

Last reviewed: November 2019

Intervention website: www.mindup.org

GUIDEBOOK INTERVENTION INFORMATION SHEET

MindUP 3-7

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	MindUP 3-7 is a schools-based curriculum for children between 3 to 7 years old aimed at supporting social and emotional development. It is delivered by teachers to groups of children over 15 sessions of 20 to 30 minutes duration. These sessions can be taught in 15-week blocks or spread across the school year.
Evidence rating	2
Cost rating	1
Child outcomes	<ul style="list-style-type: none"> Enhancing school achievement and employment <ul style="list-style-type: none"> Improved self-regulatory behaviour Improved literacy.
Child age (population characteristic)	3 to 7 years old
Level of need (population characteristic)	Universal
Race and ethnicities (population characteristic)	<ul style="list-style-type: none"> African American Hispanic White American.

Foundations Guidebook – Intervention information sheet

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Intervention summary	
Type (model characteristic)	Schools-based
Setting (model characteristic)	<ul style="list-style-type: none">• Preschool• Primary school.
Workforce (model characteristic)	Teachers
UK available?	Yes
UK tested?	No

Model description

MindUP is a universal, schools-based social and emotional learning curriculum made available in separate versions for multiple age groups. The version described here is for children aged 3 to 7.

MindUP is delivered by classroom teachers over 15 lessons of 20 to 30 minutes duration, which can either be spread across the school year or taught in a 15-week block. A core part of the intervention is mindfulness breathing practice with focus on a single sound, which is intended to be practised three times a day. The duration of this practice starts at around 30 seconds and increases to around 60 seconds as children gain experience of the technique.

The first nine lessons involve activities aimed at building children's self-regulatory and self-awareness skills through knowledge about brain functionality to help children understand how their mind works. During these first sessions, children are also introduced to mindfulness breathing techniques.

The last five sessions provide children with strategies for increasing their relationship skills. Examples of these strategies include perspective taking, practising optimism, and gratitude lessons.

Each lesson includes interactive activities and a mix of individual and group work. Additionally, children are encouraged to engage in core mindfulness strategies three times a day throughout the curriculum.

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Target population

Age of child	3 to 7 years old
Target population	Preschool and primary school children.

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
The ability to control thoughts, emotions, and behaviours is critical for success at school and in adulthood.	Classroom-based activities are useful in supporting children's ability to concentrate and social and emotional self-regulatory skills.	All school-aged children can benefit from activities aimed at increasing their social and emotional awareness and regulation.	<p>Children learn:</p> <ul style="list-style-type: none"> • Mindfulness techniques aimed at increasing their concentration and awareness capabilities • Strategies for managing their emotions and behaviour • Strategies for interacting positively with others. 	Children learn and can successfully apply mindfulness and emotion regulation techniques in the classroom.	Children demonstrate improved concentration skills and classroom achievement.	<ul style="list-style-type: none"> • Children achieve greater attainment at school • Children are better able to manage their emotions and behaviour in adolescence and adulthood.



Implementation requirements

Who is eligible?	Children aged 3 to 7
How is it delivered?	MindUP 3-7 is delivered in 15 sessions of 20 to 30 minutes' duration each by one practitioner, to groups of children. Children also practise breathing exercises (30 to 60 seconds) in class three times a day.
What happens during the intervention?	Children participate in classes incorporating interaction and both individual and group work, which cover mindfulness-based strategies to focus attention, regulate emotions, and engage in prosocial behaviours. Children are taught age-appropriate neuroscience underpinning the strategies. Children also participate in a regular mindfulness practice.
Who can deliver it?	The practitioner who delivers this intervention is a qualified teacher.
What are the training requirements?	The practitioners have 26 hours of intervention training. Booster training of practitioners is not required.
How are practitioners supervised?	It is recommended that practitioners are supervised by two MindUP consultants with five days of curriculum training, and a MindUP school lead who is a teacher or member of the leadership team at the school offering MindUP.
What are the systems for maintaining fidelity?	Intervention fidelity is maintained through the following processes: <ul style="list-style-type: none"> • Training manual • Other printed material • Other online material • Face-to-face training • Fidelity monitoring • Teachers receive digital decks to teach each of the 15 lessons. Ongoing CPD sessions for MindUP school leads are provided.
Is there a licensing requirement?	No
Contact details	<p>Email address: hello@mindup.org</p> <p>Website: www.mindup.org</p> <p>*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.</p>



Evidence summary

MindUP 3-7's most rigorous evidence comes from a single, quasi-experimental study conducted in the United States which is consistent with Foundations' Level 2 evidence strength threshold.

This study identified statistically significant improvements in teacher-reports of children's attention, planning and memory skills, in particular working memory and planning and organising, and vocabulary and literacy skills.

MindUP 3-7 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	7
Studies reviewed	1
Meeting the L2 threshold	1
Meeting the L3 threshold	0
Contributing to the L4 threshold	0
Ineligible	6

Individual study summary: Study 1

Study 1	
Study design	QED (quasi-experimental design)
Country	United States
Sample characteristics	Participants were 47 pre-kindergarten students (average age 4.54 years) from an urban elementary school in southwestern United States



Study 1	
Race, ethnicities, and nationalities	<ul style="list-style-type: none"> • 9% African American • 85% Hispanic • 6% White American.
Population risk factors	Economic disadvantage (72% qualified for free or reduced-price school meals)
Timing	<ul style="list-style-type: none"> • Baseline • Post-intervention • One year follow-up.
Child outcomes	<ul style="list-style-type: none"> • Improved attention, planning and memory skills • Improved vocabulary and literacy skills.
Other outcomes	None reported
Study Rating	2
Citation	Thierry, K. L., Bryant, H. L., Nobles, S. S. & Norris, K. S. (2016) Two-year impact of a mindfulness-based program on preschoolers' self-regulation and academic performance. <i>Early Education and Development</i> . 27 (6), 805–821.

Brief summary

Population characteristics

The study involved 47 pre-kindergarten children from an urban school in the southwestern United States. The children were primarily Hispanic (85%), and most were from economically disadvantaged backgrounds (72% qualified for free or reduced-price lunch). Their average age was 4.55 years, and gender was nearly evenly split.

Study design

24 pupils receiving the MindUp curriculum were compared to 23 pupils who were not offered the curriculum the previous school year, although some mindfulness techniques (for example, breathing exercises) were already part of the standard classroom curriculum. Both groups were comparable on baseline characteristics.

Measurement

Teachers and parents completed assessments over two consecutive school years during US pre-kindergarten and kindergarten.



Pre-kindergarten assessments

- **Parent report** measures included the normative Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) assessment of executive function.
- **Teacher-based** assessments included the BRIEF-P and the Peabody Picture Vocabulary Test (PPVT).

Kindergarten assessments

- **Child assessments** were conducted via computer with the Child Istation's Indicators of Progress (ISIP) Early Reading Assessment.

Study retention

94% of the children were retained throughout the duration of the study, including 96% (23) of the pupils in the MindUP 3-7 group and 91% (21) in the group not receiving the intervention the previous year.

Results

Data-analytic plan

Multivariate Analysis of Covariance (MANCOVA) was used to compare children's pre- and post-test scores, controlling for group differences and family language.

Findings

At the end of the 1st year of the intervention, MindUp pupils showed statistically significant improvements in teacher reports of working memory and planning and organising, whereas business-as-usual students showed a decline in these areas. No difference between the groups' receptive vocabulary was observed in pre-kindergarten. At the end of kindergarten, MindUp children had higher vocabulary and reading scores than those not receiving the intervention the year previously.

Limitations

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



Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Behaviour inhibition	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) (Parent report)	Not available	No	47	Post-intervention
Emotion control	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) (Parent report)	Not available	No	47	Post-intervention
Cognitive shifting	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – shift (Parent report)	Not available	No	47	Post-intervention
Organisational skills	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) (Parent report)	Not available	No	47	Post-intervention
Working memory	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – (Parent report)	Not available	No	47	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Behaviour inhibition	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) - Inhibition (Teacher report)	Not available	No	47	Post-intervention
Emotional control	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – emotional control (Teacher report)	Not available	No	47	Post-intervention
Cognitive shifting	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – shift (Teacher report)	Not available	No	47	Post-intervention
Organisational skills	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – organisation (Teacher report)	Not available	Yes	47	Post-intervention
Working memory	Behavior Rating Inventory of Executive Function for Preschoolers (BRIEF-P) – (Teacher report)	Not available	Yes	47	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child vocabulary	Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4) (Teacher assessment)	Not available	No	47	Post-intervention
Child literacy and reading skills	Istation's Indicators of Progress (ISIP) Early Reading Assessment (Computer-based assessment)	$d = 0.93$	Yes	42	One year follow-up

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.

De Carvalho, J. S., Marques Pinto, A. & Marôco, J. (2017) Results of a mindfulness-based social-emotional learning program on Portuguese elementary students and teachers: A quasi-experimental study. *Mindfulness*. 8, 337–350. **This reference refers to a quasi-experimental design, conducted in Portugal.**

Harpin, S. B., Rossie, A. & Kim, AK. (2016) Behavioral impacts of a mindfulness pilot intervention for elementary school students. *Education*. 137 (2), 149–156. **This reference refers to a quasi-experimental design, conducted in the USA.**

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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.