

The Prevention, Treatment and Management of Conduct Problems in Childhood

David M Fergusson

Christchurch Health & Development Study
Department of Psychological Medicine
University of Otago, Christchurch

November 2011

Introduction

In this talk I will attempt three tasks:

- i) A brief review of the evidence showing linkages between childhood conduct problems and later developmental outcomes including crime, imprisonment, mental health outcomes, substance abuse, teen pregnancy, domestic violence and related outcomes.
- ii) A more extensive review on the evidence from randomised trials of prevention and treatment programs.
- iii) Examine the translation of this evidence in the development of New Zealand policy.

The Christchurch Health And Development Study

The Christchurch Health and Development Study (CHDS) is a longitudinal study of a birth cohort of 1265 children born in Christchurch, New Zealand.

This cohort has been studied at birth, 4 months, 1 year, annual intervals to 16 and at 18, 21, 25 and 30 (a total of 22 occasions).

As part of this research, extensive data was gathered on childhood behavioural adjustment and outcomes in young adulthood.

Key Findings From The CHDS

On the basis of data gathered from parent and teacher reports over the ages 7-9 years, children were classified on an underlying dimension of conduct problems that ranged from none to severe.

Outcomes At Age 25 Crime

	Extent of Early Conduct Problems				
Outcome 21-25	Low 1	2	3	High 4	- р
% Violent Offending	3.2	6.4	11.6	34.8	<.001
% Arrested	3.0	6.5	15.0	32.6	<.001
% Imprisonment (ever)	0.2	1.0	5.7	14.3	<.001

With increasing early conduct problems there were increases in rates of offending, arrest and imprisonment

Outcomes At Age 25 Substance Use

	Extent of	Extent of Early Conduct Problems			
Outcome 21-25	Low 1	2	3	High 4	p
% Nicotine dependence	15.9	26.2	31.3	41.3	<.001
% Alcohol dependence	5.6	5.0	4.8	8.7	NS
% Illicit drug dependence	5.2	7.8	15.7	19.6	<.001

With increasing early conduct problems there were increases in rates of nicotine dependence and illicit drug dependence

Outcomes At Age 25 Mental Health

	Extent of Early Conduct Problems				
Outcome 21-25	Low 1	2	3	High 4	p
Anxiety/depression	24.4	36.8	38.1	32.6	<.001
Antisocial personality Suicide attempt	1.0	3.2	5.4	17.4	<.001
(ever)	4.4	10.3	14.8	18.4	<.001

With increasing early conduct problems there were increases in rates of mental health problems and suicidality.

Outcomes At Age 25 Sexual And Partner Relationships

	Extent of Early Conduct Problems				
Outcome	Low 1	2	3	High 4	- p
% Multiple (10+) sexual partners	12.3	17.1	19.7	24.4	<.001
% Pregnant/partner pregnant <20	11.7	17.6	25.5	36.7	<.001
% Became parent <20	4.4	8.1	14.3	19.6	<.001
% Inter-partner violence	5.2	8.8	15.0	23.9	<.001

With increasing early conduct problems there were increases in rates of sexual risk taking, early pregnancy/parenthood, and inter-partner violence.

Major Conclusion

These findings show the pervasive effects of early conduct problems on later development.

It may be argued, plausibly, that no other common childhood condition has such pervasive and far reaching consequences for later development, as childhood conduct disorders.

Development of a Policy Response

In response to the evidence from the CHDS and similar evidence from the Dunedin Multidisciplinary Health and Development Study (DMHDS), the NZ government convened an expert panel to provide advice on the prevention, treatment and management of childhood conduct problems. This group - the Advisory Group on Conduct Problems (AGCP) - comprises consultants from Life Course Research, Education and Psychiatry.

The Work of the AGCP

The AGCP has been in operation for over three years. Key tasks have involved:

- Reviewing the literature to identify evidence based interventions
- 2) Making policy recommendations
- Providing assistance with program implementation
- Developing research designs to evaluate policy changes

Promising/Recommended Programs for 3-7 Year Olds

Program Type	Tier(s)
Family Based Interventions	
Parent Behavior Management Training:	
PMTO; Triple P; Incredible Years; PCIT	1, 2, 3
School Based Interventions	
School-Wide Behavior Support	1, 2, 3
Teacher Behavior Management Training:	
Incredible Years Teacher	1, 2
Good Behavior Game	1
CLASS	2
<u>Residential</u>	
Multi-dimensional Treatment Foster Care (MTFC)	3

Promising/Recommended Programs for 8-12 Year Olds

Program Type	Tier(s)
Family Based Interventions	
Parent Behavior Management Training	1, 2, 3
School Based Interventions	
School-Wide Behavior Support	1, 2, 3
Teacher Behavior Management Training	1, 2
Good Behavior Game	1
Check, Connect, Expect	2
<u>Multimodal</u>	
LIFT	1
Coping Power; Stop Now and Plan	2
MST; PSST + PMT (Kazdin)	3
<u>Residential</u>	
MTFC; Teaching Family Homes (TFM)	3

Promising/Recommended Programs for 12-17 Year Olds

Program Type	Tier(s)
Family Based Programs	
Teen Triple P; Functional Family Therapy	2
School Based Interventions	
School-Wide Behavior Support	1, 2, 3
Teach, Prevent, Reinforce	2, 3
Check and Connect	3
Group Contingency Management Programs	1, 2
<u>Multimodal</u>	
Multi-systemic Therapy; Aggression Replacement Therapy; Adolescent Transitions Program	3
<u>Residential</u>	
MTFC; TFM	3

Overview of Promising/Recommended Approaches

		Age	
Program Type	3-7	8-12	12-17
Parent Behavior Management Training	✓	✓	√
School-Wide Positive Behavior Support	\checkmark	✓	\checkmark
Teacher Behavior Management Training	✓	\checkmark	?
Group Contingency Management	✓	✓	\checkmark
Multimodal Programs	_	✓	√
Residential Programs	✓	✓	√

Common Features of Successful Interventions

- 1) All take a problem-solving rather than a punitive focus
- All are founded in behavioral psychology, including social learning therapy, cognitive behavioral theory and related approaches
- 3) All are manualised and can be transferred to new settings
- 4) The majority have been developed in university settings rather than by service providers

What is Not on the List

- Wilderness Programs
- Military Style Training (Boot Camps)
- Mentoring
- Restorative Justice

Policy Outputs

The work of the AGCP has underwritten the development of the Positive Behavior for Learning (PB4L) policy announced by the Ministry of Education in 2010.

PB4L is centred around the implementation and evaluation of three of the programs recommended by the AGCP:

- The Incredible Years Basic Parent Program
- The Incredible Years Teacher Training Program
- School-Wide Positive Behavior Support

Policy Impact

An interesting observation is that the AGCP reports have had their greatest impact on the Ministry of Education and far less impact on the Ministries of Health or Social Welfare.

These differences are largely explained by the fact that the policy leaders in Education are trained psychologists, whereas those in Social Welfare and Health are either Social Workers or Public Health Analysts. Differences in disciplinary affiliation and training appear to play a central role in the uptake of evidence based interventions.

Policy Implementation

To introduce these programs to the Education sector, the Ministry then held a series of meetings throughout New Zealand to introduce teachers, health workers and social workers to the reasoning underlying PB4L and the evidence supporting the program choices. These meeting were well attended with over 1000 participants in 12 centres, and very well received by the sector. This effort laid the groundwork for the implementation of PB4L.

Program Implementation

By 2014, PB4L intends to deliver:

- School Wide Positive Behavior Support to 400 NZ Schools
- Incredible Years Basic Parent Program to 12,000 parents
- Incredible Years Teacher Program to 5,000 teachers

This represents a very large investment in evidence based services within the education sector.

Evaluation

- The reports of the AGCP have emphasised the need for thorough evaluation of programs before they are widely implemented. The Ministries involved have been responsive to this view and a research unit has been set up in the Ministry of Social Development to evaluate evidence based programs in this area.
- The first evaluation planned is a first phase assessment of the Incredible Years Basic Parent program.

Evaluation of Incredible Years Parent Program

The evaluation planned involves:

- 150 families from three sites who will be studied at: baseline, mid program, end of program, and 3 months after program completion
- At least 50 families will be Māori
- Assessments will be made of child behavior, parenting practices and family functioning before, during and after the program

Evaluation of Incredible Years Parent Program

These assessments will be supplemented by single subject studies of 30 families (10 per site) and client satisfaction studies

The overall aim will be to build up a clear picture of the changes that families display following the introduction of the program and to compare these results with benchmarks derived from existing randomised trials.

Progress on the Evaluation

Progress on the evaluation has been very good: a total of 88 families have been recruited, with a 99% response rate. 44 families have been followed up, with a 100% response rate. Single subject research is proceeding well and a preliminary check on the factorial validity and reliability of the behavioral report data has been extremely promising.

This progress has been possible as a result of the transfer of data collection skills from the CHDS and DMHDS to the Ministry of Social Development Unit running the evaluation.

Reflections on the Process

It is quite clear that the process of translating research evidence into effective and well validated public programs is arduous and littered with pitfalls. Most of these centre around the differences in values and beliefs between research scientists on the one hand, and public servants and politicians on the other. Aligning these two cultures takes a lengthy process of negotiation - the success of this negotiation appears to depend critically on the background training of public servants who are given the responsibility for implementing programs.