Understanding Negative Impacts of Early Years Early Intervention Programs: Realist Methodologies

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Community Matters

Aims

- The research question
- The realist evaluation question
- The methodological question
- Two realist methods:
  - Realist qualitative analysis
  - Realist synthesis
- The hypotheses
- Messages: what messages for whom?

Early Head Start

- USA: low income families with 0-3 year olds.
- Home visiting, centre based, mixed
- Impact Eval'n: 17 sites, 3001 families, random assignment
- Overall: positive impacts for children, parents and home environments, across approaches
- 5 risk factors: single parent; teenage parent; not in EET; receiving public assistance; lacking high school diploma
- *"The programs had only a few significant impacts on families with fewer than three demographic risks, and the impacts on families with more than three risks were unfavourable."*
- Unfavourable impacts include worse cognitive and social-emotional development for the child by age 3 for those in treatment group, *compared to equivalent children in the control group*

Programs 'not effective' / some negative impacts for:	
Program / Ref	**Family / Maternal Characteristics**
Boston Program by Ayoub et al; cited in Browne, 1995	depression, withdrawal, low self-esteem, limited parenting skills, unrealistic expectations of children. …[with] family violence or chemical dependency 'can lead to a deterioration'
Infant Health Development Program; cited in Brooks-Gunn et al, 2000	Poor families, high no. of risk factors (low maternal education, unemployed head of household, single marital status, teenage mother, high levels of depressive symptoms, low social support)
Hawaii Healthy Start; cited in Knitzer, 2000	Mothers who have experienced much grief, trauma, depression and abuse
Keys to Caregiving Program; cited in Knitzer, 2000	Women with few friends, little support and many problems
Farran, 2000	Families in poverty experiencing significant personal stress
Nurse Home Visiting Program, Eckenrode et al, 2000	Reducing child abuse in families with significant levels of domestic violence
Healthy Families Alaska, Duggan et al, 2009	Mothers who are depressed and have avoidant attachment styles

The research question

- Why do some early years programs which 'work' for the relatively disadvantaged 'not work' – and/or make things worse – for the most disadvantaged?
  - How do early years programs generate negative impacts for child development outcomes for some children?
  - Why are these outcomes concentrated amongst the most disadvantaged?

The Realist Evaluation Question

- *"What works, for whom, in what contexts, and how?"*
- Context, Mechanism, Outcome Configurations (CMOC)
- Quantitative, qualitative, mixed methods
- 'Realist synthesis'

Realistic Evaluation
Ray Pawson and Nick Tilley
Sage Publications, 1997

The methodological question

- Can realist synthesis be used with small-scale empirical evaluation to:
  - develop and/or refine program theory
  - investigate research questions
  - relate empirical findings to theory & research
  - enable small scale evaluation to contribute to cumulative knowledge?

Reflections Program

- Noarlunga, South Australia
- Attachment theory base
- Mother-child dyads, children 1-4 years
- Multi-disciplinary staff team
- 14-16 week program, 1 day/week
- Therapeutic group program for mothers (am) and activities (pm)
- On-site child care (informed by attachment theory)

Realist Qualitative Analysis

- Individual interviews with parents (N=11, +1)
- Focus groups with service providers
- Tape and transcribe interview/focus group
- Print, read and memo in margins –
  - outcomes, features of context, reasoning, resources, program strategies, themes
- Synthesis: matrices
  - Patterns / groups of outcomes (by respondent)
  - Mechanisms ⇔outcomes
  - Contexts ⇔ mechanisms
- Relationship to program theory
- Relationship to substantive theory

Reflections Analysis

Mechanism					Outcome Domains				
Group	1	2	3	4	Group	1	2	3	4
Cognitive learning (content)	✓	✓	✓	?	Parent as person	✓	✓	?	x
Therapeutic engagement	✓	✓	?	x	Parenting Behaviours	✓	✓	?	x
Peer support	✓	✓	✓	x	Child	✓		?	x
Perception of self	✓	✓	x	x	Parent-Child Relationship	✓		?	x
Perception of child	✓	?	?	x					
Perception of role as a parent	✓	✓	?	x					
Perception of others' judgements	✓	x	x	x					
Feeling judged, excluded, 'wrong but others right'	x	x	x	✓					

Context: Reflective capacity (incl. emotional); nature of mental health issues

Pawson, Ray (2006)
Evidence Based Policy. Sage

Meta-Analysis
- "Does this work?"

- Program type
- Quantitative
- RCT's preferred
- Uses minority of studies
- (Usually) calculates 'average' impacts – hides differences

Realist Synthesis
- "Where, how & for whom does this work?"
- Theory type (mechanism)
- Qualitative & quantitative
- All studies of sufficient quality to support their findings
- Explores and explains differences – builds theory

The process of realist synthesis

- Starts with an initial 'rough theory'; uses each document as a case study to refine theory
- Uses different analytic techniques, eg:
    - juxtaposing ("for instance, when one study provides the process data to make sense of the outcome pattern noted in another")
    - reconciling (identifying differences which explain apparently contradictory sets of findings)
    - adjudicating between studies (quality of research);
    - consolidating ('multi-faceted explanations of success')
    - situating ('this mechanism in context A, that one in context B")

RS: Negative Impacts of EI

- One chapter of thesis: 50 articles/studies
  - home visiting / centre based Early Years EI programs
- Priority to literature:
  - relating to EHS, CoS, attachment based programs
  - identifying negative outcomes (overall; for sub-groups)
- Initial questions/ emerging hypotheses
  - contexts and mechanisms for generation of negative outcomes;
  - influence of adult attachment style for engagement in such programs;
  - relationships between reflective capacity, personality disorders and attachment.

Theory building in realist synthesis

- "In Vermont, one EHS site examined impacts on parental stress and harsh parenting attitudes (Ayoub and Pan, 2002). The program group showed greater improvement than the comparison group in parenting stress, "potentially harsh, abusive values and beliefs about their children" (p 17), "unhappiness/depression" and "emotional distress" over time. Of greater interest to this study, however, is that parenting stress and parental distress reduced earlier (at 14 months) than did harsh parenting attitudes (by 24 months), and that greater change was made to the parents' own distress than to their perceptions of the child."

M: stress reduction ⇨ more positive attitudes to children ⇨ more positive parenting beliefs

Negative Outcomes

- Less sensitive, inconsistent or aversive parenting and/or high conflict
- ⇨ insecure / disorganised attachment for children
- Children spend more time with attachment system activated and less time with exploratory system activated
- ⇨ Poorer cognitive and social skills development

Negative Outcomes

Lower cognitive / language skills development

Lower social skills development

Lower exploratory system activation

Higher rates of insecure or avoidant attachment

Less sensitive, inconsistent or aversive parenting

High conflict
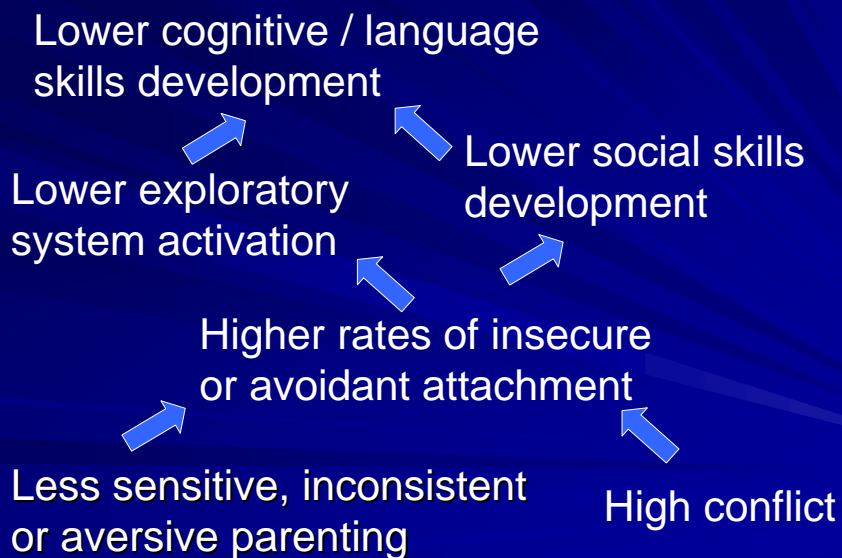
Contexts & Mechanisms 1:
Increased stress for parents

Context	Program Feature	Mechanisms
High poverty High time demands	Low negotiation of program delivery Parent training model	Program experienced as added burden
High poverty High social support		
Low perceived need for support	Parent training model	Decreased parenting self-efficacy
High poverty	Financial costs of participation	⇧ economic stress
Insecure attachment High levels of conflictual relationships	High parent drop-out rate	⇩use of informal support & poorer coping over time

Contexts & Mechanisms 2:
Parents' attachment style

Context	Program Feature	Mechanisms
Secure	Positive engagement with staff, program activities & content	⇧parenting sensitivity, ⇨ +'ve child outcomes
Ambivalent/ unresolved adult attachment	Parent support/ education model ⇧ 'symptom reporting' ⇧ Focus on adult or on crisis intervention	Decreased program & parent attention to child development
Avoidant adult attachment	Lower engagement with staff	Lower perceived need for support Reduced use of support networks

Contexts & Mechanisms 3: **Parental mental health**

Context	Program Feature	Mechanisms
High poverty High rates of mental health issues	Parent training model	Program rejected
Personality disorders (BPD)	Attachment focus	Attachment systems activated: Fear, anger, violence triggered
High unresolved trauma (past or present)	Attachment focus	Emotional-intellectual dissociation: Intellectual learning, no 'empathic shift'
Insecure adult attachment Maternal depression		Severity & persistence of depression. ⇩ engagement with services & parenting

Contexts & Mechanisms 4: **Direct Child Mechanisms**

Context	Program Feature	Mechanisms
Partner / family resistance to program		⇧family conflict / violence
Relatively insensitive parental care Child care in 1st yr of life	More than 10 hrs/ week of childcare Multiple care providers	Increased rates of insecure child attachment

Next steps

- So far: tentative hypotheses based on exploratory synthesis of some literature
- Testing and refinement of hypotheses through thorough realist synthesis
- Testing of hypotheses in future research and evaluation of programs
- Raising awareness – 'for whom, of what, in what contexts'?

Research findings

Role	Function	Information
Politicians	Fund programs	EI can be effective One size does not fit all Suite of programs required Program types x populations
Policy staff	Design & administer	Broad CMOC for program types (middle level theory)
System gatekeepers	Referral	C & M x local programs Assessment instruments
Service providers	Provision	Detailed knowledge & skill Substantive theory
Researchers & evaluators	**Investigate, evaluate, recommend**	**CMO's for positive and negative outcomes. Models & methods to analyse both**