

Rock and Water

Reviews: November 2019; January 2021

Rock and Water is a social and emotional learning programme for children and young people. It aims to improve skills such as self-regulation, communication and empathy. It can be delivered in a variety of settings, such as schools or youth clubs.

The programme cultivates mental and social skills by starting with physical action and experience. The emphasis on kinaesthetic learning patterns are practised through a series of exercises and games, some of which are martial arts based, and evoke a physical and psychological response.

Participants undergo a journey of self-awareness as they learn about responding to life with either a 'rock' or a 'water' attitude. The use of symbolism is central to the programme. For instance, 'rock' represents a strong and uncompromising attitude, while 'water' symbolises flexibility, communication and cooperation. The programme teaches the consequences, both positive and negative, of responding to situations with either a 'rock' or 'water' attitude. It is typically taught over 6–10 sessions, during which the skills of physical, social and mental resilience are practised and then considered in relation to daily situations.

Evidence
rating: **2+**

Cost rating: **1**

EIF Programme Assessment

Rock and Water has **preliminary evidence** of improving a child outcome, but we cannot be confident that the programme caused the improvement.

Evidence
rating: **2+**

What does the evidence rating mean?

Level 2 indicates that the programme has evidence of improving a child outcome from a study involving at least 20 participants, representing 60% of the sample, using validated instruments.

This programme does not receive a rating of 3 as its best evidence is not from a rigorously conducted RCT or QED evaluation.

What does the plus mean?

The plus rating indicates that a programme's best available evidence is based on an evaluation that is more rigorous than a level 2 standard but does not meet the criteria for level 3.

In study one, the programme is delivered as a universal, school-based programme for adolescent boys. In study two the programme is delivered as a universal, school-based programme, for both boys and girls in primary school

Cost rating

A rating of 1 indicates that a programme has a low cost to set up and deliver, compared with other interventions reviewed by EIF. This is equivalent to an estimated unit cost of less than £100.

Cost rating: **1**

Child outcomes

According to the best available evidence for this programme's impact, it can achieve the following positive outcomes for children:

Supporting children's mental health and wellbeing

Improved self-regulation

Based on study 1

Improved self-efficacy

Based on study 1

Increased self-esteem

Based on study 2

Decreased depressive feelings

Based on study 2

Preventing crime, violence and antisocial behaviour

Decreased coercive strategies

Based on study 1

Reduced "bullying otherwise" (i.e. forms of bullying that do not fit into verbal, physical, cyber & property bullying categories)

Based on study 2

Decreased physical victimisation

Based on study 2

Key programme characteristics

Who is it for?

The best available evidence for this programme relates to the following age-groups:

- Primary school
- Preadolescents
- Adolescents

How is it delivered?

The best available evidence for this programme relates to implementation through these delivery models:

- Group

Where is it delivered?

The best available evidence for this programme relates to its implementation in these settings:

- Primary school
- Secondary school

How is it targeted?

The best available evidence for this programme relates to its implementation as:

- Universal
-

Where has it been implemented?

Australia, Belgium, Brazil, Canada, China, England, Germany, Kenya, Mexico, Netherlands, New Zealand, Peru, Scotland, Sweden, Taiwan, Turkey, Wales

UK provision

This programme has been implemented in the UK.

UK evaluation

This programme's best evidence does not include evaluation conducted in the UK.

About the programme

What happens during delivery?

How is it delivered?

- The Rock and Water Programme is delivered in 6–10 sessions of 1–1.5 hours' duration each by trained teachers to groups of children and young people.

What happens during the intervention?

- During the sessions, a series of physical exercises, games and role-plays are facilitated which evoke physical and psychological responses in the participants.
- These experiences are immediately reflected upon individually, in pairs and in group discussions.
- Video scenarios help further discussions and homework assignments are given to further reflect and transfer the learning to real-life situations.
- Specific topics covered include: mental strength, body language, empathic feeling, setting boundaries, bullying, breath strength, life goals, dealing with a threatening group, body awareness, intuition and listening, sexuality and sexual violence, and emotional control.

What are the implementation requirements?

Who can deliver it?

- The practitioner who delivers this programme is a teacher (or youth or social worker) with QCF-6 level qualifications.

What are the training requirements?

- The practitioners have 24 hours of programme training. Booster training of practitioners is not required.

How are the practitioners supervised?

- Supervision is not required.

What are the systems for maintaining fidelity?

Programme fidelity is maintained through the following processes:

- Training manual
- Other printed material
- Other online material
- Video or DVD training
- Practitioner forum for sharing best practice (optional).

Is there a licensing requirement?

There is no licence required to run this programme.

How does it work? (Theory of Change)

How does it work?

- As children and young people develop strong abilities to self-regulate their emotions and behaviours they are less likely to act in violent and aggressive ways in times of conflict.
- The Rock and Water programme teaches self-regulation skills such as grounding, centering, effective breathing, verbal and non-verbal communication, self-reflection and empathy.
- In the short term, young people will be more aware of themselves and others, have improved communication skills, and understand social behaviours that are deemed appropriate, acceptable and safe.
- In the longer term, young people will have greater ability to develop and sustain relationships as they move into adulthood and will be less likely to act in violent or aggressive ways in times of conflict.

Intended outcomes

Supporting children's mental health and wellbeing
Enhancing school achievement & employment
Preventing crime, violence and antisocial behaviour
Preventing risky sexual behaviour & teen pregnancy
Preventing obesity and promoting healthy physical development

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About the evidence

The Rock and Water Programme's most rigorous evidence comes from a randomised control trial and a quasi-experimental study both of which were conducted in the Netherlands.

This study identified statistically significant positive impact on a number of child outcomes.

This programme is underpinned by two studies, one with a level 2+ rating and one with a Level 2 rating, hence the programme receives a level 2+ rating overall.

Study 1

Citation: de Graaf, de Haas, Zaagsma & Wijsen., 2016 | **Design:** QED

Country: Netherlands | **Study rating:** 2

Sample: 521 adolescent boys with a mean age of 15 years

Timing: Post-test; 4–5 month follow-up

Child outcomes:

Decreased coercive strategies

Improved self-regulation

Improved self-efficacy

Other outcomes:

None measured

de Graaf, I., de Haas, S., Zaagsma, M., & Wijsen, C. (2016). Effects of Rock and Water: an intervention to prevent sexual aggression. *Journal of Sexual Aggression*, 22(1), 4-19.

Available at

<https://www.tandfonline.com/doi/abs/10.1080/13552600.2015.1023375>

Study design and sample

This study is a pragmatic quasi-experimental trial.

Six schools were randomly assigned in matched clusters to the experimental or control group. The matching

variables were education level, ethnicity, school size and urbanisation. Three schools were matched and assigned non-randomly. These three schools were assigned according to pragmatic reasons such as ability to separate pupils into boys and girls and availability of teachers.

This study was conducted in the Netherlands with a sample of 521 boys across 42 classes in 9 schools. The boys had a mean age of 15 years. 64% were of Dutch ethnic background, with the next largest ethnic group described as 'Moroccan or Turkish' (11%). This evaluation of the Three Day Rock and Water Programme focused on whether it prevents sexual aggression in boys.

Measures

- Sexual aggression (use of coercive strategies) was measured using the coercive strategies part of the Sexual Experience Survey, adapted version (for Dutch population) (self-report).
- Sexual aggression (non-contact) was measured using the non-contact sexual aggression part of the Sexual Experience Survey, adapted version (for Dutch population) (self-report).
- Boys' control over their sexual experiences was measured as a subscale on the (sexual) interaction competence scale (self-report).
- Boys' assertiveness in their sexual experiences was measured as a subscale on the (sexual) interaction competence scale (self-report).
- Self-regulation was measured using the self-regulation scale (self-report).
- Attitudes towards dating violence was measured using items from the subscale 'Attitude towards sexual pressure used by men' (self-report).
- Self-efficacy was measured using the General Self-Efficacy Scale (self-report).
- Self-esteem was measured using the Rosenberg Self-Esteem Scale (self-report).

Findings

This study identified statistically significant positive impact on a number of child outcomes.

This includes (at follow-up time point only):

- reduced coercive strategies
- improved self-regulation
- improved self-efficacy.

The conclusions which can be drawn from this study are limited by methodological issues pertaining to the treatment and comparison groups not being generated by sufficiently robust methods and evidence of the groups being inequivalent at baseline, hence why a higher rating is not achieved.

Study 2

Citation: Reitz, Mertens, van Londen, & Deković., 2019 | **Design:** RCT

Country: Netherlands | **Study rating:** 2+

Sample: 1203 primary school children between 7-14 years old

Timing: Post-test

Child outcomes:

Reduced "bullying otherwise" (i.e. forms of bullying that do not fit into verbal, physical, cyber & property bullying categories)

Decreased physical victimisation

Increased self-esteem

Decreased depressive feelings

Other outcomes:

None measured

Reitz, E., Mertens, E., van Londen, M., & Deković, M. (2019). Changes in social safety, feelings of competence, and depressive feelings of primary school children who have participated in the intervention program Rock and Water: A comparison study.

Study design and sample

This study is a cluster RCT.

Seventeen primary schools were randomly assigned to the experimental or control group.

This study was conducted in the Netherlands with a sample of 1203 pupils across 17 schools. The pupils ranged from 7-14 years old with a median age of 10.08. 33% of the children in the sample had parents who had divorced and 7% were described as having been born in a 'non-western' region.

Measures

- Bullying and victimisation was measured using the Bullying and Victimization questionnaire. This measure assesses different types of bullying (child self-report).
- Global self-esteem was measured using the global self-esteem scale of the Self-Perception Profile for Children (child self-report).
- Social acceptance was measured using the the social acceptance scale of Harter's Self Perception Profile for Children (child self-report).
- Depressive feelings were measured using the Major Depression Disorder Scale (child self-report).

Findings

This study identified statistically significant positive impact on a number of child outcomes.

This includes:

- Reduced victimisation (physical)
- Reduced "bullying otherwise" (i.e. forms of bullying that do not fit into verbal, physical, cyber & property bullying categories)
- Reduced depressive feelings
- Improved self-esteem

The conclusions which can be drawn from this study are limited by methodological issues pertaining to clustering not being taken into account in analyses, hence why a higher rating is not achieved.

Guidebook

The EIF Guidebook provides information about early intervention programmes that have at least preliminary evidence of achieving positive outcomes for children. It provides information based on EIF's assessment of the strength of evidence for a programme's effectiveness, and on detail about programmes shared with us by those who design, run and deliver them.

The Guidebook serves an important starting point for commissioners to find out more about effective early interventions, and for programme providers to find out more about what good evidence of impact looks like and how it can be captured. As just one of our key resources for commissioners and practitioners, the Guidebook is an essential part of EIF's work to support the development of and investment in effective early intervention programmes.

Our assessment of the evidence for a programme's effectiveness can inform and support certain parts of a commissioning decision, but it is not a substitute for professional judgment. Evidence about what has worked in the past offers no guarantee that an approach will work in all circumstances. Crucially, the Guidebook is not a market comparison website: ratings and other information should not be interpreted as a specific recommendation, kite mark or endorsement for any programme.

[How to read the Guidebook](#)

[EIF evidence standards](#)

[About the EIF Guidebook](#)

EIF

The Early Intervention Foundation (EIF) is an independent charity and a member of the What Works network. We support the use of effective early intervention for children, young people and their families: identifying signals of risk, and responding with effective interventions to improve outcomes, reduce hardship and save the public money in the long term.

We work by generating evidence and knowledge of what works in our field, putting this information in the hands of commissioners, practitioners and policymakers, and supporting the adoption of the evidence in local areas and relevant sectors.

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