

Out-of-School Care and Recreation

EVIDENCE BRIEF

Out-of-school care and recreation programmes (OSCAR) are primarily designed to support working parents, but have also been used internationally in an effort to reduce crime by young people. However, international evidence is yet to show that this type of investment tends to reduce crime.

OVERVIEW

- Out-of-school care and recreation programmes (OSCAR) in New Zealand are not intended to reduce crime, but similar programmes have been used overseas in an attempt to prevent offending and victimisation.
- Although this approach to reducing crime by teenagers is theoretically promising, results have typically been poor.
- International programmes often struggle to get at-risk young people to attend consistently.
- In some cases, targeted programmes have made crime more likely by concentrating anti-social individuals together.
- The more promising programmes are highly structured, with a focus on developing young people's academic, social or cognitive skills, and with male staff.
- The less promising programmes are unstructured, with a focus solely on leisure activities.
- There is little evidence that recreation or sport alone tends to reduce crime.
- The evidence for the effect on broader social outcomes such as educational achievement is also mixed.
- Although unstructured and unsupervised socialising among teenagers is a risk factor for crime, other approaches appear to be more effective at mitigating this risk than OSCAR programmes.
- For further information on more promising approaches for at-risk young people, see the investment briefs on cognitive-behavioural therapy, family-based interventions, school-based interventions, mentoring and wilderness programmes.
- After-school programmes may be more successful if they combine elements of these other approaches, such as mentoring or cognitive-behavioural therapy.

EVIDENCE BRIEF SUMMARY

Evidence rating:	Inconclusive
Unit cost:	Up to \$200 per week per child (subsidy)
Effect size (number needed to treat):	NA – effectiveness unproven
Current spend:	c.\$50m per year (MSD)
Unmet demand:	Unknown

DO AFTER-SCHOOL PROGRAMMES REDUCE CRIME?

International evidence

Crime rates tend to be high during the teenage years, and are higher still when teenagers socialise together unsupervised.ⁱ

As a result, it is common for some forms of crime to spike in the hours between 3pm and 5pm, after teenagers are released from the supervision of school but before they return to the supervision of their families.ⁱⁱ

After-school programmes have been extensively studied in the United States, where there has been substantial investment in these programmes in an attempt to reduce the prevalence of so-called 'latch-key' children looking after themselves after school.

Much of this research uses methodologies that make it difficult to reach definitive conclusions about the effectiveness of these programmes at reducing crime.

As noted by Robert Apsler,ⁱⁱⁱ some of the main problems that various methodologies have inadequately dealt with involve:

- selection bias (the fact that the kind of young person more likely to participate in an after-school programme may well be less likely to offend anyway)
- attendance (what level of attendance constitutes participation for the purpose of evaluation)
- attrition (many students who enrol in an after-school programme drop out almost immediately).

Reviews of the literature take different approaches in summarising the research. Without going into detail, suffice to say that a large number of reviews and meta-analyses prior to 2010 came to differing conclusions depending on what outcomes were focused on and which studies were included.^{iv}

All of these reviews as well as the underlying studies have been criticised for their methodologies, so it is difficult to place much confidence in their conclusions.^v

Few of these reviews prior to 2010 looked specifically at crime as an outcome. Instead, these earlier reviews looked at the relationship between after-school programmes and a broader set of negative behavioural outcomes, as well as broader social outcomes such as academic achievement.

In response to these methodological criticisms and to focus more directly on offending, two recent meta-analyses claim to use more stringent methods to gather, select and summarise the literature.

Both of these studies were unable to conclude that these programmes tend to be effective at reducing problem behaviour generally^{vi} and crime specifically.^{vii}

At the same time, there are specific examples of after-school programmes that have generated success at reducing anti-social behaviour. For example, Denise Gottfredson and colleagues found that participation in an after-school programme significantly reduced delinquent behaviour for middle-school but not elementary school children.^{viii}

New Zealand Evidence

No research in New Zealand has examined whether OSCAR programmes reduce crime.

The Ministry of Social Development evaluated the OSCAR subsidy in 2005, but this research did not examine whether OSCAR improves outcomes for participants.^{ix}

Overall, we can not yet conclude that OSCAR programmes reduce crime.

If after-school programmes are to be invested in from a crime prevention perspective, a substantial commitment to careful design and evaluation would be needed, picking up clues from the features of those programmes that have been associated with success.

DO SPORT AND OTHER RECREATION PROGRAMMES REDUCE CRIME?

Similar to after-school programmes, sports and recreation programmes could reduce crime through either a social control or a social learning mechanism.

Sports and recreation programmes have been less researched than after-school programmes. Their genuine potential for crime reduction is essentially untested. Where these programmes have been evaluated, they have typically not been evaluated for the effect on crime, but only on other factors such as risky sexual behaviour or alcohol use.^x

If implementing sports and recreation programmes, a sensible starting point is likely to be the findings from the after-school programme literature. In particular, it seems reasonable to hypothesise that highly structured sports and recreation programmes have a better chance of reducing crime than unstructured, drop-in type programmes.

WHAT WOULD MAKE OUT-OF-SCHOOL CARE AND RECREATION REDUCE CRIME?

The evidence does not indicate what characteristics make programmes more or less effective.

However, in a review of 35 studies Denise Gottfredson and colleagues began to identify factors that have been associated with greater success in reducing both offending and victimisation. These include:

- structured programmes, with a low proportion of free-time for leisure activities, and clear expectations for how the young people will spend their time
- small programme size
- high staff education levels
- a higher proportion of male staff.^{xi}

The degree of structure appears to be particularly important, and is reinforced by the review of Joseph Durlak and colleagues^{xii}.

Further, there is some evidence that unstructured programmes can even increase offending if they lead to ‘deviancy training’ whereby at-risk young people socialise with each other.^{xiii}

The importance of structured programming is reinforced by the broader literature on reducing youth offending. In a comprehensive meta-analysis of all intervention types for young people, Mark Lipsey identified that skill-building programmes of various types, including behavioural, cognitive-behavioural and academic, are all consistently associated with lower offending rates. In contrast, surveillance or control-type approaches tend to be less effective at reducing youth offending.^{xiv}

This suggests that the best chance of success with after-school programmes may be to

approach them instead as skill building programmes that happen to occur after school, and delivered by professionals trained in skills building rather than staff recruited merely as supervisors.

Targeting and attrition: Widespread use of after-school programming would require a substantial investment. To reduce the cost, it may be tempting to target after-school programmes to high-risk individuals. However, this would increase the likelihood of deviancy training by concentrating anti-social young people in one place, which can potentially increase offending.^{xv}

Another issue that is common to all approaches is the problem of attrition. As noted earlier, a common theme in the literature is the difficulty in attracting young people to these programmes and retaining them,^{xvi} and those who drop out are in many cases likely to be those who could gain most from the programmes.^{xvii}

This suggests that targeted programmes could struggle to maintain adequate numbers to justify provision, and that untargeted programmes would end up serving mostly low-risk young people with less to gain, thus diluting the benefits of investment.

If there were to be investment in after-school programmes, attendance and attrition would need to be important considerations as part of the service design process.

WHAT OTHER BENEFITS DO OUT-OF-SCHOOL CARE AND RECREATION PROGRAMMES HAVE?

Educational achievement

Internationally, after-school programmes typically have multiple aims, of which preventing crime is often a secondary consideration. Many after-school programmes have a primary focus on academic achievement.

Several of the earlier meta-analyses conclude that after-school programmes tend to improve outcomes such as school attendance, grades, and test scores.^{xviii}

However, in many cases the effect is marginal and not to a level sufficient to describe the effect as statistically significant if restricting an overview to the most rigorous studies.^{xix}

These findings are supported by a broader literature on tutoring programmes. While not generally considered after-school programmes, there is evidence that volunteer tutoring programmes tend to improve educational achievement.^{xx}

Other outcomes

Again, although subject to methodological criticism, reviews of the underlying literature have found that after-school programmes can reduce drug use, improve self-perceptions and improve school bonding.^{xxi}

Later life outcomes, such as employment and earnings, have not been researched.

CURRENT INVESTMENT IN NEW ZEALAND

OSCAR programmes are available to children aged 5 to 13 years. There are two primary types of Government funding for these programmes, both administered by MSD.

OSCAR **grant** funding supports providers to stay open by helping reduce fluctuations in revenue. Approximately 680 providers receive grants, totalling about \$18m per year.

OSCAR **subsidies** support low-income parents to enter and remain in employment by contributing to the cost of OSCAR fees. Up to 15,000 families are supported by these subsidies at any one time, at a total cost of about \$30m per year.

These programmes are primarily focused on supporting employment outcomes for parents, thus are not targeted at 14-17 year olds who are at greater risk of offending and victimisation.

The mainstream OSCAR funding is complemented with small-scale additional funding for programmes called Extended School Services and Breakaway. More information about these programmes are available at the following web pages:

<https://www.msd.govt.nz/about-msd-and-our-work/work-programmes/initiatives/extended-services/index.html>

<https://www.familyservices.govt.nz/working-with-us/programmes-services/youth-intervention/overview.html>

The Ministry of Education does not fund any OSCAR programmes.

EVIDENCE RATING AND RECOMMENDATIONS

Each evidence brief provides an evidence rating between Harmful and Strong.

Harmful	Robust evidence that intervention increases crime
Poor	Robust evidence that intervention tends to have no effect
Inconclusive	Conflicting evidence that intervention can reduce crime
Fair	Some evidence that intervention can reduce crime
Promising	Robust international <i>or</i> local evidence that intervention tends to reduce crime
Strong	Robust international <i>and</i> local evidence that intervention tends to reduce crime

According to the standard criteria for all evidence briefs¹, the appropriate evidence rating for Out-of-School Care and Recreation is Inconclusive.

This rating is particularly relevant to recreational programmes, even if structured after-school programmes are borderline promising.

This rating reflects that the international research base shows very mixed results, with no consistency in positive results.

As per the standard definitions of evidence strength outlined in our methodology, the interpretation of this evidence rating is that:

- there is conflicting evidence that interventions can reduce crime
- it is highly uncertain whether interventions will generate return even if implemented well.

It is likely that programmes for young people delivered after school or during school holidays can reduce crime if carefully designed and implemented.

But because failure appears common, any investment in this type of crime prevention should be accompanied by a strong commitment to careful design and testing, and rigorous evaluation of results.

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¹ Available at www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/

FIND OUT MORE

Go to the website

www.justice.govt.nz/justice-sector/what-works-to-reduce-crime/

Email

whatworks@justice.govt.nz

Recommended reading

Gottfredson, D., Cross, A. & Soule, D. (2007). Distinguishing characteristics of effective and ineffective after-school programs to prevent delinquency and victimization. *Criminology and Public Policy*, 6(2).

Kremer, K., Maynard, B., Polanin, J., Vaughn, M. & Sarteschi, C. (2015). Effects of after-school programs with at-risk youth on attendance and externalizing behaviours: A systematic review and meta-analysis. *Journal of Youth and Adolescence*, 44(3).

Taheri, S. & Welsh, B. (2015). After-school programs for delinquency prevention. A systematic review and meta-analysis. *Youth Violence and Juvenile Justice*, January 20 2015 (online publication)

Citations

ⁱ Osgood and Anderson 2004

ⁱⁱ OJJDP 2014

ⁱⁱⁱ Aspler 2009

^{iv} Fashola 1998, Beckett et al 2001, Scott-Little et al 2002, Little and Harris 2003, Miller 2003, McComb and Scott-Little 2003, Hollister 2003, Kane 2004, Lauer et al 2006, Bodilly and Beckett 2005, Zief et al 2006, Gottfredson et al 2007, Durlak et al 2010.

^v Valentine 2010, Aspler 2009

^{vi} Kremer et al 2015

^{vii} Taheri and Welsh 2015

^{viii} Gottfredson et al 2004

^{ix} MSD 2005

^x See Cameron and MacDougall 2000, Morris et al 2003 and Nichols 2004 for reviews of the sports

literature, and Lubans et al 2012 and Weinstein et al 2014 for reviews of the recreation literature.

^{xi} Gottfredson et al 2007

^{xii} Durlak et al 2010

^{xiii} Rorie et al 2011

^{xiv} Lipsey 2009

^{xv} Rorie et al 2011

^{xvi} Aspler 2009

^{xvii} Weisman and Gottfredson 2001

^{xviii} Scott-Little et al 2002, Kane 2004, Lauer et al 2006, Durlak et al 2010

^{xix} Zief et al 2006

^{xx} Ritter et al 2009

^{xxi} Durlak et al 2010

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SUMMARY OF EFFECT SIZES FROM META-ANALYSES

Meta-analysis	Outcome measure	Reported average effect size	Number of estimates meta-analysis based on	Percentage point reduction in offending (assuming 50% untreated recidivism)	Number needed to treat (assuming 50% untreated recidivism)
Durlak et al 2010	Problem behaviours	d=0.19*	43	0.08	13
Kremer et al 2015	Problem behaviours	d=0.11 (NS)	49	0.05	22
Taheri and Welsh 2015	Delinquency	d=0.062 (NS)	12	0.03	39

* Statistically significant at a 95% threshold

OR=Odds ratio

d=Cohen's d or variant (standardised mean difference)

Φ=phi coefficient (variant of correlation coefficient)

NA=Not applicable (no positive impact from treatment)

NS: Not significant

NR: Significance not reported

RRR: Relative risk