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Intervention website: https://bounceforward.com

# GUIDEBOOK INTERVENTION INFORMATION SHEET

# Penn Resilience Programme (UK Implementation in Primary School)

Please note that in the 'Intervention summary' table below, 'child age', 'level of need', and 'race and ethnicities' information is **as evaluated in studies**. Information in other fields describes the intervention as **offered/supported by the intervention provider**.

Intervention summary				
Description	Penn Resilience Programme (UK Implementation in Primary School) is a school- based intervention for primary school children. It is delivered by teachers to groups of 6 to 30 students over 18 one-hour sessions.			
Evidence rating	2			
Cost rating	1			
Child outcomes	<ul> <li>Supporting children's mental health and wellbeing</li> <li>Reduced depression</li> <li>Reduced anxiety.</li> </ul>			
<b>Child age</b> (population characteristic)	9 to 10 years			
<b>Level of need</b> (population characteristic)	Universal			

#### Foundations Guidebook – Intervention information sheet

Visit the Foundations Guidebook | <u>www.foundations.org.uk/guidebook</u>

Intervention summary				
<b>Race and</b> <b>ethnicities</b> (population characteristic)	<ul><li>White</li><li>Minoritised ethnic group.</li></ul>			
<b>Type</b> (model characteristic)	Group			
<b>Setting</b> (model characteristic)	Primary school			
<b>Workforce</b> (model characteristic)	Teacher, teaching assistant or learning mentor			
UK available?	No			
UK tested?	Yes			

# Model description

Penn Resilience Programme (UK Implementation in Primary School) (PRP) is a school-based intervention for primary school children. There are other versions of the PRP model, including the UK implementation of the PRP in secondary schools and international implementations of the PRP; these versions are treated as separate interventions by Foundations due to different features, such as target age group and intervention duration.

PRP is delivered by teachers, teaching assistants, or learning mentors to groups of 6 to 30 students over 18 one-hour sessions (note that in the evaluation which forms the basis of the Guidebook rating, PRP was delivered for 25 hours). It is taught in school, and lessons are timetabled as part of the normal school day.

PRP aims to teach resilient thinking skills such as generating alternatives, real-time resilience, and assertive communication through the use of scenarios, role-play, and quizzes, using a mix of individual, paired, and group activities. These skills and coping strategies are designed to contribute towards six resilience competencies: emotional intelligence, impulse control, optimistic thinking, flexible and accurate thinking, self-efficacy, and connecting with others.

PRP teachers give examples of skills in use in contexts relevant to the students; one method of achieving this is by providing students with the opportunity to anonymously submit problems to

the 'problem pool' which is used as a source of example problems for the teacher to work through, providing students opportunity to practise skills in class.

The intervention also teaches coping strategies such as calming and focusing, social skills, overcoming procrastination, problem-solving, and distraction.

### **Target population**

Age of child     Primary school age	
Target population	Children attending primary school

Please note that the information in this section on target population is as **offered/supported by the intervention provider**.

## Theory of change

Why		Who	How	What		
Science-based assumption	Science-based assumption	Science-based assumption	Intervention	Short-term outcomes	Medium-term outcomes	Long-term outcomes
Primary school is an important stage for social and emotional development.	Teaching resilience skills can prevent and reduce mental health issues such as anxiety and depression, as well as improve behaviour, wellbeing, and performance.	Primary school children.	The PRP (UK Implementation) aims to improve children's psychological wellbeing and self- efficacy by promoting flexible and accurate thinking, optimism wedded to reality, and impulse control.	There is an improvement in pupils' depression and anxiety symptoms, school attendance rates, and academic attainment levels.	Children and young people become less at risk of issues such as poor attainment, problem behaviour, and drug use.	Children can make the most of the opportunities available to them in and beyond school.

## **Implementation requirements**

Who is eligible?	Primary school age children.				
How is it delivered?	Penn Resilience Programme (UK Implementation in Primary School) is delivered in 18 sessions of one hours' duration each by one teacher, teaching assistant, or learning mentor, to groups of 6 to 30 students.				
What happens during the intervention?	PRP teaches resilient thinking skills and coping strategies through the use of scenarios, role-play, and quizzes, incorporating a mix of individual, paired, and group activities.				
Who can deliver it?	The practitioner who delivers this intervention is a teacher, teaching assistant, or learning mentor.				
What are the training requirements?	The practitioners have 35 hours of intervention training. Booster training of practitioners is not required.				
How are practitioners supervised?	External supervision of practitioners is not required; however, standard internal line management supervision including the opportunity to discuss teaching the PRP is recommended.				
What are the systems for maintaining fidelity?	<ul> <li>Intervention fidelity is maintained through the following processes:</li> <li>Training manual</li> <li>Other printed material</li> <li>Telephone support as required from a How to Thrive PRP facilitator.</li> </ul>				
Is there a licensing requirement?	Yes				
*Contact details	Contact person: Lucy Bailey Organisation: Bounce Forward Email address: <u>info@bounceforward.com</u> Website: <u>https://bounceforward.com</u> <u>https://ppc.sas.upenn.edu/services/penn-resilience-training</u> *Please note that this information may not be up to date. In this case, please visit the listed intervention website for up to date contact details.				

# Evidence summary

Penn Resilience Programme (UK Implementation in Primary School)'s most rigorous evidence comes from a quasi-experimental design study which was conducted in the UK.

This study identified statistically significant reductions in symptoms of depression and anxiety, consistent with our Level 2 threshold. The intervention has preliminary evidence of improving a child outcome, but we cannot be confident that the intervention caused the improvement.

### Search and review

	Number of studies
Identified in search	6
Studies reviewed	1
Meeting the L2 threshold	1
Meeting the L3 threshold	0
Contributing to the L4 threshold	0
Ineligible	5

# Individual study summary: Study 1

Study 1	
Study design	QED
Country	UK
Sample characteristics	Approximately 175 pupils from four schools, aged 9 to 10 at the start of the intervention



Study 1	
Race, ethnicities, and nationalities	<ul><li>White</li><li>Minority ethnic.</li></ul>
Population risk factors	None reported
Timing	<ul> <li>Baseline</li> <li>Interim (6 months after baseline for 1 intervention and 1 control school, 2 months after baseline for 1 intervention and 1 control school)</li> <li>Post-intervention.</li> </ul>
Child outcomes	<ul><li>Reduced symptoms of anxiety (child report)</li><li>Reduced symptoms of depression (child report).</li></ul>
Other outcomes	None
Study Rating	2
Citation	Challen, A. (2012) Short report on the impact of the 2011 <i>Primary UK Penn</i> <i>Resilience Programme in Hertfordshire schools</i> . Centre for Economic Performance, London School of Economics.

### **Brief summary**

#### **Population characteristics**

This study involved approximately 175 pupils living in the UK, aged 9 to 10 years old at the start of the intervention and attending a school in Hertfordshire.

#### Study design

Approximately 130 students in three Hertfordshire primary schools began PRP lessons when they were in year 5, in January or May 2011. One school did not complete the intervention or participate in follow-up data collection. The remaining intervention schools, with at least 70 pupils, continued implementing PRP until November 2011 and January 2012, and each spent over 25 hours implementing the PRP curriculum. Approximately 100 pupils in two control schools and a control class in a PRP school received the usual curriculum.

There were significant baseline differences between the treatment and intervention condition on measures of depression and anxiety, with pupils in the intervention group demonstrating significantly higher levels of anxiety and depression at baseline.

#### Measurement

Assessments took place at baseline, interim, and post-intervention.

- **Child report** measures included the Mood and Feelings Questionnaire (MFQ) (excluding one item on suicidal ideation), and the Screen for Child Anxiety Related Disorders Scores (SCARED).
- **Teacher report** measures included the Goodman Strengths and Difficulties Questionnaire (Goodman SDQ).

#### **Study retention**

#### Baseline

#### **Child report**

136 pupils completed the MFQ at baseline, representing 66 pupils in the intervention group and 70 pupils in the control group. 137 pupils completed the SCARED at baseline, representing 68 pupils in the intervention group, and 69 pupils in the control group.

#### **Teacher report**

SDQ data was collected for 175 pupils at baseline, representing 72 pupils in the intervention group and 103 pupils in the control group.

#### Interim

#### **Child report**

165 pupils completed the MFQ at the interim timepoint, representing 69 pupils in the intervention group and 96 pupils in the control group. 161 pupils completed the SCARED at the interim timepoint, representing 66 pupils in the intervention group and 95 pupils in the control group.

#### **Teacher report**

SDQ data was collected for 175 pupils at the interim timepoint, representing 72 pupils in the intervention group and 103 pupils in the control group.

#### **Post-intervention**

#### **Child report**

151 pupils completed the MFQ at post-intervention, representing 65 pupils in the intervention group, and 86 pupils in the control group. 150 pupils completed the SCARED at post-intervention, representing 64 pupils in the intervention group and 86 pupils in the control group.

#### **Teacher report**

SDQ data was collected for 166 pupils at post-intervention, representing 72 pupils in the intervention group and 94 pupils in the control group.

#### Results

#### Data-analytic strategy

Difference-in-difference scores were calculated to assess the impact of the intervention on outcome measures, with follow-up regression analyses performed accounting for pupil characteristics, school characteristics, and controlling for each pupil across time (pupil fixed effects). Pupil data was included in analysis if scores were available for at least two timepoints.

#### Findings

The study observed statistically significant reductions in symptoms of anxiety and depression in children in the PRP group, but no differences in behavioural difficulties or prosocial behaviour.

#### Limitations

It is important to note the significant baseline differences between groups on measures of anxiety and depression.

### Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point		
	Child outcomes						
Anxiety	Screen for Child Anxiety Related Disorders Scores (SCARED) (child report)	Not reported	Yes	168	Regression analysis incorporating baseline, interim, and post- intervention		
Depression	Mood and Feelings Questionnaire (MFQ) (excluding one item on suicidal ideation) (child report)	Not reported	Yes	168	Regression analysis incorporating baseline, interim, and post- intervention		

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Behaviour difficulties	Strengths and Difficulties Questionnaire (SDQ) total difficulties score (teacher report)	Not reported	No	178	Regression analysis incorporating baseline, interim, and post- intervention
Prosocial behaviours	Strengths and Difficulties Questionnaire (SDQ) prosocial score (teacher report)	Not reported	No	178	Regression analysis incorporating baseline, interim, and post- intervention

# Other studies

The following studies were identified for this intervention but did not count towards the intervention's overall evidence rating. An intervention receives the same rating as its most robust study or studies.

Chaplin, T. M., Gillham, J. E., Reivich, K., Elkon, A. G., Samuels, B., Freres, D. R., ... Seligman, M. E. (2006) Depression prevention for early adolescent girls: A pilot study of all girls versus co-ed groups. *The Journal of Early Adolescence*. 26 (1), 110–126.

Gillham, J. E., Hamilton, J., Freres, D. R., Patton, K. & Gallop, R. (2006) Preventing depression among early adolescents in the primary care setting: A randomized controlled study of the Penn Resiliency Program. *Journal of Abnormal Child Psychology*. 34 (2), 195–211.

Gillham, J. E., Reivich, K. J., Freres, D. R., Chaplin, T. M., Shatté, A. J., Samuels, B., ... Gallop, R. (2007) School-based prevention of depressive symptoms: A randomized controlled study of the effectiveness and specificity of the Penn Resiliency Program. *Journal of Consulting and Clinical Psychology*. 75 (1), 9–19.

Gillham, J. E., Reivich, K. J., Freres, D. R., Lascher, M., Litzinger, S., Shatté, A. & Seligman, M. E. (2006) School-based prevention of depression and anxiety symptoms in early adolescence: A pilot of a parent intervention component. *School Psychology Quarterly*. 21 (3), 323–348.

Kindt, K., Kleinjan, M., Janssens, J. M. & Scholte, R. H. (2014) Evaluation of a school-based depression prevention program among adolescents from low-income areas: A randomized controlled effectiveness trial. *International Journal of Environmental Research and Public Health*. 11 (5), 5273–5293.

Quayle, D., Dziurawiec, S., Roberts, C., Kane, R. & Ebsworthy, G. (2001) The effect of an optimism and lifeskills program on depressive symptoms in preadolescence. *Behaviour Change*. 18 (4), 194–203.

Roberts, C. M., Kane, R., Bishop, B., Cross, D., Fenton, J., & Hart, B. (2010) The prevention of anxiety and depression in children from disadvantaged schools. *Behaviour Research and Therapy*. 48 (1), 68–73.

Rooney, R., Hassan, S., Kane, R., Roberts, C. M. & Nesa, M. (2013) Reducing depression in 9–10 year old children in low SES schools: A longitudinal universal randomized controlled trial. *Behaviour Research and Therapy*. 51 (12), 845–854.

Rooney, R., Roberts, C., Kane, R., Pike, L., Winsor, A., White, J. & Brown, A. (2006) The prevention of depression in 8- to 9-year-old children: A pilot study. *Australian Journal of Guidance and Counselling*. 16 (1), 76–90.

Tak, Y. R., Lichtwarck-Aschoff, A., Gillham, J. E., Zundert, R. M. & Engels, R. C. (2016) Universal school-based depression prevention 'Op Volle Kracht': A longitudinal cluster randomized controlled trial. *Journal of Abnormal Child Psychology*. 44 (5), 949–961.

University of Hertfordshire. (2013) *The United Kingdom Resilience Programme. The experience of schools in Buckinghamshire: A qualitative research project.* School of Education, University of Hertfordshire.

Yu, D. L. & Seligman, M. E. (2002) Preventing depressive symptoms in Chinese children. *Prevention & Treatment*. 5 (1), 9a.

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**Note on provider involvement:** This provider has agreed to Foundations' terms of reference (or the Early Intervention Foundation's terms of reference), and the assessment has been conducted and published with the full cooperation of the intervention provider.