



Dark logic: theorising the harmful consequences of public health interventions

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**Dedicated to the memory of Farah Jamal
1986-2016**



Aims

- Why harms important to research
- Example of a harmful intervention that prompted our interest
- A review of evaluation protocols
- Suggested approaches for developing dark logic models of potential harms

Why harms are important to research

Evaluating harms

- First do no harm is a key ethical imperative > doing good
- Popper (1945), Merton (1936) - unintended consequences of social policies and programmes must be assessed

Social interventions can harm

- Assessing harms of social interventions neglected in most areas
- Partly because viewed as harmless compared to clinical interventions
- But long tradition of findings of harm for some interventions e.g. Cambridge Somerville programme (Dishion et al 1999)

Types of harms

- **Paradoxical effects** on intended outcomes – e.g. increasing not decreasing TPs
- **Harmful externalities** on other outcomes e.g. Cambridge Somerville
- Latter often not anticipated so not measured
- Former detected but underlying mechanisms not assessed
- Understanding mechanisms could inform refinements

Example of a harmful intervention that prompted our interest

Young People's Development Programme

- Sustained and intensive after school youth work for adolescents age 13-15 identified as at risk by teachers, social workers to reduce pregnancies, substance use, exclusions
- Multi-component informed by Positive Youth Development and US studies
- Additional education, arts and sports, mentoring, sexual health promotion etc.

Evaluation YPPD

- Quasi experimental (Wiggins et al 2009)
- 27 intervention and 27 matched comparison youth work sites
- N=1637 YPDP participants, 1087 matched controls
- 18 month follow up

Findings

Young women

Pregnancy

- 16% intervention vs 6% comparison aOR=3.55 (95% CI 1.32 to 9.50)

Early heterosexual experience

- 58% v 33%; aOR=2.53 (95% CI 1.09 to 5.92)

Why?

- Labelling → stigma → disengagement from school → risk behaviours

(FitzGibbon & Defty 2000)

- Aggregation of at risk young people → amplified pro-risk norms

(Imrie et al 2001)

- Didn't measure possible mediators, only hints in qualitative research: crude central targets led to distortion

Review of evaluation protocols

- We didn't pay enough attention to harms
- What about more recent evaluations?

Review of NIHR PHR protocols

2013, 29 RCTs, 12 quasi-experimental

- 14 did not mention harm at all
- 17 mentioned harm but aimed to examine this only in terms of paradoxical effects on main outcomes
- 12 studies aimed to examine other harms
 - 10 using additional quantitative measures
 - 6 using qualitative research
- 1 study aimed to examine the mechanisms underlying harms, using qualitative research.

Suggested approaches for developing dark logic models of potential harms

“Dark Logic” models

- We have logic models of intended benefits
- What about dark logic models to focus our minds on potential harms?
- Consider different approaches to theorising
- Example of new intervention – “Learning Together”
- Consider how theories might be tested with RCT data

Learning Together

- Whole-school intervention to reduce bullying and aggression in UK secondary schools
- Restorative practice, social/emotional skills, student/staff collaboration
- RCT in 40 schools with nested process / economic evaluation

Approach #1

- How might practitioner/ participant agency interact with structure to produce unintended effects (Giddens 1982)
- Learning Together is 'hijacked' to focus on attainment leading to neglect of other issues
- Look for worse RCT outcomes in schools which we identify as doing this

Approach #2

- Consider harmful effects of similar interventions
- Learning Together aggregates at risk youth leading to 'peer deviancy training'
- Look for worse RCT outcomes moderated by involvement in RP and/or mediated by indicators of negative peer influence

Approach #3

- Ask informed stakeholders about their concerns
- Learning Together sends out wrong message re. seriousness of bullying
- Look for increases in bullying mediated by changes in attitude

Implications

- Use when developing interventions to avoid harms
- RCTs used to refine and test theories of harm
- Problems with power, multiple significance testing – solutions are pooling/synthesis and pre-hypothesisation
- Prediction imperfect: still use qualitative work to spot unanticipated harms

- Danke für Ihre
Aufmerksamkeit!
- Thank you for your attention!