flanders.

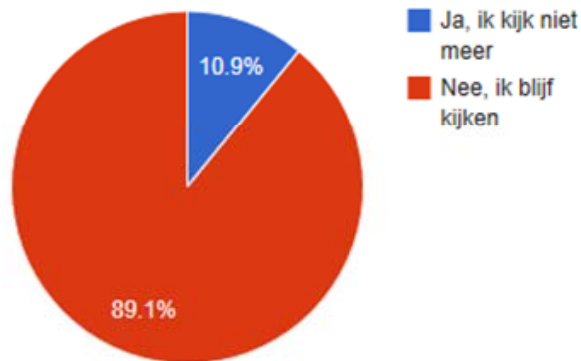
IMPACT OF DOPING ON TV INTEREST TOUR DE FRANCE

Study Van Reeth (2013) on TV demand for the Tour de France:

- Short term (day-effect): -4,8% to -7,6%
- Long term (year-effect): -7,7% to -17,5%

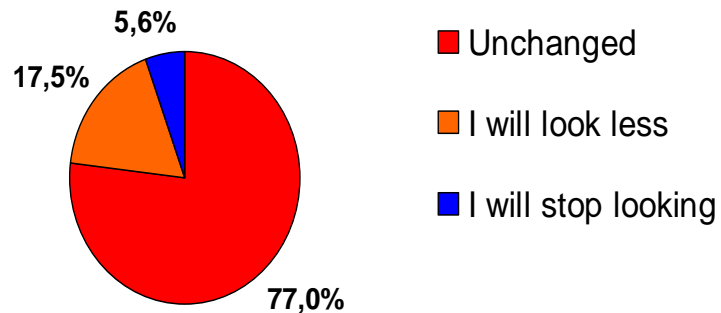
Belgian newspaper questionnaire
(Het Nieuwsblad, November 2012):

Als u dit jaar naar de Tour gekeken hebt, zijn de dopingaffaires een reden om dat volgend jaar niet meer te doen?



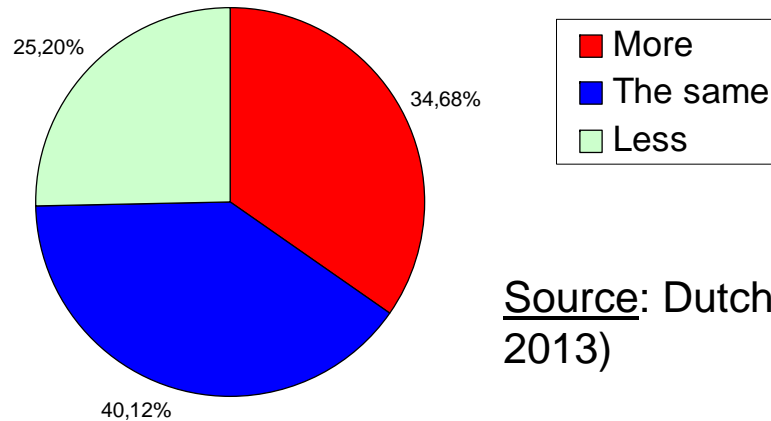
Dutch newspaper questionnaire
(Multiscope, February 2013):

Compared to last year, how would you describe your Tour de France tv viewing behaviour in 2013?

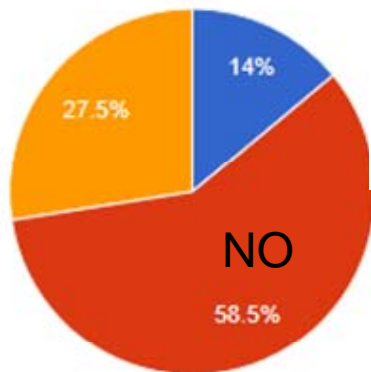


IS CYCLING CLEAN NOW?

Compared to 10 years ago, do you think there is more or less doping use in cycling?



Source: Dutch newspaper questionnaire (February 2013)



ARE YOUNG RIDERS CLEAN?
(< 26 years)



ARE OLD RIDERS CLEAN?
(> 26 years)

Source: Belgian newspaper questionnaire (November 2012)

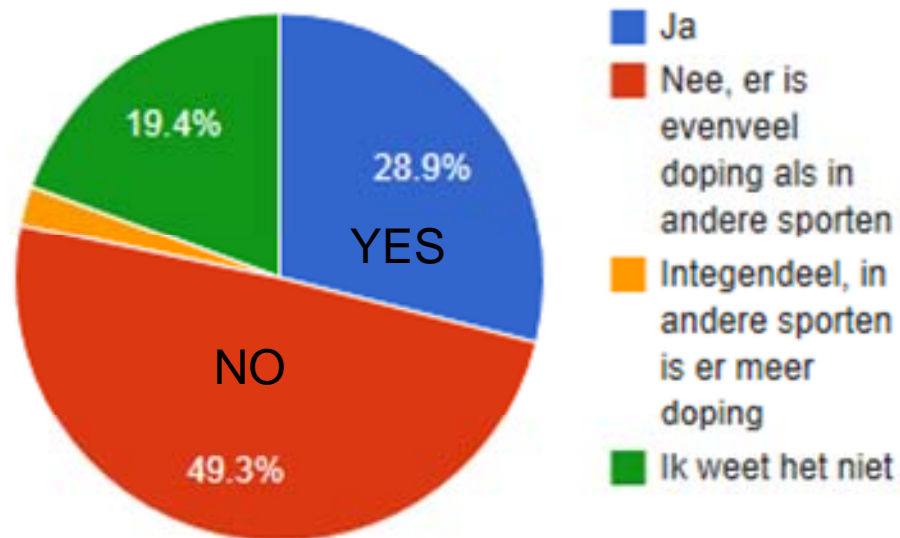


DIFFERENT TREATMENT OF CYCLING QUESTIONS

Statement		Gender		Age			Cycling activity			Cycling interest		Doping knowledge	
		M	F	Yg	M-a	Old	C	R	No	No	Yes	Low	High
Cyclists are sanctioned harder than other athletes when found guilty of a doping offense.	D1	<u>3,6</u>	<u>3,1</u>	3,4	3,4	3,5	<u>4,1</u>	<u>3,8</u>	<u>3,2</u>	<u>3,1</u>	<u>3,8</u>	<u>3,1</u>	<u>3,8</u>
Cyclists are controlled more often on doping use than other athletes.	D2	<u>3,9</u>	<u>3,4</u>	3,7	3,8	3,8	<u>4,3</u>	<u>4,1</u>	<u>3,6</u>	<u>3,4</u>	<u>4,1</u>	<u>3,5</u>	<u>4,2</u>

- Cycling fans, cycling active people and people who have a certain doping knowledge clearly feel cyclists are worse off than other athletes.
- There is no significant difference in opinion between age groups.

IS DOPING A BIGGER PROBLEM IN CYCLING THAN IN OTHER SPORTS?



Source: Belgian newspaper questionnaire (November 2012)



**Closing question:
Do you know these sportsmen
(and what they have in common)?**



	Cannavaro	Vaughters
What happened?	Got stung by a wasp in the buttocks (at least, he said so)	Got stung by a wasp close to the eye at the start of a Tour stage
Reaction	Used cortisone without any medical certificate	Asked official permission for the use of cortisone
Consequence	Got caught for using doping	Was denied medical treatment if he wanted to continue the Tour
Team attitude	(Juventus) Defended him	(Crédit Agricole) Did nothing (fundamental principle)
Outcome	Was acquitted of any doping offence	Had to leave the Tour

Anecdotic evidence, but exemplary of the different attitude between cycling and football when it comes to doping. Probably, it also affects public perception on doping.





THANKS FOR YOUR ATTENTION

