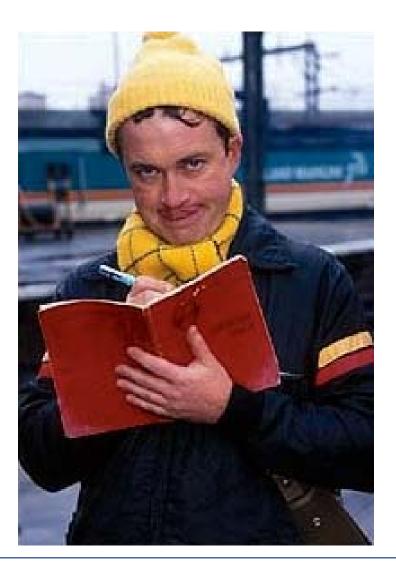


Are evidence-based programmes dead?







# Articles

# Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial



Michael Robling, Marie-Jet Bekkers, Kerry Bell, Christopher C Butler, Rebecca Cannings-John, Sue Channon, Belen Corbacho Martin, John W Gregory, Kerry Hood, Alison Kemp, Joyce Kenkre, Alan A Montgomery, Gwenllian Moody, Eleri Owen-Jones, Kate Pickett, Gerry Richardson, Zoë E S Roberts, Sarah Ronaldson, Julia Sanders, Eugena Stamuli, David Torgerson



#### **Summary**

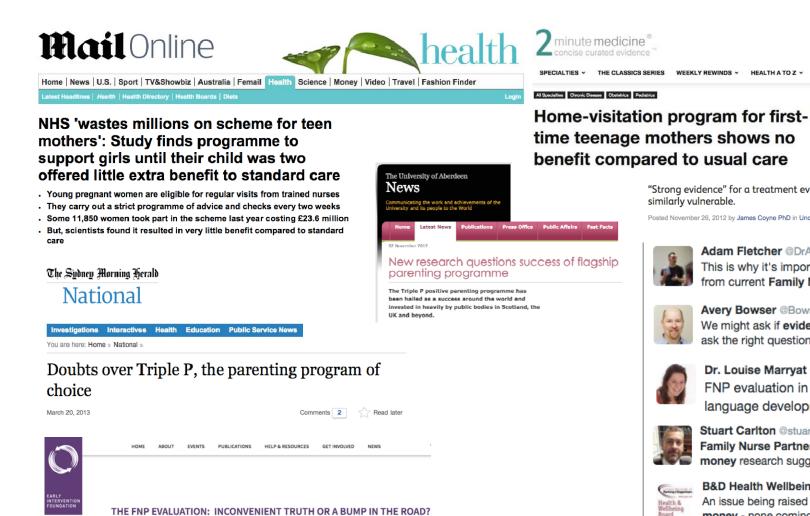
Background Many countries now offer support to teenage mothers to help them to achieve long-term socioeconomic stability and to give a successful start to their children. The Family Nurse Partnership (FNP) is a licensed intensive home-visiting intervention developed in the USA and introduced into practice in England that involves up to 64 structured home visits from early pregnancy until the child's second birthday by specially recruited and trained family nurses. We aimed to assess the effectiveness of giving the programme to teenage first-time mothers on infant and maternal outcomes up to 24 months after birth.

Published Online October 14, 2015 http://dx.doi.org/10.1016/ S0140-6736(15)00392-X See Online/Comment http://dx.doi.org/10.1016/ S0140-6736(15)00476-6

Source: Robling, M., Bekkers, M-J., Bell, K., Butler, C. C., Cannings-John, R., Channon, S., Martin, B. C., ... Torgerson, D. (2015). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial. *The Lancet*.

# Family Nurse Partnership







HOME NURSING PRACTICE NURSING TIMES LEARNING OPINION

#### Family Nurse Partnership 'not beneficial' in short term

A government-backed programme that provides early years nurse support for firsttime teenage mothers has not produced the improved health outcomes it was expected to, new research has found.

"Strong evidence" for a treatment evaporates with a closer look: Many psychotherapies are similarly vulnerable.

Posted November 26, 2012 by James Coyne PhD in Uncategorized

HEALTH A TO Z ~

WEEKLY REWINDS >



#### Adam Fletcher @DrAdamFletcher · Oct 15

This is why it's important to trial costly programmes. No evidence of benefits from current Family Nurse Partnership cardiff.ac.uk/news/view/1465...



Avery Bowser @BowserAvery · Oct 15

We might ask if evidence based programmes are really the answer - did we ask the right questions to start with?



Dr. Louise Marryat @LMarryat · Oct 15

FNP evaluation in England showing little positive effect (except for language development)...worth the money?



Stuart Carlton @stuartcarlton · Oct 15

Family Nurse Partnership to boost teen mums' parenting skills not worth the money research suggests #ncasc15 onmedica.com/newsArticle.as...



#### B&D Health Wellbeing @BarDagHWBB · 9 Sep 2014

An issue being raised with NHS England about Family Nurse Partnership money - none coming over to us, which causes some concern.

A waste of time and money?















Evidence-based programmes databases



# 1. Impact

- Limited transportability
- Low/modest effect sizes
- Developer bias
- 'Voltage drop' in replication

### 2. Implementation

Poor fidelity in real world

#### 3. Scale

- Poor fit with systems
- Limited marketing / business model
- Expensive
- Hard to access
- Tension with fidelity





Programme Name	Effects in the US	Number of studies in the US	Effects in Europe	Number of studies in Europe
Big Brothers Big Sister	Positive effect	4	No effect	1
Functional Family Therapy	Positive effect	8	Positive effect	3
Good Behaviour Game	Positive effect	5	Positive Effect	4
Incredible Years Parent Training Programme	Positive effect	26	Positive effect	18
Incredible Years Child Training Programme	Positive effect	5	No effect	3
Multisystemic Therapy	Positive effect	12	Mixed effects	5
Nurse Family Partnership	Positive effect	3	Mixed effects	4
Promoting Alternative Thinking Strategies (PATHS)	Positive effect	8	Mixed effects	6
Multidimensional Treatment Foster Care (Oregon)	Positive effect	8	Mixed effects	4
Strengthening Families 10-14	Positive effect	2	No effect	3
Programme	Effect Size in the US	Effect Size in Europe	Countries Included	
Functional Family Therapy	-0.09 to -0.59	-0.96	Sweden	
Good Behaviour Game	-0.37	-0.35	The Netherlands	
Incredible Years Parent Training Programme	-0.02 to -1.18	-0.10 to -0.72	UK, Norway	
Multisystemic Therapy	-0.13 to -1.74	0.40	UK	

\*Effect sizes based on effects on primary outcomes.

Some effect sizes have been calculated by the Washington State Institute of Public Policy

-0.92

-0.49 to -1.6

# Transportability of programmes

Multidimensional Treatment Foster Care (Oregon)



UK (In Sweden, the effect on internalizing (ES = -0.39) and

externalizing (ES = -0.58) behaviour was measured.)

Programme	Level of Prevention	Primary Outcome	Effect size from Meta analyses
Good Behaviour Game	Universal	Externalising Behaviour	-0.31
Guiding Good Choices	Universal	Illicit drug use	-0.25
Promoting Alternative Thinking Strategies (PATHS)	Universal	Externalising Behaviour/ Prosocial skills	-0.05
Strengthening Families 10- 14	Universal	Illicit drug use	-0.32
Success for All	Universal	Test scores	0.25
Triple P System	Universal/Targeted	Child abuse and neglect	-0.14
Functional Family Therapy	Targeted	Crime	-0.59
Incredible Years Parent Training Programme	Targeted	Disruptive behaviour	-0.47
Multidimensional Treatment Foster Care (Oregon)	Targeted	Crime	-0.61
Multisystemic Therapy	Targeted	Crime	-0.43
Nurse Family Partnership	Targeted	Child abuse and neglect	-0.88



# Low effect sizes?



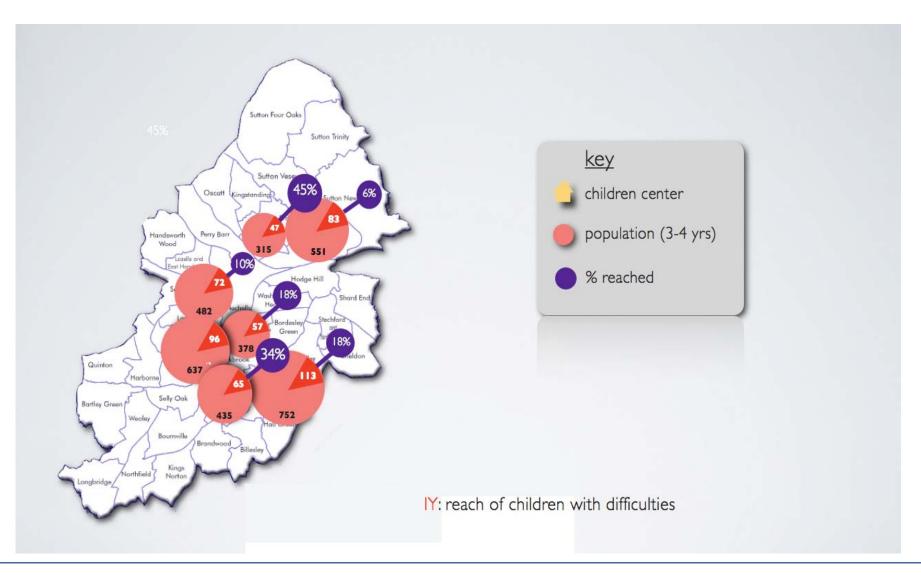
Programme	Findings in developer-led studies	Findings in independent evaluations
Reconnecting Youth (Drug prevention programme)	Increased GPA; increased self-esteem; increased school bonding; decreased hard drug use; and decreased drug control problems (Eggert et al. 1994)	Negative effects on most outcome measures, no positive effects. Negative effects the stronger the better implementation fidelity (Sanchez et al. 2007)
Triple P Positive Parenting Programme	Positive mean effect on child problem behavior of d=0.35 in 33 trials (Nowak and Heinrichs 2008)	No positive effects on any aspect of problem behavior evaluated by teachers, parents, or child self-reports (Eisner et al. 2007)
Olweus Bullying Prevention Programme	Reductions of up to 50% in bullying in the original study (Olweus 1994)	No overall effects on either attitudinal measures or victimization (Bauer et al. 2007)
ALERT (Drug prevention programme)	Reduction in cigarette, marijuana and alcohol use by 19–39% (Ellickson et al. 2003)	No effects on mediators or substance abuse itself (St Pierre et al. 2006)



Source: Eisner, M. (2009). No effects in independent prevention trials: can we reject the cynical view?. *Journal of Experimental Criminology*, 5(2), 163-183.

# The problem of developer bias





Hard-to-reach families, or hard-to-access services?



- 1. Keep going (with some changes)
- 2. Change programmes
- 3. Develop and apply evidence-based "kernels"
- 4. Tighten-up existing provision
- 5. Engage multiple systems
- 6. Exmplore common logic models / meta-theory
- 7. Improve prevention training for practitioners
- 8. Acknowledge the role of civil society
- 9. Reform systems







W22 D18 L10 = 84 points

W27 D9 L14 = 90 points





Evidence or rationale for programme	Description of evidence	Description of programme	EIF rating	Recommendation for commissioner or provider
Multiple high-quality evaluations (RCT/QED) with consistently positive impact across populations and environments	Established	Consistently Effective	4	Take to scale (subject to local feasibility and appraisal)
Single high-quality evaluation (RCT/QED) with positive impact	Initial	Effective	3	Commission and evaluate
Lower-quality evaluation (not RCT or QED) showing better outcomes for programme participants	Formative	Potentially Effective	2	Pilot and evaluate rigorously
Logic model and testable features, but not current evidence of outcomes or impact		Theory-Based	1	Track performance and outcome measures
No logic model, testable features, or current evidence of outcomes or impact	Non-existent	Unspecified	0	Develop logic/measurement model
Evidence from at least one high-quality evaluation (RCT/QED) indicating null or negative impact	Negative	Ineffective/ Harmful	: <del>-</del> :	Redesign / Avoid / Decommission
Programmes not yet rated, including those rated by evidence bodies whose standards are not yet mapped to the EIF standards, and submissions from providers or local areas of innovative or promising interventions	TBD	TBD	?	

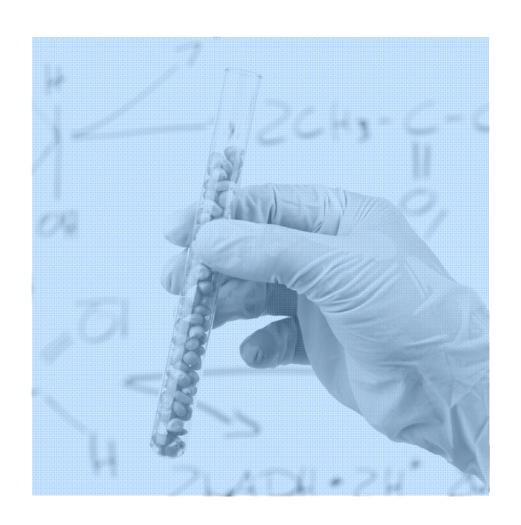
# Progressive standards of evidence



A "fundamental unit of behavioural influence" that underlie effective prevention and treatment and a small and simple entity that holds the potential to transform into something much larger.

### They must:

- be inexpensive;
- show an immediate effect;
- be easily useable; and
- be flexible to simultaneously solving additional problems that might arise in the course of prevention or treatment
- be empirically found to be effective
- be indivisible (i.e. it would not work if altered).



Evidence-based kernels



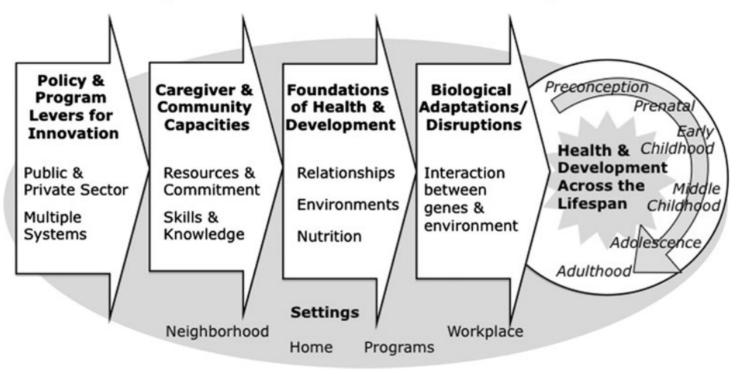
#### Standardized Program Evaluation Protocol (SPEP) for Services to Probation Youth

	Possible Points	Received Points
Primary Service: High average effect service (35 points) Moderate average effect service (25 points) Low average effect service (15 points)	35	
Supplemental Service: Qualifying supplemental service used (5 points)	5	
Treatment Amount:  Duration:  % of youth that received target number of weeks of service or more  0% (0 points) 20% (2 points) 40% (4 points)  60% (6 points) 80% (8 points) 100% (10 points)	10	
Contact Hours:  % of youth that received target hours of service or more  0% (0 points) 20% (3 points) 40% (6 points)  60% (9 points) 80% (12 points) 100% (15 points)	15	
Treatment Quality: Rated quality of services delivered: Low (5 points) Medium (10 points) High (15 points)	15	
Youth Risk Level: % of youth with the target risk score or higher: 25% (5 points) 50% (10 points) 75% (15 points) 99% (20 points)	20	
Provider's Total SPEP Score:	100	[Insert Score]

Standardised Programme Evaluation Protocol (SPEP)



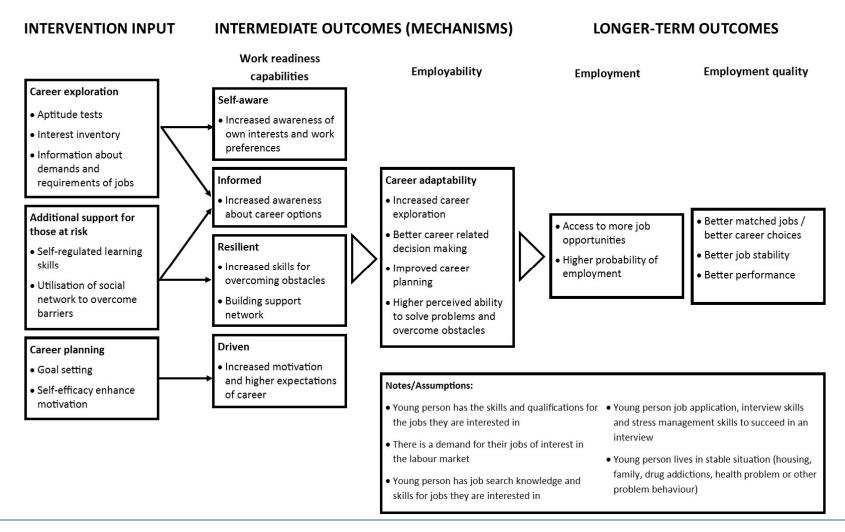
# A Science-Based Logic Model Could Inform More Effective Early Childhood Policies and Programs



Source: Shonkoff, J. P. and Fisher, P. A. (2013) Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and Psychopathology* 25, 1635-1653.

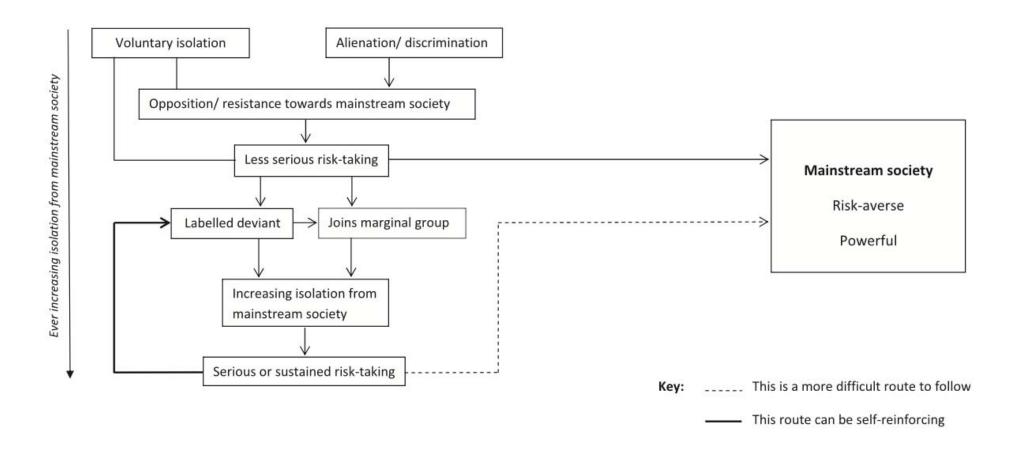








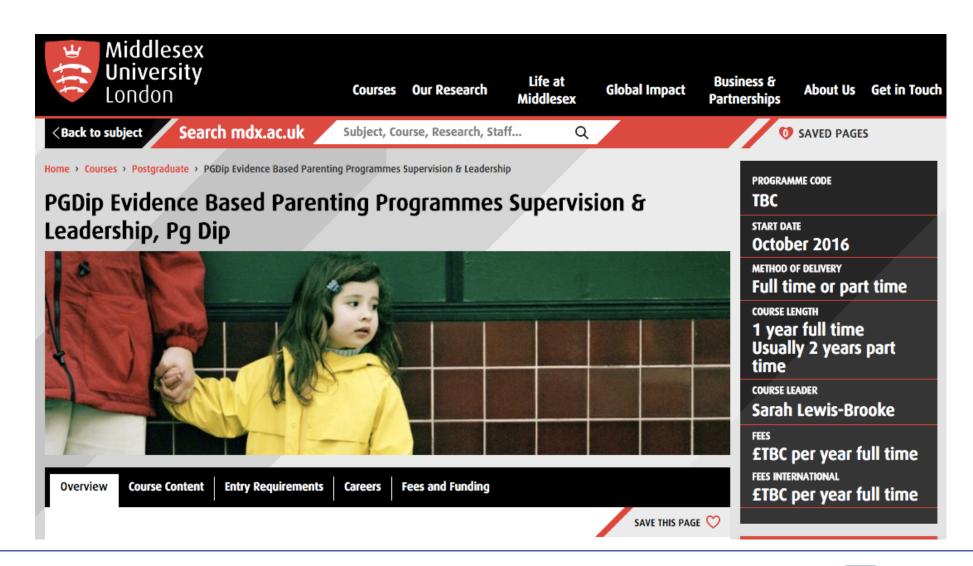




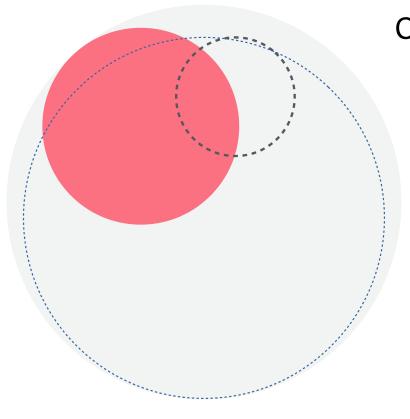
Source: Pound, P. & Campbell, R. (2015) Exploring the feasibility of theory synthesis: a worked example in the field of health-related risk-taking. *Social Science & Medicine* 124, 57-65.

# Theory synthesis









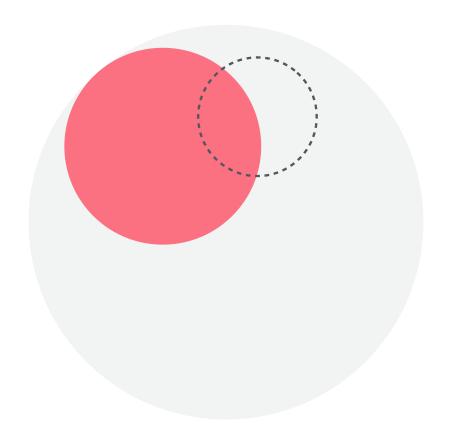
Children with high need

Children in contact with specialist services

Children with informal support

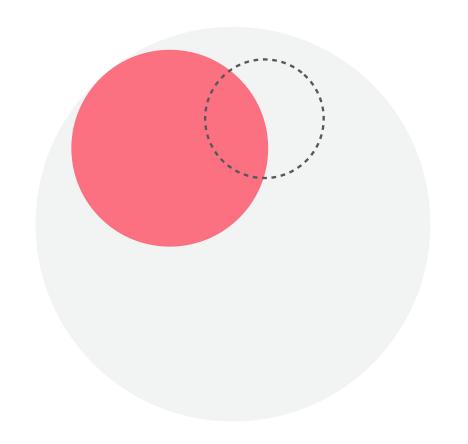


# Provide more services



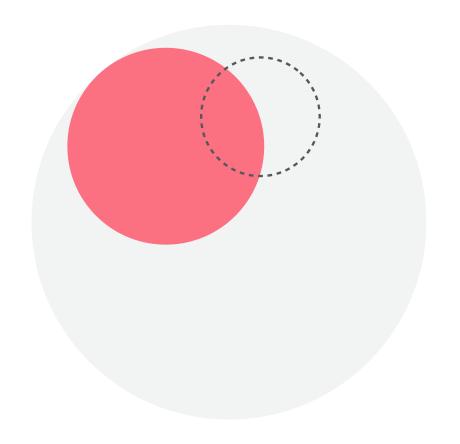


# Re-focus services





# Reduce need





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### References



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Thanks to...



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The Dartington Social Research Unit is an independent charity that brings science and evidence to bear on policy and practice in children's services to improve the health and development of children and young people.

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