

The adaptation of the WSIPP benefit-cost model for England

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The Social Research Unit at Dartington



- Using evidence to improve children's outcomes
- Increasing the use of evidence in children's services
- Focus on prevention and early intervention

The Social Research Unit

- Linking outcomes to cost-benefit
- Overview of the WSIPP cost-benefit model
- Adaptation to the UK
- Costs and benefits of a school-based intervention
- Limitations of our cost-benefit analysis
- Latest news

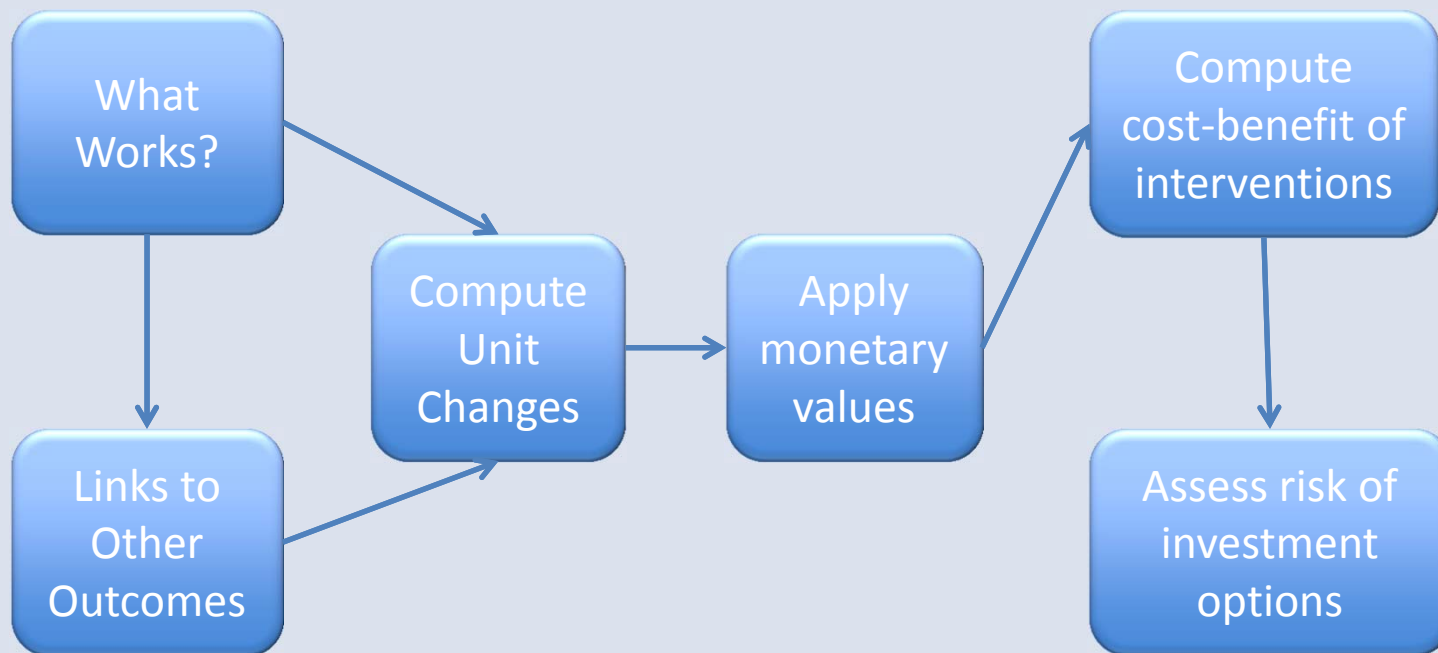
Outline

- Trials measure interventions' impact on outcomes (ES)
 - Behaviour
 - Mental health
 - Education
 - etc.
- All improvements benefit children & families
- Some improvements can be translated into monetary benefits to children, families, & society

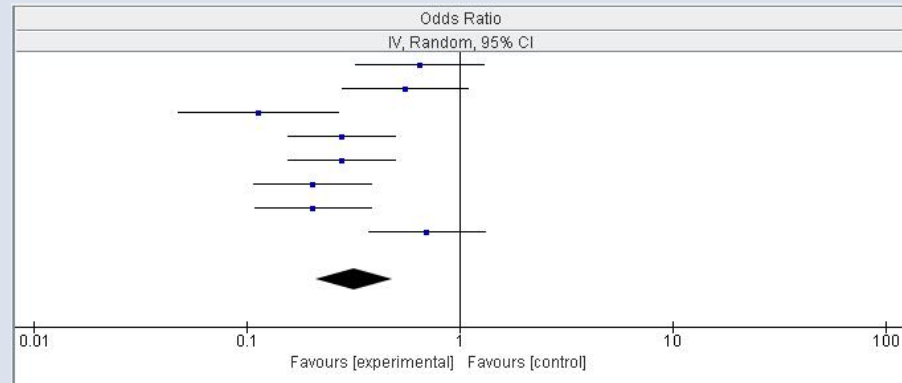
Linking outcomes and cost-benefit

- Empirical evidence
- Consistent across interventions and policy areas
- Cautious estimates
- Used in real-world policymaking

Overview of the WSIPP Cost-benefit model



WSIPP Cost-benefit model



- Literature Review
- Effect size calculation
- Effect sizes reduced for weak methodology and risk of bias
- Meta-analysis

What Works?



- Causal link between one outcome and another that can be monetised
- Based on empirical evidence from longitudinal studies

Links to Other Outcomes



- Determine the rate of the outcome in an 'untreated' population
- e.g. average rates of school completion
- Apply intervention effect (or linked effect) to that base rate

Unit Change

- Unit costs of interventions
- How much is it worth to us to achieve outcomes?
- System costs
- Prevalence rates
- Population statistics
- Economic inputs

Apply Monetary Value

$$NPV_{progage} = \sum_{y = progage}^N \frac{Q_y \times P_y - C_y}{(1 + Dis)^y}.$$

Combine:

- The mean effect size from studies
- Long-term outcomes and their value
- The cost of the intervention

From age of treatment through life course

Compute Cost-benefit



- All estimates include some uncertainty
- Randomly vary most factors
- Test for likelihood of a net benefit (or loss)

Assess Risk of Investment



- UK figures
- Units (e.g. classroom sizes)
- Staff turnover
- Set-up costs

Limitations: Costs of interventions

- Additional benefits that are not monetisable
- Model designed for Washington state
- Source of benefits vs benefits to system

Limitations: Value of benefits

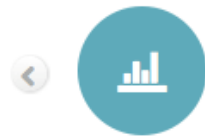


- Intervention costs vary
- Benefits over lifetime
- Benefits not necessarily cashable

Limitations: Investment advice vs budgeting tool

- Most programmes that improve outcomes will also yield a quantifiable net benefit
- However, some will not
- When making policy and investment decisions in children's services, where should cost-benefit fit in?

Implications



Welcome to Investing in Children

Investing in Children, produced by the Social Research Unit at Dartington, provides free and independent advice on the costs and benefits of competing investment options in children's services



Search

Find and compare interventions that match your criteria



Intervention of the week

The UK Resilience Programme is a school-based programme that uses cognitive behavioural methods to prevent or reduce depression in children and has a benefit-cost ratio of 7:10



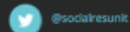
Features

Seven questions programme developers need to address in order to achieve effective implementation within a social policy context

ABOUT US

Investing in Children is a product of the Social Research Unit at Dartington, an independent charity that seeks to increase the use of evidence of what works in designing and delivering services for children and their families. We are also a strong advocate of prevention and early intervention.

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LINKS

- [Social Research Unit at Dartington](#)
- [Washington State Institute for Public Policy](#)
- [Blueprints for Healthy Youth Development](#)
- [Early Intervention Foundation](#)
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SEARCH: 

OUTCOMES		AGE GROUP	LEVEL OF INTERVENTION	FOCUS OF INTERVENTION
Healthy birth	No risky sex	0-2	Promotion	Individual and peer
No chronic ill-health	Regulating emotions	3-5	Universal prevention	Family
Healthy weight	Not depressed	6-11	Selective prevention	School and work
Talking and reading	No suicidal ideation	12-14	Indicated prevention	Community
School ready	Good relations with parents	15-18	Treatment	Economic
Doing well in school	Good relations with peers	19-22	Maintenance	
Good behaviour	Not abused or neglected			
Not using substances				

Results

INTERVENTION	BLUEPRINTS APPROVED	COST	BENEFIT	BENEFITS MINUS COSTS	BENEFIT-COST RATIO	RATE OF RETURN ON INVESTMENT	RISK OF LOSS
Adolescents Coping With Depression	★						
Athletes Training and Learning to Avoid Steroids (ATLAS)	★						
Be Proud! Be Responsible!	★						
Behavioural Monitoring and Reinforcement Programme	★	£865	£1,353	£488	1.56	9%	42%
Interactive Book Reading (Story Talk)	★						
Big Brothers Big Sisters	★						
Brief Alcohol Screening and Intervention for College Students (BASICS)	★	£153	£2,109	£1,955	13.75	28%	3%
Life Skills Training	★	£27	£288	£261	10.67	72%	1%
Multidimensional Treatment Foster Care	★	£7,821	£20,613	£12,792	2.64	24%	22%
Multisystemic Therapy (MST) for Juvenile Offenders	★	£9,732	£19,893	£10,161	2.04	16%	13%

The iC Website



Thank you!

For more information please visit:

www.dartington.org.uk

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