

# THE APPLICATION OF REALIST EVALUATION TO A CAPITAL CITY CCTV SYSTEM

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# ACKNOWLEDGEMENTS

## ◎ CCTV Evaluation

- South Australia Police
- Adelaide City Council
- Australian Institute of Criminology – DUMA Programme

VIDEO SURVEILLANCE



WHAT DID THEY  
WANT TO KNOW?

*“Do CCTV cameras  
work?”*

# PROJECT FUNDING OBJECTIVES

1. Reduce the incidence of crime and antisocial behaviour through the installation of a CCTV system
2. Increase the perception of the area as a safe place and reduce the fear of crime amongst the community
3. Enhance the availability and quality of evidence available to Police to identify offences as they occur, and to identify the perpetrators of offences that are committed in the locations monitored by the CCTV.

# THE USE OF CRIME STATISTICS IN EVALUATION

## ⊙ Issues of measurement

- Unreported

## ⊙ Issues of causality

- What other factors might explain any shift in recorded crime statistics?
  - Prolific offender sentenced to jail time
  - Extra police patrols in the area
  - Increased use of Crimestoppers number by community members

# Programme Logic for CCTV System in the East End of Adelaide

Public feel safer

Improved behaviour on street

Reduced crime in the target area

Medium term outcomes - Change in risk, reward, effort decision making process for offenders.

**Mechanisms** activate short term outcomes:

- **Deterrence** – CCTV provides a visible deterrence (CCTV, signs, and promotion) – changes risk perception for potential offenders – more likely to be caught.
- **Detection** –Verification of incidents – better application of police resources. Identification and detection of current offenders is high.
- **Response** – police given real time information. Facilitates the effective deployment of police to locations where suspicious behaviour is occurring. Better situational awareness for officers.
- **Investigative** –post incident review of recorded CCTV vision – identification prosecution is high – changed risk perception for offender.
- **Reassurance** – community perception of safety is high – changed confidence of users/increase legitimate users

**Outputs:** Incident logs; real time info; calls for video evidence; CCTV signs

**Processes/Activities:** CCTV system implemented

Acquire, install equipment (x CCTV, Y monitors)

Train staff

Inform/marketing/signage

Partners/relationships/management/strategic

Use/record/monitor

CCTV identified as one option to make high risk area safer - technology; staff; training; information

Local committee with appropriate mandate and range of stakeholders exists/established. Develop **Strategy**

**Context** – Needs (high risk Location); Resources; Laws/Mandates; stakeholders Buy-In

Other complementary local crime prevention initiatives are established. E.g., lighting, emergency phones, managed taxi rank, CPTED Safety Audits and Upgrades

# REALIST EVALUATION - PRINCIPLES

- ⦿ Social programs are an attempt to address an existing social problem – that is, to create some level of **social change**.
- ⦿ Programs ‘work’ by enabling participants to **different choices make**
- ⦿ Making and sustaining different choices requires a change in **participant’s reasoning** (eg, values, beliefs, attitudes, or the logic they apply to a particular situation) and/or the **resources** (eg, information, skills, material resources, support) they have available to them.
- ⦿ This combination of ‘reasoning and resources’ is what enables the program to ‘work’ and is known as a program **‘mechanism’**.

## REALIST EVALUATION, CONT.

- ⦿ Programs 'work' in different ways for different people
- ⦿ The **contexts** in which programs operate make a difference to the **outcomes** they achieve.
- ⦿ Some factors in the context may enable particular mechanisms to be triggered. Other aspects of the context may prevent particular mechanisms from being triggered. That is, there is always an interaction between context and mechanism, and that interaction is what creates the program's impacts or outcomes:
- ⦿ ***Context + Mechanism = Outcome.***



# REALIST EVALUATION, CONT.

- ⦿ Because programs work differently in different contexts and through different change mechanisms, programs cannot simply be replicated from one context to another and automatically achieve the same outcomes. Good understandings about ‘what works for whom, in what contexts, and how’ are, however, portable.
- ⦿ Therefore, one of the tasks of evaluation is to learn more about ‘**what works for whom**’, ‘**in which contexts particular programs do and don’t work**’, and ‘**what mechanisms are triggered by what programs in what contexts**’.

Source: A brief introduction to Realist Evaluation -

Dr Gill Westhorp from Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*

## Application of Realist Evaluation Principles

CCTV

# EVALUATION PROCESS

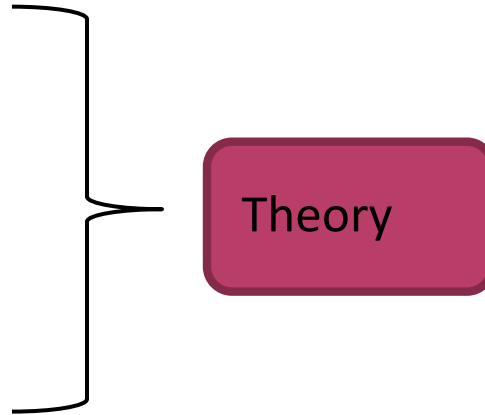
1. Desk based review of documentation
2. Participant observation, interviews and surveys with project staff
3. Public perception survey
4. Control room observation and study
5. Data sets

# HOW MIGHT CCTV WORK?

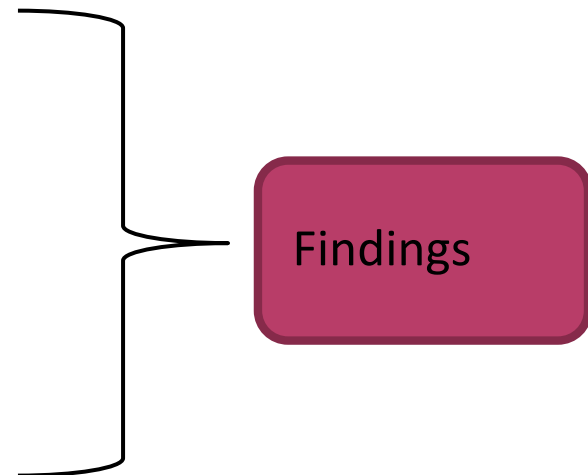
1. Deterrence Mechanism  
*CCTV makes potential offenders **think twice** about committing crime in the area*
2. Detection Mechanism  
*CCTV **identifies crime in the act** and assists police to catch the present offenders*
3. Response Mechanism  
*CCTV ensures an **efficient response** by police and emergency services to where an incident is occurring*
4. Investigative Mechanism  
*CCTV assists in the **identification** and **prosecution** of offenders **after** the incident*
5. Reassurance Mechanism  
*Knowledge of CCTV covering areas of the City **improves confidence of users** in those areas*

# FOR EACH OF THE 5 WAYS THE CCTV SYSTEM MIGHT WORK.....

- ◉ Context
- ◉ Mechanism
- ◉ Outcome



- ◉ How did people think the theory worked?
- ◉ What happened in practice?
- ◉ What could be improved?



# THE DETERRENCE MECHANISM

- Context

*offenders who are able to, and do, rationally weigh up costs and benefits of committing crime, and include CCTV in that risk assessment*

- Mechanism

*resource = visible CCTV cameras; reasoning = think twice and decide risk is too great*

- Outcome

*offender is displaced to another time or place; or doesn't commit crime at all*

- How did people think the theory worked?

*64% agreed that this mechanism would be fired. Lowest rated mechanism*

- What happened in practice?

*30% were aware of cameras. So, if people don't know the cameras are there, then they won't form part of the crime C/B analysis*

- What could be improved?

*Marketing of CCTV cameras (visibly located, signs, media coverage)*

# THE DETECTION MECHANISM

- ◉ **Context**  
*suspicious incidents are currently NOT being seen by police patrols*
- ◉ **Mechanism**  
*by observing the CCTV, the camera operators can contact the police who can then be effectively deployed to areas of incidents and guided by the CCTV operators to offenders, victims and potential witnesses.*
- ◉ **Outcome**  
*offender is displaced to another time or place; or doesn't commit crime at all*
- ◉ **How did people think the theory worked?**  
*77% respondents agreed that this was how the CCTV system would operate*
- ◉ **What happened in practice?**  
*Only 6% of CCTV incidents logged by camera operators were initiated by the operators themselves. 74% of incidents involved CCTV assisting police – where police already knew*
- ◉ **What could be improved?**  
*Improved training for CCTV operators about how to look for and record vision to assist in locating real time incidents, tracking movement of offenders, and noting identifying features of potential witnesses.  
Introduction of intelligence led auto equipment*

# THE RESPONSE MECHANISM

## ◎ Context

*incidents are not being seen by emergency services and general public slow to respond.*

## ◎ Mechanism

*by observing CCTV, the operators can effectively assist the police and emergency services to be deployed to areas where incidents are occurring, or where attention is required. TIMELINESS is the key.*

## ◎ Outcome

*police and emergency services can assist as required in a timely manner*

## ◎ How did people think the theory worked?

*76% respondents agreed that this is how the CCTV system would operate*

## ◎ What happened in practice?

*Only 6% of recorded incidents were initiated by the CCTV operators themselves. 94% were police initiated; called in by public, other emergency services or security*

## ◎ What could be improved?

*Improved training for CCTV operators about how to locate potential incidents*



# THE INVESTIGATIVE MECHANISM

- ◉ **Context**

*prosecution of offenders is rarely sought because of a lack of clear evidence*

- ◉ **Mechanism**

*resource = clear vision of offences; reasoning = legal system more confident about prosecuting....high success rate in prosecution deters offenders*

- ◉ **Outcome**

*CCTV evidence allows more successful convictions and, therefore, reduces the number of active offenders and acts as a deterrent to others*

- ◉ **How did people think the theory worked?**

*98% of respondents agreed that this is how the CCTV system would operate*

- ◉ **What happened in practice?**

*90% of police who had used CCTV vision found it useful. Only 6% said the vision had secured a successful prosecution; further 6% pending; 17% said vision helped identify offenders. 26% clearer understanding of incident under investigation; 23% vision helped corroborate evidence. 89% said vision was only 'slightly clear' or worse – severe impact on ability to do facial recognition*

- ◉ **What could be improved?**

*CCTV burnt vision quality (enhanced frames per second); operator training in detection and evidence gathering techniques*

# THE REASSURANCE MECHANISM

## ◉ Context

*People need to have felt concern about their safety and confidence levels before the cameras were installed*

## ◉ Mechanism

*resource = visible CCTV cameras; reasoning = boosts confidence of users of space which increases numbers of users*

## ◉ Outcome

*CCTV increase numbers of people using city – improves natural surveillance – deters potential offenders*

## ◉ How did people think the theory worked?

*71% respondents said the cameras would improve their confidence and use of city*

## ◉ What happened in practice?

*Only 30% of respondents were aware there were cameras; so for many the reassurance mechanism wasn't fired*

## ◉ What could be improved?

*Improved marketing and signage of CCTV; higher profile of CCTV/prosecution cases*

# ACTIVATION OF MECHANISMS

Ranked	Mechanism in Theory	Mechanism actually fired?
1	Investigative mechanism	To an extent
2	Response mechanism	To a small extent
3	Detection mechanism	To a small extent
4	Reassurance mechanism	To a reasonable extent
5	Deterrence mechanism	Low*

*\* Only 17.4% of police detainees said that the CCTV cameras had an impact on their decision to commit crime in the area (i.e. they decided not to do it.)*

# COMPARISON

## ○ General Public

- 30% aware of CCTV cameras
- 64% thought offenders would change crime plans due to cameras
- 77% thought offenders would be caught via CCTV/police

## ○ Police Detainees

- 87% aware of CCTV cameras
- 17% decided to change crime plans due to cameras
- 75% thought offenders would be caught via CCTV/police

*Police detainees more aware of risks but take them anyway?*

# DID A REALIST APPROACH PROVIDE ANY DIFFERENT ANSWERS?

- ⦿ It led to different lines of investigative enquiry
- ⦿ It worked to get inside the 'black box'
- ⦿ It provided tangible results for the stakeholders
- ⦿ It demonstrated **how** the CCTV system worked to affect change
- ⦿ It offered useful measurement variables for future data collection and evaluation
- ⦿ It produced lessons that could more appropriately be used in the formulation and refinement of CCTV policy and practice