RIALTO POLICE DEPARTMENT WEARABLE CAMERAS EXPERIMENT

Crim-PORT 1.0:

Criminological Protocol for Operating Randomized Trials

@ 2009 by Lawrence W. Sherman and Heather Strang

INSTRUCTIONS: Please use this form to enter information directly into the WORD document as the protocol for your registration on the Cambridge Criminology Registry of EXperiments in Policing Strategy and Tactics (REX-POST) or the Registry of EXperiments in Correctional Strategy and Tactics (REX-COST).

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1. NAME AND HYPOTHESES

1.1 Name of Experiment:

The Rialto Police Department Wearable Cameras Experiment

1.2 **Principal Investigator:**

1.2.1 Barak Ariel, PhD

Cambridge University

1.3 <u>Co-Principal Investigator</u>:

1.3.1 William Farrar (Chief of Police)

City of Rialto Police Department

1.4 **General Hypothesis**:

Wearing wearable video cameras by patrol officers will increase officers' compliance rates, compared to not wearing wearable video cameras.

1.5 **Specific Hypotheses:**

- 1.5.1 Wearing personal video cameras will decrease the number of citizens' complaints lodged against participating police officers, compared to control group.
- 1.5.2 Wearing personal video cameras will decrease the prevalence of incidents with police use of force, compared to control group.
- 1.5.3 List all subgroups to be tested for all varieties of outcome measures:

(Of both officers and third-parties):

- 1.5.3.1 Gender
- 1.5.3.2 Age (natural cut-off point)
- 1.5.3.3 Years of experience (natural cut-off point)
- 1.5.3.4 Ethnicity (all subgroups available)
- 1.5.3.5 Police-led operations versus routine police response
- 1.5.3.6 Interaction with the public at high-crime geographic areas versus low-crime geographic areas (natural cut-off points)
- 1.5.3.7 Interaction with the public during day shifts versus night shifts
- 1.5.3.8 New recruits vs. experienced officers

2. ORGANIZATIONAL FRAMEWORK

- **2.1 Dual Partnership:** Operating agency delivers treatments with independent research organization providing random assignment, data collection, analysis $\underline{\mathbf{X}}$
 - **2.1.1** Name of Operating Agency : **Rialto Police Department**
 - **2.1.2** Name of Research Organization: **University of Cambridge**

3. UNIT OF ANALYSIS

Patrol shifts

4. ELIGIBILITY CRITERIA

- **4.1 Criteria Required** (list all)
 - **4.1.1** Uniformed front-line police officers' shifts (including new recruits in training)
 - **4.1.2** Within Rialto Police Department geographic jurisdiction

4.2 Criteria for Exclusion (list all)

- **4.2.1** Surreptitious interviews with victims or suspects (e.g., sex offenders and gang members), in which recording of the communication may be counter-productive¹
- **4.2.2** Lengthy or extensive interviews in police custody (e.g., child abuse reports, sexual battery or rape reports)
- **4.2.3** Emergency situations where activating the device will present safety risks
- **4.2.4** Special operations (e.g., football games, payback days, holidays), in which more than 50% of the department is involved in non-routine activities

5. PIPELINE: RECRUITMENT OR EXTRACTION OF CASES

(answer all questions)

5.1 Where will cases come from?

Rialto Police Department

5.2 Who will obtain them?

Data Analysis Team (DAT) consisting of RPD Professional Standards – Unit Sergeant and Administrative Assistant (confidential employees), Crime Analysis Supervisor and Chief Farrar (Co-Investigator).

¹ Registry of these interviews is required

5.3 How will they be identified?

Experimental shifts will be identified by DAT and assigned by Cambridge at random.

5.4 How will each case be screened for eligibility?

All RPD patrol police officers are eligible (n=54); eligibility of shifts (n=19 per week) pursuant to Section 4 above will screened weekly for routine patrol and daily for special patrol tasks.

5.5 Who will register the case identifiers prior to random assignment?

RPD Crime Analysis Unit Supervisor.

5.6 What social relationships must be maintained to keep cases coming?

None.

5.7 Has a Phase I (no-control, "dry-run") test of the pipeline and treatment process been conducted?

Yes

5.7.1 how many cases were attempted to be treated?

Two weeks of 100% assignment

- **5.7.2** how many treatments were successfully delivered
- **5.7.3** how many cases were lost during treatment delivery

6. TIMING: CASES COME INTO THE EXPERIMENT IN

(check only one)

- **6.1** A trickle-flow process, one case at a time
- **6.2** A single batch assignment__
- **6.3** Repeated batch assignments $\underline{\mathbf{X}}$ (random assignment every week, for the next week of shift pattern)
- **6.4** Other (describe below)

7. RANDOM ASSIGNMENT

7.1 How is random assignment sequence to be generated?

(Check one from 1, 2 or 3 below)

- 7.1.1 Random numbers table → case number sequence → sealed envelopes with case numbers outside and treatment assignment inside, with 2-sheet paper surrounding treatment
- **7.1.2** Random numbers case-treatment generator program in secure computer The **Cambridge Randomiser**
- **7.1.3** Other (please describe below)___

7.2 Who is entitled to issue random assignments of treatments?

- **7.2.1** Role: Co-Principle Investigator
- **7.2.2** Organization: Rialto Police Department Chief (Cambridge Randomiser)

7.3 How will random assignments be recorded in relation to case registration?

- **7.3.1** Name of data base: Cambridge Randomiser RPD II.
- **7.3.2** Location of data entry: RPD
- **7.3.3** Persons performing data entry: RPD Professional Standards Unit.

8. TREATMENT AND COMPARISON ELEMENTS

8.1 Experimental or Primary Treatment

- **8.1.1** What elements must happen, with dosage level (if measured) indicated.
 - 8.1.1.1 Element A: wearable, personal cameras attached to each patrolling officer during experimental shifts, with capability of capturing and recording police interaction with the public (offenders, witnesses, victims), in both colour video and audio.
 - 8.1.1.2 Element B: each 'experimental shift' of uniformed front-line police patrol unit consist of nine officers ((1) sergeant; (1) corporal; and (7) officers)
 - 8.1.1.3 Cameras must be turned on during every interaction with the public, until the situation is stabilized.
- **8.1.2** What elements must *not* happen, with dosage level (if measured) indicated.
 - 8.1.2.1 Element A: cross over

8.2 Control or Secondary Comparison Treatment

- **8.2.1** What elements must happen, with dosage level (if measured) indicated.
 - 8.2.1.1 Element A: no 8.1.1.1 above during control shifts
- 8.2.2 What elements must not happen, with dosage level (if measured) indicated.
 - 8.2.2.1 Element A: Cross over.

9. MEASURING AND MANAGING TREATMENTS

9.1 Measuring (see Appendix A)

9.1.1 How will treatments be measured?

- 9.1.1.1 Dichotomous measurement of treatment assignment.
- 9.1.1.2 Rich video-audio data from third party provider Taser Inc (see **Appendix D**)

9.1.2 Who will measure them?

Taser Inc.

9.1.3 How will data be collected?

Computerized collection using *IAPro* and *Blue Team* software².

9.1.4 How will data be stored?

Computer files.

9.1.5 Will data be audited?

Yes.

9.1.6 If audited, who will do it?

DAT personnel and Chief of Police

9.1.7 How will data collection reliability be estimated?

Cambridge calculations.

9.1.8 Will data collection vary by treatment type?

No. treatment is identical in all cases.

9.2 Managing

9.2.1 Who will see the treatment measurement data?

DAT personnel and Cambridge.

9.2.2 How often will treatment measures be circulated to key leaders?

Bi-monthly.

9.2.3 If treatment integrity is challenged, whose responsibility is correction?

Chief of Police.

² **IA Pro** is a software program used by internal affairs and professional standards units in over 340 public safety agencies in Canada, Australia, New Zealand and the USA. **Blue Team** is a web-enabled software program was designed to support patrol, command and supervisory staff on the front-lines; it tracks and records complaints, use-of-force, vehicle accidents and pursuits.

10. MEASURING AND MONITORING OUTCOMES

10.1 Measuring

10.1.1 How will outcomes be measured?

All X and O in terms of:

- 10.1.1.1 Number of formal complaints lodged by a supervisor regarding officer misconduct or performance per patrol hour³.
- 10.1.1.2 Number of incidents with the use of force per shift⁴.
- 10.1.1.3 Rich video-audio data from third party provider Taser Inc

10.1.2 Who will measure them?

Rialto Police Department Professional Standards Unit.

10.1.3 How will data be collected?

IAPro and Blue Team software

10.1.4 How will data be stored?

DAT secured systems.

10.1.5 Will data be audited?

Yes.

10.1.6 If audited, who will do it?

Chief of Police.

10.1.7 How will data collection reliability be estimated?

Reading of all incident reports during and after the experiment (both treatment and control), for measurement of accuracy and precision of data.

10.1.8 Will data collection vary by treatment type?

No.

10.2 Monitoring

10.2.1 How often will outcome data be monitored?

Biweekly.

10.2.2 Who will see the outcome monitoring data?

Cambridge.

³ Number of formal complaint is defined as a complaint where the reporting party either requests the alleged misconduct or performance related issues be investigated or the reporting party completes the department complaint form.

⁴ physical force more than a basic control or compliance hold, OC spray, baton, Taser, canine bite

10.2.3 When will outcome measures be circulated to key leaders?

Monthly.

10.2.4 If experiment finds early significant differences, what procedure is to be followed?

Discuss with leaders.

11. ANALYSIS PLAN

- 11.1 Which outcome measure is considered to be the primary indicator of a difference between experimental treatment and comparison group?
 - 11.1.1 Total number of complaints against patrolling officers per officer per patrol hour (GLM, with number of complaints during the experimental period (365 days) as dependant variable and number of complaints during the pre-experimental period (365 days) as a covariate).
 - **11.1.2** Total number of incidents in which police force was used per patrol hour per officer

(GLM, with number of use-of-force indicants during the experimental period (365 days) as dependant variable and use-of-force indicants during the pre-experimental period (365 days) as a covariate).

11.2 Which outcome measure is considered to be the secondly indicator of a difference between experimental treatment and control group?

Customised Tankebe legitimacy before-after survey of participating officers, substantially in the form of **Appendix C**).

11.3 What is the minimum sample size to be used to analyze outcomes?

988 shifts (19 shifts per week x 52 weeks)

11.4 Will all analyses employ an intention-to-treat framework?

Yes.

11.5 What is the threshold below which the percent Treatment-as-Delivered would be so low as to bar any analysis of outcomes?

60%

11.6 Who will do the data analysis?

Cambridge.

11.7 What statistic will be used to estimate effect size?

Cohen's d (1988)

11.8 What statistic will be used to calculate P values?

GLM with zero-inflated distribution or Poisson distribution

11.9 What is the magnitude of effect needed for a two-tailed, p = .05 difference to have an 80% chance of detection with the projected sample size (optional but recommended calculation of power curve) for the primary outcome measure (at allocation ratio between the arms of 1:1)

d = 0.18

(See **Appendix B** for power calculations)

11.10 Any additional analyses will be conducted?

None.

12. DISSEMINATION PLAN

12.1 What is the date by which the project agrees to file its first report on CCR-RCT? (report of delay, preliminary findings, or final result).

Within 6 months.

12.2 Does the project agree to file an update every six months from date of first report until date of final report?

Yes.

12.3 Will preliminary and final results be published, in a 250-word abstract, on CCR-RCT as soon as available?

Yes.

12.4 Will CONSORT requirements be met in the final report for the project? (See http://www.consort-statement.org/)

Yes.

12.5 What organizations will need to approve the final report? (Include any funders or sponsors).

RPD.

12.6 Do all organizations involved agree that a final report shall be published after a maximum review period of six months from the principal investigator's certification of the report as final?

Yes.

12.7 Does principal investigator agree to post any changes in agreements affecting items 12.1 to 12.6 above?

Yes.

12.8 Does principal investigator agree to file a final report within two years of cessation of experimental operations, no matter what happened to the experiment? (e.g., "random assignment broke down after 3 weeks and the experiment was cancelled" or "only 15 cases were referred in the first 12 months and experiment was suspended").

Yes.

Appendix A

Random Assignment Sequence

 $(n_{officers} = 54, N_{teams} = 6, N_{shifts} per week = 19, N_{shifts as per year 2012} = 988)$

<u>RA</u>: 19 SHIFTS RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=988)

RIALTO POLICE DEPARTMENT PATROL PATTERNS

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
DAY SHIFT	TEAM 2	TEAM 1	TEAM 1	TEAM 1	TEAM 3	TEAM 2	TEAM 2
NIGHT SHIFT	TEAM 5	TEAM 5	TEAM 5	TEAM 4	TEAM 4	TEAM 4	TEAM 3
COVER		TEAM 6	TEAM 6	TEAM 6	TEAM 6	TEAM 3	

162 OFFICER SHIFTS PER WEEK RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=8424)

RIALTO POLICE DEPARTMENT PATROL PATTERNS:

TEAMS	N OFFICERS PER TEAM	DAYS	TIME	OFFICER SHIFTS PER WEEK	OFFICERS SHIFTS IN 12 MONTHS (-52 weeks)
					(¬52 weeks)
Team 1 (days)	10	Tues/Wed/Thurs	0600-1830	3 days x 10 officers = 30	1,560
Team 2 (days)	9	Sat/Sun/Mon	0600-1830	3 days x 9 officers = 27	1,404
Team 4 (nights)	10	Thurs/Fri/Sat	1800-0630	3 days x 10 officers = 30	1,560
Team 5 (nights)	9	Mon/Tues/Wed	1800-0630	3 days x 9 officers = 27	1,404
Team 6 (night cover)*	7	Tues/Wed/Thurs/Fri	1400-0000	4 days x 7 officers = 21	1,092
		Fri	0600-1800	1 day x 9 officers = 9	468
Team 3 (day cover)	9	Sat	1400-0230	1 day x 9 officers = 9	468
		Sunday	1800-0630	1 day x 9 officers = 9	468
TOTAL	54			162	8,424

^{*} Team 6 will be as 4 for approximately 3 months, until new officers join this team.

2,038 OFFICER SHIFT HOURS PER WEEK RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=52,998)

RIALTO POLICE DEPARTMENT PATROL PATTERNS:

	N				OFFICERS SHIFT
TEAMS	OFFICERS	DAYS	TIME	OFFICER SHIFT HOURS PER WEEK	HOURS IN 12
	PER TEAM				MONTHS (¬52 weeks)
Team 1 (days)	10	Tues/Wed/Thurs	0600-1830	12.5 hours x 3 days x 10 officers = 375.0	19,500
Team 2 (days)	9	Sat/Sun/Mon	0600-1830	12.5 hours x 3 days x 9 officers = 337.5	17,550
Team 4 (nights)	10	Thurs/Fri/Sat	1800-0630	12.5 hours x 3 days x 10 officers = 375.0	19,500
Team 5 (nights)	9	Mon/Tues/Wed	1800-0630	12.5 hours x 3 days x 9 officers = 337.5	17,550
Team 6 (night cover)*	7	Tues/Wed/Thurs/Fri	1400-0000	10.0 hours x 4 days x 7 officers = 280.0	14,560
		Fri	0600-1800	12.0 hours x 1 day x 9 officers = 108.0	5616
Team 3 (day cover)	9	Sat	1400-0230	12.5 hours x 1 day x 9 officers = 112.5	5850
		Sunday	1800-0630	12.5 hours x 1 day x 9 officers = 112.5	5850
TOTAL	54			2,038	105,996

^{*} Team 6 will be as 4 for approximately 3 months, until new officers join this team.

MONTHLY SHIFT PATTERNS:

DAY

T-W-T

TEAM 1	Jan 2012			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	T	W	T	F	S	S	M	Т	w	Т	F	S
Sergeant	Position 1			X	X				X	X	X	X				X	X	X	X				X	X	X	X				X	X
Corporal	Position 1			X	X				X	X	X	X				X	X	X	X				X	X	X	X				X	X
Officer	Position 1			X	X				X	X	X	X				X	X	X	X				X	X	X	X				X	X
Officer	Position 2			Х	X				X	Х	X	X				X	X	Х	X				X	Х	X	X				Х	Х
Officer	Position 3			Х	X				X	X	X	X				X	X	X	X				X	Х	X	X				Х	X
Officer	Position 4			Х	X				X	X	X	X				X	X	X	Х				X	Х	X	Х				Х	X
Officer	Position 5			X	X				X	X	X	X				X	X	X	X				X	Х	X	X				X	X
Officer	Position 6			Х	X				X	X	X	X				X	X	X	X				X	Х	X	X				Х	Х
Officer	Position 7			X	X				X	X	X	X				X	X	X	х				X	Х	X	X				X	X
Officer	Position 8																														
	OFFICERS					10	10	10					10	10	10					10	10	10					10	10	10		

DAY S-S-M

TEAM 2	Jan 2012			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	T	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S
Sergeant	Position 1					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Corporal	Position 1					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Officer	Position 1					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Officer	Position 2					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Officer	Position 3					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	Х	
Officer	Position 4					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Officer	Position 5					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
Officer	Position 6					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	Х	
Officer	Position 7					X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X	
	OFFICERS			9	9					9	9	9					9	9	9					9	9	9					9

COVER

F-S-S

0600-1800 1400-0230 1800-0630

Team 3	Jan 2012			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S
Sergeant	Position 1				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Corporal	Position 1				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 1				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 2				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 3				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 4				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 5				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 6				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
Officer	Position 7				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X		
				9					9	9	9					9	9	9					9	9	9					9	9

NIGHT

T-F-S

Team 4	Jan 2012			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	T	F	S	S	M	T	W	Т	F	S
Sergeant	Position 1			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Corporal	Position 1			X	X	X	X				X	X	X	X				X	X	X	t				X	X	X	X			
Corporal	Position 2			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 1			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 2			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 3			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 4			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 5			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 6			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 7			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
Officer	Position 8			X	X	X	X				X	X	X	X				X	X	X	X				X	X	X	X			
	OFFICERS							10	10	10					10	10	10					10	10	10					10	10	11

NIGHT

M-T-W

Team 5	Jan 20121			17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	T	F	S	S	M	Т	W	T	F	S
Sergeant	Position 1			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 1			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 2			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 3			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 4			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 5			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 6			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
Officer	Position 7			X				X	X	X	X				X	X	X	X				X	X	X	X				X	X	X
					9	9	9					9	9	9		·			9	9	9					9	9	9	·		

SWING (Team 6)

T-W-T-F

TEAM 6	Jan 2011			17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13
CALL#	NAME	RI#	HT#	S	M	Т	W	Т	F	S	S	M	Т	W	Т	F	S	S	M	Т	W	T	F	S	S	М	Т	W	Т	F	S
Sergeant	Position 1			X	X					X	X	X					X	X	X					X	X	X					X
Corporal	Position 2			X	X					X	X	X					X	X	X					X	X	X					X
Officer	Position 1			X	X					X	X	X					X	X	X					X	X	X					X
Officer	Position 2			X	X					X	X	X					X	X	X					X	X	X					X
Officer	Position 3			X	X					X	X	X					X	X	X					X	X	X					X
Officer	Position 4			X	X					X	X	X					X	X	X					X	X	X					X
Officer	Position 5			X	X					X	X	X					X	X	X					X	X	X					X
						7	7	7	7				7	7	7	7				7	7	7	7				7	7	7	7	

^{*} Team 6 will be as 4 for approximately 3 months, until new officers join this team.

Appendix B

Power Calculations

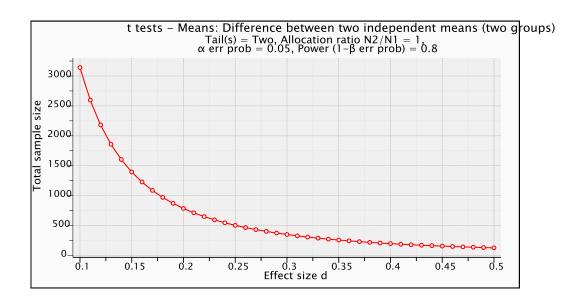
Base rate:

Total complaints in 2009 = 36

Total complaints in 2010 = 51

Total use of force in 2009 = 70

Total use of force in 2010 = 65



Appendix C

Customised Tankebe Questionnaire on Officers' legitimacy (TBA)

University of Cambridge Institute of Criminology





Police Personal Video Cameras - Survey

My name is Tony Farrar and I am the Police Chief for the City of Rialto Police Department in the state of California. I am also a graduate student at the Institute of Criminology, Cambridge.

For my graduate degree, I am investigating whether the police should use personal video cameras more often during patrols. Video and audio documentation has become an integral and valued tool in law enforcement for those agencies that have adopted patrol car mounted cameras. A recent study conducted by the International Association of Chiefs of Police (IACP) points out that video documentation not only provides solid evidence documentation, but also significantly improved the officer's ability to respond to complaints. Wearable video technology is the next logical step.

Every police officer who has encountered a tense or uncertain situation can describe the effects of stress on perception. When the officer encounters a violent subject, perception can become even more focused. Personal video cameras will assist with incident reconstruction, report writing, aid in the prosecution of offenders by capturing an objective recording of the offender's actions. Additionally, the same study found that fifty-one percent of the general population said they would change their behavior if they know they are being video recorded.

I need your input on this topic. Your help can potentially shape police policy on wearable video technology in Rialto and nationwide. I kindly ask you to fill out the survey attached to this letter. It contains three sections; (1) your view on authority, (2) your view on public trust and the perception of the public, and (3) your feelings about wearing a personal video camera. Please answer the questions to the best of your ability

I am more than happy to discuss this further and address any questions you may have. My email address is tw372@cam.ac.uk and my phone is 909-421-7121.

THE SURVEY IS ANONYMOUS AND CANNOT BE TRACED BACK TO YOU. HOWEVER, FOR RESEARCH PURPOSES ONLY, IT CONTAINS A RANDOM NUMBER

ON THE TOP OF THE FIRST PAGE. PLEASE WRITE DOWN THIS NUMBER FOR FUTURE REFERENCE. DO NOT SHARE THIS NUMBER WITH ANYONE.

4C01

SECTION ONE: On a scale from **1** to 5 with 1 = "strongly disagree", 2 = "disagree", 3 = neither agree nor disagree", 4 = "agree", and 5 = "strongly agree", please indicate how much each of the following statements reflects your own views about your authority, and about your relationship with colleague officers **circling ONE number** under each statement.

1.	As a police officer, I feel	that I represe	ent the interests of the	people in the comr	nunity	in which I work.
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
2.	It is morally right for m	e as an offic	er to have special at	uthority over my fe	ellow o	citizens (e.g. to stop,
	search or make arrests).					
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
3.	I sometimes worry that I	am not really	up to the job of bein	g a police officer.		
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
4.	Putting on my police unif	form/badge m	nakes me feel that I ha	ave a special kind o	f autho	ority.
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
5.	I am confident that I have	e enough auth	ority to do my job w	ell.		
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
6.	I believe it is right for me	e to give direc	etives to members of	the public and to ex	pect th	em to obey them.
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
7.	The law governing my w	ork is consist	ent with the values ar	nd beliefs of the con	nmuni	ty in which I work.
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
8.	If I were to speak with a	members of t	he community in wh	nich I work, I woul	d find	that their values are
	consistent with what my	authority stan	ds for.			
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					

9.	I believe the authority I h	ave is based o	n the lawfulness of	my decisions and a	ctions.	
	Strongly Disagree 1	2	3	4	5	Strongly Agree
10.	I believe I can justify the	laws I have	to enforce in terms	of the values of m	ost of	the people I have
	police.					
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
11.	I sometimes have doubts a	about whether	the laws I have to e	nforce are proper.		
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
12.	I feel supported in my wo	rk by my colle	eague officers.			
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
13.	I feel a sense of loyalty to	my colleague	s in my station.			
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
14.	I trust my colleagues in m	y station.				
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
15.	I feel my colleagues in my	y station respe	ct me.			
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
16.	There is a good communication	cation among	my colleagues.			
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
17.	My colleagues in this state	ion trust me.				
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					
18.	Most officers in my statio	n get along ve	ry well with each ot	ther.		
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					2
19.	One can never be too care	eful with one's	colleagues in this o	rganisation.		
	Strongly Disagree	2	3	4	5	Strongly Agree
	1					

to

SECTION TWO: On a scale from 1 to 5 with 1 = "strongly disagree", 2 = "disagree", 3 = neither agree nor disagree", 4 = "agree", and 5 = "strongly agree", please indicate how much each of the following statements reflects your own views about decision-making in your organization by circling ONE number under each statement 1. The decisions of my senior officers are consistent across every officer in my station. Strongly Disagree 5 Strongly Agree 1 2. I feel that my senior officers treat me with respect and dignity. 2 Strongly Disagree 4 5 Strongly Agree 1 3. My senior officers usually give me an honest explanation for the decisions they make that affect me. 2 Strongly Disagree 5 Strongly Agree 1 4. My senior officers take account of my needs when they are making decisions that affect me. 3 Strongly Disagree 2 5 Strongly Agree 1 5. I am treated fairly in my police station. Strongly Disagree 2 3 5 Strongly Agree 6. The decisions of my senior officers are equally fair to everyone. Strongly Disagree 5 Strongly Agree 1 7. Decisions by my senior officers are based on facts, not personal biases or opinions. 2 3 Strongly Disagree 5 Strongly Agree 8. Overall, I receive excellent pay. Strongly Disagree 2 3 5 Strongly Agree 1 9. I am satisfied with my present pay. 2 3 5 Strongly Agree Strongly Disagree 10. I am well paid considering the hours I work. 2 Strongly Disagree 3 4 5 Strongly Agree 1 11. Considering how much I work, I am satisfied with my pay. Strongly Disagree 3 5 Strongly Agree 1

12. Overall, I receive excellent allowance and benefits.

	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
13.	I am satisfied with my pe	ersonal financi	al situation.				
	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
14.	My senior officers take ac	ecount of my n	eeds when they are	making a decision	۱.		
	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
15.	I feel that the way my sen	nior officers as	ssign duties for the	week is fair to all o	officers.		
	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
16.	I feel that my workload is	far more than	other officers with	in my rank.			
	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
17.	There is high level of inte	grity among n	nost RPD officers.				
	Strongly Disagree	2	3	4	5	Stro	ngly Agree
	1						
18.	I feel that the way evaluat	tions are done	in this organization	is fair to all office	rs.		
	Strongly Disagree	2	3	4		5	Strongly
	1						Agree
19.	I am treated politely by m	y senior office	ers.				
	Strongly Disagree	2	3	4		5	Strongly
	1						Agree
							Ü
20.	The way things are done i	in my station r	espects my rights.				
	Strongly Disagree	2	3	4		5	Strongly
	1						Agree
21.	I feel that the promotion of	of officers is ba	ased on procedures	that are fair to all o	officers.		
	Strongly Disagree	2	3	4		5	Strongly
	1						Agree

SECTION THREE: On a scale from 1 to 5 with 1 = "strongly disagree", 2 = "disagree", 3 = neither agree nor disagree", 4 = "agree", and 5 = "strongly agree", please indicate how much each of the following statements reflects your own views about RPD. Please, **circling ONE number** under each statement.

1.	I feel a strong sense of "belonging" to RPD.									
	Strongly Disagree 1	2	3	4	5	Strongly Agree				
2.	I feel proud to tell people	I am a police	officer with RPD.							
	Strongly Disagree 1	2	3	4	5	Strongly Agree				
3.	Even if it were to my adva	Even if it were to my advantage, I do not feel it would be right to leave RPD.								
	Strongly Disagree 1	2	3	4	5	Strongly Agree				
4.	I feel that RPD deserves my loyalty.									
	Strongly Disagree 1	2	3	4	5	Strongly Agree				
5.	I feel very little loyalty to the RPD.									
	Strongly Disagree 1	2	3	4	5 Agree	Strongly				
6.	I have a sense of obligation	on to RPD.								
	Strongly Disagree 1	2	3	4	5 Agree	Strongly				
7.	I find that my values and	values of RPD	are very similar.							
	Strongly Disagree 1	2	3	4	5 Agree	Strongly				
8.	Overall, I feel I am satisfied with my job.									
	Strongly Disagree I	2	3	4	5 Agree	Strongly				
9.	For me, RPD is the best o	f all possible e	employers.							
	Strongly Disagree	2	3	4	5	Strongly Agree				

	,	

10.	RPD inspires the best in r	ne in the way o	of job performance.		
	Strongly Disagree	2	3	4	5 Strongly Agree
	1				
11.	Most days, I feel enthusia	stic about my j	ob.		
	Strongly Disagree	2	3	4	5 Strongly Agree
	1				
12.	I find real enjoyment in n	ny job.			
	Strongly Disagree	2	3	4	5 Strongly Agree
	1				

SECTION FOUR: On a scale from **1** to 5 with 1 = "strongly disagree", 2 = "disagree", 3 = neither agree nor disagree", 4 = "agree", and 5 = "strongly agree", please indicate how much each of the following statements reflects your own views about **RPD**. Please, **circling ONE number** under each statement.

STATEMENT	FOR EACH STATEMENT BELOW, MARK AN "X" IN THE CORRESPONDING NUMBER FOR THE RESPONSE THAT BEST DESCRIBES HOW YOU FEEL				
	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. I would feel comfortable wearing a personal video camera.					
2. Wearing a personal video camera would improve my behavior.					
3. Wearing a personal video camera would improve the behavior of those I contact in the field.					
4. Wearing personal video cameras would reduce violence.					
5 Wearing personal video cameras would reduce the number of use of force incidents I would be involved in.					
6. Wearing personal video cameras					

would reduce the number of officer complaints I would receive.					
7. I always utilize a personal audio recording device in the field.					
there anything else you think is important eras?	for me to ki	now about th	ne potential u	se of wearab	ole

SECTION FIVE: ABOUT YOU

The information requested below would be used to analyze and understand how different demographic groupings view the various issues to which you have already responded.

1.	Please, indicate your gender		
	Female Male		
2.	How old are you?		
	18 – 22 23 – 27 28 – 32	33	3 – 37 38 – 42
	43 – 47 48+		
3.	What is your current rank?		
4.	What is your total length of service as a police	offic	cer?
	Less than 2 years Between 2 – 5 year		Between 6 – 10 y
	Between 11 – 15 years Between 16 – 20 years	ea_	Between 21 − 25 ye
	Between 26 – 30 years 31 or more ye	ars	
5.	Highest level of education?	•••••	
6.	How would you describe your ethnic origin?		
a.	White – American	j.	Asian or Asian American – Bangladeshi
b.	White – Irish	k.	Asian or Asian American – Other Asian
c.	White - Other White Background		Background
d.	Mixed – White and Black Caribbean	1.	Black or Black American – Caribbean
e.	Mixed – White and Black African	m.	Black or Black American – African
f.	Mixed – White and Asian	n.	Black or Black American – Other Black
f. g.	Mixed – White and Asian Mixed – Any Other Mixed Background	n.	Black or Black American – Other Black Background

i. Asian or Asian American – Pakistani

p. Other

Appendix D

Treatment Apparatus: Wearable Cameras

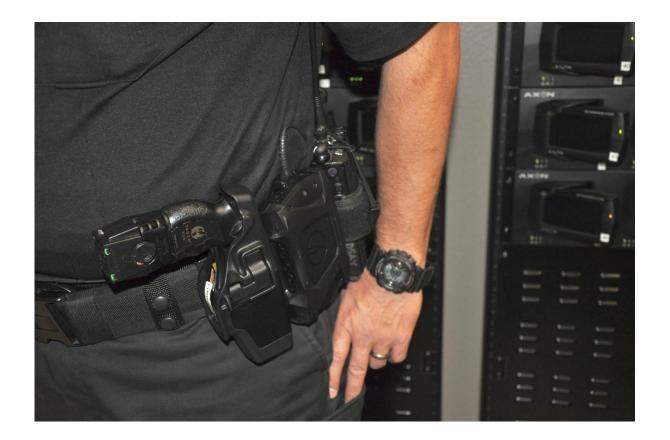
Below please find a few pictures of the treatment apparatus: wearable camera system, charging units, and an officer wearing the gear.

- 1. The wearable camera is touch-screen and full color. The unit has fast forward, rewind, etc.
- 2. Each officer must enter their code to activate the unit.
- 3. At the end of the officer's shift they only need to place the unit into the charging bank. The system will automatically download the video into the officers file folder and also begin the recharging process.
- 4. The units are also automatically locked into the charging bank until the officer re-enters their code.
- 5. The unit battery life is 12.5 hours
- 6. Data downloadable every day.

Pic 1: an officer standing by the charging units. These charging units are in the police department briefing room.



Pic 2: the main video unit on the officers duty belt. The unit has a touch screen and is in full colour.



Pic 3: Officer wearing the collar mount - camera. Most of the officers prefer this to the one that goes over the ear (head). There are three options with this camera; collar mount, ear (head) mount, and hat mount (baseball cap).



Pic 4: This is a picture of the three main pieces of the system; main video/battery box, push to operate assembly, and the camera itself.



Pic. 5: Another picture of the charging banks. Each bank holds 24 units. There are separate charging units for the sergeants in their office.



 $\begin{tabular}{ll} Pic 6: The equipment guy (corporal in the training unit) assembling the charging banks. The Banks are bolted to the floor, for security measures. \\ \end{tabular}$



Pic 7: A close-up of the main unit on the officers duty belt.

