

Bilaga till rapport

Främjande av psykiskt välbefinnande hos barn och ungdomar. En fördjupad analys av SEL-programmenkön/ Promoting mental well-being in children and adolescents: In-depth analysis of SEL programmes, rapport 373 (2024)

Bilaga 3 Tabell över inkluderade studier i huvudrapporten

Appendix 3 Table of included studies in the main report

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PATHS-program (15 studier)

Author	Bierman
Year	2008
Country	USA
Ref#	[1]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Preschool
Inclusion criteria	Consent by parents and complete preassessment. If siblings, only one of them was included in
	study.
Follow up	End of intervention, approximately 25 weeks of exposure of 35 week program.
Population	Preschool children, 4 years old
characteristics	Total population:
	Age; Mean (SD): 4 years old
	Sex;(Percent girls): 54%
	Socioeconomic/educations; Mean (SD): Not stated
	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	PATHS - Head Start REDI (Research-based, Developmentally Informed)
program	
Program extent	Number of sessions: 33 lessons
	Intensity: 1 lesson and one extension activity per week
	Duration: One schoolyear, 35 weeks
	Attendance: Not stated
	Implementation: 1.77 (SD: 0.12) lessons and extension activities per week
Participants (n)	22 Classrooms, about 14 children per classroom
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 3 days pre intervention, 1 booster day mid intervention, manuals and kits, weekly
	mentoring support by educational consultants
Comparison program	Common school curriculum (no specific program)
Participants (n)	22 Classrooms, about 14 children per classroom
Drop-outs (n)	Not stated

Program Deliverer	Not applicable
Outcomes	Measurement:
	Social-emotional behaviors
	SCS - Social Competence Scale
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Emotional understanding
	CES - Children's Emotion Skills
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	Additional outcomes:
	Language skills; Expressive One-Word Picture Vocabulary Test Test of Language Development
	(TOLD)
	Emergent literacy skills; Three subscales of Test of Preschool Early Literacy (TOPEL; previously
	labelled the Pre-CTOPP)
	Emotional understanding and social-cognitive skills; Emotion Recognition Questionnaire
	Variation of the Challenging Situations Task
	Social-emotional behaviors; Seven items from the Teacher Observation of Child Adaptation –
	Revised (TOCA– R), Six items from the Preschool Social Behavior Scale – Teacher Form
	Learning engagement at school; Eight-item inventory developed for the study ADHD Rating
	Scale
Risk of bias	Moderate

Author	Conduct Problems Prevention Research Group
Year	2010
Country	USA
Ref#	[2]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary school, Grade 1-3
Inclusion criteria	Students who remained in the same school building from the beginning of Grade 1 to the end of
	Grade 3 and had complete Grades 1–3 information on the Social Health Profile (SHP; CPPRG,
	1998) and sociometric outcomes.
Follow up	During and after intervention
Population	School children, year 1–3
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): Not stated (Elementary School 1-3 Grade is 6-9 years old.)
	Sex; (Percent girls): Not stated
	Socioeconomic/educations: 57 % of children received free or reduced lunch
Participants (n)	
	Total:
	Nashville: 1560
	Pennsylvania: 1696
	Seattle: 1825
Drop-outs (n)	
	Retention:
	Total: 2937
	Nashville: 482 (30.9%)
	Pennsylvania: 1272 (75%)
	Seattle: 759 (41.6%)
Intervention	Fast Track Promoting Alternative Thinking Strategies [PATHS] curriculum and behavioral
program	consultation)
Program extent	Number of sessions:
	Grade 1: 57 lessons
	Grade 2: 46 lessons
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	Grade 3: 48 lessons
	Intensity: 2-3 times per week
	Duration: 3 schoolyears
	Attendance: Not stated
	Implementation:
	Grade 1 lessons (range, SD): 48.2 (13 - 57, 9.7)
	Grade 2 lessons (range, SD): 39.6(22 - 49, 10.2)
	Grade 3 lessons (range, SD): 38.4 (17 – 48, 9.6)
Participants (n)	Classrooms: 190
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: A 2-day training workshop and received wee weekly consultation and observation
	from project staff.
Comparison program	Common school curriculum (no specific program)
Participants (n)	Classrooms: 180
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Cognitive Concentration
	TOCA-R (Teacher Observation of Classroom Adaptation—Revised; Werthamer-Larsson, Kellam,
	& Wheeler, 1991)
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	<u>Measurement:</u>
	Prosocial behavior
	SHP (CPPRG, 1998)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Emotion regulation
	SHP (CPPRG, 1998)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	Additional outcomes:

	By teachers: Authority acceptance (TOCA-R)
	By peers: three sociometric outcomes; aggressive, hyperactive– disruptive, and prosocial
	behaviors
Risk of bias	Moderate

Author	Domitrovich
Year	2007
Country	USA
Ref#	[3]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Head Start preschools
Inclusion criteria	English as primary language, no previous participation in intervention and parental permission.
Follow up	Post-intervention data collected directly after the intervention ended
Population	Preschool children, three and four-year-old
characteristics	Intervention group:
	Age, years; Mean (SD): 4.20 (0.50)
	Sex;(Percent girls): 55%
	Socioeconomic/educations):
	Parent education:
	Less than high school: 15%
	High school or equivalent: 62%
	Greater than high school: 23%
	Control group:
	Age, years; Mean (SD): 4.36 (0.47)
	Sex (Percent girls): 48%
	Socioeconomic/educations):
	Parent education:
	Less than high school: 28%
	High school or equivalent: 47%
	Greater than high school: 25%
Participants:	246
Drop Out:	Post-test sample: 201
Intervention	Promoting Alternative Thinking Strategies (PATHS; Kusché & Greenberg, 1994)
program	
Program extent	Number of sessions: 30
	Intensity: 1 lesson/week
	Duration: Attendance: Implementation: 9 months (one schoolyear)
	Implementation:
	Fidelity (Likert scale 1-4): 3.62
	Generalization (Likert scale 1-4): 3.37
	Openness to consultation (Likert scale 1-4): 3.67
Participants (n)	10 classrooms (number of children not specified on group level)
Drop-outs (n)	number of children not specified on group level
Program Deliverer	Classroom teachers

	Training: two-day training before and one-day booster mid intervention, supervisor contact and
	meetings throughout
Comparison program	Head Start programs for preschool
Participants (n)	10 classrooms (number of children not specified on group level)
Drop-outs (n)	number of children not specified on group level
Program Deliverer	Classroom teachers
Outcomes	Outcome
	Measurement:
	Social emotional skills – Parent-Report of Child
	Head Start Competence Scale (HSCS; Domitrovich, Cortes, & Greenberg, 2001)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	<u>Measurement:</u>
	Emotional knowledge - Direct Child Assessments
	Recognition of Emotion Concepts subtest from the Kusché Emotional Inventory (KEI; Kusché
	1984)
	The Assessment of Children's Emotions Scales (ACES; Schultz et al., 2001)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Social skill - Teacher-Report of Child
	Preschool and Kindergarten Behavior Scales (PKBS; Merrell, 1996)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	Additional outcomes:
	Affective perspective-taking skills; The Denham Puppet Interview (DPI; Denham, 1986)
	Inhibitory control: Day/Night task developed (Diamond & Taylor, 1996), An adaptation of Luria's
	(1966) tapping test with procedures described by Diamond (Diamond & Taylor, 1996).
	Attention: Attention Sustained subtest from the Leiter-Revised Assessment Battery, (Roid &
	Miller, 1997).
	Interpersonal Problem Solving; The problem-solving portion of the Challenging Situations Task
	(CST, Denham, Bouril, & Belouad, 1994)
	Moderate - borderline high
Risk of bias	

Author	Eninger
Year	2021
Country	Sweden
Ref#	[4]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Preschool
Inclusion criteria	Not stated
Follow up	Post intervention, one school year
Population	Preschool children, age 4-5 years
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): 47%
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): 52%
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age, years; Mean (SD): 4.8 (0.5)
	Sex;(Percent girls): 49%
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Preschool/Kindergarten version of the PATHS curriculum was used as the primary intervention
program	(Domitrovich, Greenberg, Cortes, & Kusché, 2004)
Participants (n)	Number of sessions: 33
	Intensity: 15-20 min per week
	Duration: 1 school year
	Attendance: Not stated
	Implementation: The average reported lesson coverage was 14.8 lessons (SD = 11.7), this
	amounts to 45% reported lesson coverage.
Participants (n)	145
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 2-day training led by a certified PATHS trainer, approximately 6 months into the
	program, a 1-day booster session was given by a certified PATHS trainer in
Comparison program	Common school curriculum (no specific program) Wait list controll
Participants (n)	140
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome

Measurement:

Emotional knowledge

The Assessment of Children's Emotional Skills, Schultz et al., 2004

End of intervention, mean (SD)

Intervention group: x

Control group: x

Measurement:

Emotional Awareness and Social Problem Solving

CST, The Challenging Situations Task, Denhamet al., 1994

End of intervention, mean (SD)

Intervention group: x

Control group: x

Measurement:

Prosocial/communication skills, emotional selfregulation, academic skills

Social Competence Scale (Sorensen and Dodge, 2016); PKBS (Preschool and Kindergarten

Behavior Scales; Merrell, 1996)

End of intervention, mean (SD)

Intervention group: x

Control group: x

Comments

Additional outcomes:

Inhibitory control 1 (EF1)—The Knock and Tap task is a sub-test of the NEPSY (Korkman et al., 1998)

Inhibitory control 2 (EF2)—An adapted version of the Day-Night task (Gerstadt et al., 1994)

Working memory (EF3)—The Word span task is an index of working memory (WM) which is in

turn an aspect of EF (Tillman et al., 2008).

 $Teacher\ rating-social\ cooperation,\ interaction,\ and\ independence-Preschool\ and$

Kindergarten Behavior Scales Frontiers in Psychology | www.frontiersin.org 5 July 2021 |

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(PKBS; Merrell, 1996)

Observer rating during child assessment -Task orientation — Task Orientation Scale. A subset of

items from a Task Orientation scale, adapted from Smith-Donald et al. (2007)

Teacher rating—internalizing and externalizing behavior— Preschool and Kindergarten Behavior

Scales (PKBS; Merrell, 1996)

Teacher rating—Inattention, hyperactivity/impulsivity—ADHD Rating Scale–IV (DuPaul et al.,

1998).

Risk of bias

Moderate

Author	Fishbein
Year	2016
Country	USA
Ref#	[5]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary school, kindergarten
ŭ	Randomization of four schools, 2 intervention schools and 2 control schools.
Inclusion criteria	Children attending kindergarten in selected schools and parents' consent
Follow up	End of intervention, about 6 months
Population	Kindergarten
characteristics	Intervention group 1, School characteristics:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Free and Reduced Meal Service (FARMS) (SY-09) School wide
	Free Lunch: 329, 84.4% (calculated)
	Reduced Lunch: 38, 9.7% (calculated)
	Paid Lunch: 23, 5.9% (calculated)
	Intervention group 2, School characteristics:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Free and Reduced Meal Service (FARMS) (SY-09) School wide
	Free Lunch: 475, 88% (calculated)
	Reduced Lunch: 55, 10% (calculated)
	Paid Lunch: 11, 2% (calculated)
	Control group 1, School characteristics:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Free and Reduced Meal Service (FARMS) (SY-09) School wide
	Free Lunch: 355, 89.4% (calculated)
	Reduced Lunch: 14, 3.5% (calculated)
	Paid Lunch: 28, 7.1% (calculated)
	Control group 2, School characteristics:
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	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Free and Reduced Meal Service (FARMS) (SY-09) School wide
	Free Lunch 548, 86.6% (calculated)
	Reduced Lunch 40, 6.3% (calculated)
	Paid Lunch 45, 7.1% (calculated)
Intervention	Preschool/Kindergarten version of the PATHS curriculum was used as the primary intervention
program	(Domitrovich, Greenberg, Cortes, & Kusché, 2004)
Participants (n)	Number of sessions: 44
	Intensity: 20 min 2 times/week
	Duration: 6 months
	Attendance: Not stated
	Implementation: 80 % (for both groups)
	<u>Group 1:</u>
Participants (n)	Not stated
Drop-outs (n)	Not stated
	<u>Group 2:</u>
Participants (n)	Not stated
Drop-outs (n)	Not stated
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Program Deliverer	Classroom teachers
	Training two-day training workshop shortly before intervention and weekly consultation with
	experienced PATH coordinator.
Comparison program	Common school curriculum (no specific program)
companison program	common sensor carried am (no specific program)
	Control group 1:
Participants (n)	Not stated
Drop-outs (n)	Not stated Not stated
Drop-outs (II)	Not stated
	Control group 2:
Participants (n)	Not stated
Drop-outs (n)	Not stated
Dunamana Dallarana	Net applicable
Program Deliverer	Not applicable Contraction of the second sec
Outcomes	Outcome
	Measurement:
	Total Social Competence

Social Competence Scale (Conduct Problems Prevention Research Group [CPPRG], 1995) End of intervention, mean (SD) Intervention group: x Control group: x Measurement: **Emotion Regulation** Social Competence Scale (Conduct Problems Prevention Research Group [CPPRG], 1995) End of intervention, mean (SD) Intervention group: x Control group: x Measurement: Prosocial Behavior Social Competence Scale (Conduct Problems Prevention Research Group [CPPRG], 1995) End of intervention, mean (SD) Intervention group: x Control group: x **Comments** Additional outcomes: Aggression Internalizing Child Activity Scale; Impulsivity, Inattention, Total Student - Teacher Relationship Scale; Closeness, Conflict, Total Peer Relationship Questionnaire Total Skill Total Peer nominations: Liking difference, Negative nominations, Play differences, Positive nominations Risk of bias Moderate

Author	Hamre
Year	2012
Country	USA
Ref #	[6]
	Randomized controlled trial
Study design	
Study protocol	No information
Setting Inclusion criteria	State-funded prekindergarten program within a single state that served at-risk children
inclusion criteria	Teacher participated in the MTP program. Schools with more than one prekindergarten
Fallow we	classroom. Parental consent.
Follow up	End of intervention Displaint degree to a children
Population	Prekindergarten children
characteristics	Intervention group PATHS-High:
	Age; Mean (SD) years: 4.38 (0.31)
	Sex;(Percent girls): 53
	Socioeconomic/educations; Mean (SD):
	Maternal education: 12.69 years (2.26)
	Poor: 69% (13)
	(Families defined as living "in poverty" with 150% of the federal poverty guidelines as threshold)
	Intervention group PATHS-Low:
	Age; Mean (SD) years: 4.40 (0.30)
	Sex;(Percent girls): 50
	Socioeconomic/educations; Mean (SD):
	Maternal education: 12.83 years (1.81)
	Poor: 67% (21)
	(Families defined as living "in poverty" with 150% of the federal poverty guidelines as threshold)
	Control group:
	Age; Mean (SD) years: 4.39 (032)
	Sex (Percent girls): 51
	Socioeconomic/educations; Mean (SD):
	Maternal education: 12.64 years (1.93)
	Poor: 72% (20)
	(Families defined as living "in poverty" with 150% of the federal poverty guidelines as threshold)
Intervention	PATHS-High
program	MTP-Literacy and Language (MTP-LL) activities
Program extent	Number of sessions: 36
	Intensity: 15-20 min 1 time/week

	Duration: Schoolyear
	Attendance: Not stated
	Implementation, average number of weekly lessons (3 = once a week): 3.04 (0.75)
Participants (n)	83 classrooms, 354 students
Drop-outs (n)	Not stated
Diop cate (ii)	
Program Deliverer	Classroom teachers
	Training: A 2-day workshop prior to start of schoolyear. Preschool PATHS, access to the Web-
	based videos, and access to a consultant who focused on helping improve implementation of the
	curricula through a focus on interactions aligned with the CLASS. Received a laptop to ensure
	equal access to the web-based resources.
Intervention	PATHS-Low
program	MTP-Literacy and Language (MTP-LL) activities
Program extent	Number of sessions: 36
	Intensity: 15-20 min 1 time/week
	Duration: Schoolyear
	Attendance: Not stated
	Implementation, average number of weekly lessons (3 = once a week): 2.97 (0.85)
Participants (n)	88 classrooms, 384 students
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 1.5-day workshop prior to start of schoolyear. Preschool PATHS and access to the
	Web-based videos. Received a laptop to ensure equal access to the web-based resources.
Comparison program	Common school curriculum (no specific program) except MTP-Literacy and Language (MTP-LL)
	activities
Participants (n)	58 classrooms, 242 students
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 2-hour workshop prior to start of schoolyear. No special training or support during
	schoolyear.
Outcomes	Outcome
	<u>Measurement</u>
	Teacher perceptions of social competencies
	Teacher-Child Rating Scale (TCRS; Hightower et al., 1986)
	End of intervention, mean (SD)
	Intervention group:
	Control group:

Comments	Additional outcomes:
	Student-Teacher Relationship Scale (STRS; Pianta, 2001).
Risk of bias	Moderate

Author	Hertzig
Year	2003
Country	USA
Ref#	[7]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary schools
Inclusion criteria	Schools in high-risk neighborhoods/towns (estimated rates of delinquency and juvenile arrests in
	the neighborhoods) with faculty consent of participation. Within those children were included
	with parents' consent.
Follow up	End of intervention
Population	School children, 1 st grade
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Receiving free or reduced lunch:
	Durham: 83.8 % (12.5)
	Nashville: 78.5% (12.4)
	Rural PA: 39.6% (16.4)
	Seattle: 45.4% (7.0)
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	Receiving free or reduced lunch:
	Durham: 75.5 % (21.2)
	Nashville: 77.0% (10.9)
	Rural PA: 39.1% (13.4)
	Seattle: 46.6% (14.2)
Participants:	7560
Drop Out:	Not stated
Intervention	The Fast-Track PATHS curriculum
program	
Program extent	Number of sessions: 57
	Intensity: 20-30 min 2-3 times/week
	Duration: 9 months (1 schoolyear)
	Attendance:
	Implementation: The mean number of lessons taught by was 48.2 (SD = 9.7, range = 13-57).

Participants (n)	198 classrooms
Drop-outs (n)	
Program Deliverer	Classroom teachers
	Training: 2.5-day training workshop and weekly consultation from project staff.
Comparison program	Common school curriculum (no specific program)
Participants (n)	180 classrooms
Drop-outs (n)	
Program Deliverer	Not applicable
Outcomes	Measurement:
	Emotion Regulation
	Teacher Observation of Classroom Adaptation—Revised (TOCA-R; Werthamer-Larsson, Kellam,
	& Wheeler, 1991)
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Prosocial behavior
	Social Health Profile (SHP; CPPRG, 1999b
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Sociometric assessments through peer nominations.
	Classroom Atmosphere by independent observers.
Risk of bias	Moderate

Author Year 2016 Country UK Ref # [8]; associated with [9]; [10]; [11] Study design Randomized controlled trial No information Setting Inclusion criteria Mainstream, state-maintained institutions, providing education for children from the ages of 4– 11 years. Consent from the schools' Head Teachers. Child assent and parental opt-out consent
Country Ref # [8]; associated with [9]; [10]; [11] Study design Randomized controlled trial No information Setting Inclusion criteria Mainstream, state-maintained institutions, providing education for children from the ages of 4– 11 years. Consent from the schools' Head Teachers. Child assent and parental opt-out consent
Ref # [8]; associated with [9]; [10]; [11] Study design Randomized controlled trial Study protocol No information Setting Inclusion criteria Mainstream, state-maintained institutions, providing education for children from the ages of 4– 11 years. Consent from the schools' Head Teachers. Child assent and parental opt-out consent
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Study protocol No information Setting Inclusion criteria Mainstream, state-maintained institutions, providing education for children from the ages of 4– 11 years. Consent from the schools' Head Teachers. Child assent and parental opt-out consent
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11 years. Consent from the schools' Head Teachers. Child assent and parental opt-out consent
were also sought.
Follow up End of intervention
Population School children, aged 7-9 years at baseline
characteristics Intervention group:
Age; Mean (SD): Not stated
Sex;(Percent girls): 50.5
Socioeconomic/educations; Mean (SD):
Free school meals (percentage): 31.7
Control group:
Age; Mean (SD): Not stated
Sex (Percent girls): 47.1
Socioeconomic/educations; Mean (SD):
Free school meals (percentage): 29.6
Intervention PATHS
program
Program extent Number of sessions: 40
Intensity: 30-40min 2 sessions/week
Duration: 2 schoolyears
Attendance % (SD): Not stated
Implementation % (SD): Not stated
Participants (n) 2340 (teachers report)
Drop-outs (n) 2073 (teachers report)
Program Deliverer Classroom teachers
Training: 1 full day of training before program start, half day follow up four months later.On-
going technical support and assistance.
Comparison program Common school curriculum (no specific program)
Participants (n) 2176 (teachers report)
Drop-outs (n) 1244 (teachers report)
Program Deliverer Not applicable
Outcomes Outcome
Measurement:

Social Emotional competence Social and Emotional Competence Change Index (SECCI) End of intervention, mean (SD) Intervention group: Control group: Measurement: Social Emotional competence: Strengths and Difficulties Questionnaire (SDQ) Pro-Social Behavior subscale End of intervention, mean (SD) Intervention group: Control group: Measurement: Social Emotional competence: Social Skills Improvement System subscales (SSIS), End of intervention, mean (SD) Intervention group: Control group: Comments Risk of bias Low

Author	Humphrey
Year	2018
Country	UK
Ref #	[9]; associated with: [8]; [10]; [11]
Study design	Randomized controlled trial
Study design	No information
Setting Inclusion criteria	Regular classrooms in Primary schools
	Consent from Schools, Parents and the children.
Follow up	End of intervention, after 2 schoolyears
Population	School children, year 3–5 (aged 7-9 years)
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 50.1
	Socioeconomic/educations:
	Free school meals (percentage): 31.3
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 47.0
	Socioeconomic/educations:
	Free school meals (percentage): 27.4
Intervention	PATHS
program	
Program extent	Number of sessions: 40
	Intensity: 30-40 min twice weekly
	Duration: 2 schoolyears
	Attendance % (SD): 91.34 (1.06)
	Implementation % (SD): 53.06 (20.35)
Participants (n)	2294
Drop-outs (n)	Post intervention participants: 2223
Program Deliverer	Classroom teachers
	Training: 1 day prior to program start and 1 half day follow up training
Comparison program	Common school curriculum (no specific program)
Participants (n)	2106
Drop-outs (n)	Post intervention participants: 1665
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Psychological well-being (Health Related Quality of Life - HRQoL)
	Self-report version of the Kidscreen-27 (KS27)
	End of intervention, mean (SD)
Program Deliverer	Not applicable Outcome Measurement: Psychological well-being (Health Related Quality of Life - HRQoL) Self-report version of the Kidscreen-27 (KS27)

	Intervention group:
	Control group:
	Measurement:
	Social skills
	SSIS
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Pro-social behavior
	SDQ
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional Outcomes:
	Mental health difficulties, SDQ: Internalising symptoms, Externalising problems
	HRQoL, KS27: Social support and peers, School environment
	QALYs: CHU-9D
Risk of bias	Moderate

Author	lalongo
Year	2019
Country	USA
Ref #	[12]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary schools
Inclusion criteria	Written parental consent.
Follow up	End of intervention, after 1 schoolyear.
Population	School children, year K–5
characteristics	Intervention group 1 (PATHS + PAX):
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 51.0
	Socioeconomic/educations; (percentage):
	Free and reduced Lunch Status (FARMS): 87.1
	Intervention group 2 (PAX):
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 49.1
	Socioeconomic/educations; (percentage):
	Free and reduced Lunch Status (FARMS): 83.4
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 49.0
	Socioeconomic/educations; (percentage):
	Free and reduced Lunch Status (FARMS): 89.0
Intervention	The PAX Good Behavior Game (PAX GBG) and Promoting Alternative Thinking Strategies
program 1	(PATHS, Greenberg et al., 1995).
Program extent	Pax Games:
	Number of sessions:
	Intensity: Not stated Duration: 31 weeks (school/year)
	Duration: 31 weeks (schoolyear) Attendance % (SD):
	Implementation number of sessions (SD): 154.22 (SD = 106.4), 1583.43 min (SD = 1482.14) total
	PATHS lessons:
	Number of sessions: Not stated
	Intensity: Not stated
	Duration: 31 weeks (schoolyear)
	Attendance % (SD):

	Implementation % (SD): 71.80% (S 0.27) .
Participants (n)	1562
Drop-outs (n)	139
Program Deliverer	Classroom teachers
	Training: 1 day group-based training before program start, and half a day follow up after three
	months, for each intervention program.
Intervention	The PAX Good Behavior Game (PAX GBG).
program 2	
Program extent	Number of sessions:
	Intensity: Not stated
	Duration: 31 weeks (schoolyear)
	Attendance % (SD):
	Implementation number of sessions (SD): 150.18 (SD = 94.92), 1431.84 min (SD = 1298.38) total
Participants (n)	1994
Drop-outs (n)	124
Program Deliverer	Classroom teachers
	Training: 1 day group-based training pre-program start, and half-day follow up after 3 months.
Comparison program	Common school curriculum (no specific program)
Participants (n)	2055
Drop-outs (n)	168
Program Deliverer	Not applicable
Outcomes	<u>Measurement:</u>
	Social Competence
	The Social Health Profile Social Competence Scale (SHP SCS, CPPRG, 1999).
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Emotion Regulation
	The Social Health Profile Social Competence Scale (SHP SCS, CPPRG, 1999).
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
Diele of his	Teacher Observation of Classroom Adaptation-Revised (TOCA-R).
Risk of bias	Low

Author	Novak
Year	2017
	Croatia
Country Ref #	[13]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Informed consent from parents.
Follow up	End of intervention, after 1,5 years
Population	School children, mid first year to mid second year, about 7 years old at beginning of study
characteristics	Total Population:
	Age; Mean (SD): 7 years
	Sex;(Percent girls): 47%
	Socioeconomic/educations; Mean (SD): Not stated
	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	PATHS (Promoting Alternative Thinking Strategies; Kusché & Greenberg, 1994)
program	
Program extent	Number of sessions: 63
	Intensity: 2 per week
	Duration: about 1 schoolyear (mid 1st to mid 2nd grade)
	Attendance % (SD):
	Implementation % (SD):
Participants (n)	280
Drop-outs (n)	265
Program Deliverer	Classroom teachers
	Training: 2 days of instruction before and between first and second grades.
Comparison program	Common school curriculum (no specific program)
Participants (n)	288
Drop-outs (n)	281
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Prosocial behavior

	Social Competence Scale
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Emotion regulation
	Social Competence Scale
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Learning behavior, School Readiness Questionnaire
	Inattention, ADHD Rating Scale
	Hyperactivity, ADHD Rating Scale
	Oppositional behavior, Teacher Observation of Classroom Adaptation—Revised
	Physical aggression, Teacher Observation of Classroom Adaptation—Revised Peer problems
	Withdrawn/depressed behavior, Strengths and Difficulties Questionnaire
Risk of bias	Moderate

Author	Panayiotou
Year	2020
Country	England
Ref#	[11]; associated with [9]; [8]; [10]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary schools
Inclusion criteria	Child participation required a lack of parental and child opt-out.
Follow up	End of intervention, after 2 schoolyears.
Population	School children year 3-5, aged 7-9 years
characteristics	Intervention group:
	Age; Mean (SD): 8.12 (0.88)
	Sex;(Percent girls): 50.1
	Socioeconomic/educations; Mean (SD):
	Not stated on group level
	Control group:
	Age; Mean (SD): 8.12 (0.86)
	Sex (Percent girls): 53
	Socioeconomic/educations; Mean (SD):
	Not stated on group level
Intervention	Promoting Alternative Thinking Strategies [PATHS] curriculum; Kusche & Greenberg, 1994
program	
Program extent	Number of sessions:40
	Intensity: 30-40 min 2 times/week
	Duration: 2 schoolyears
	Attendance:
	Implementation: Jag förstår ej hur det ska redovisas
Participants (n)	2294
Drop-outs (n)	71
Program Deliverer	Classroom teachers
	Training:.teachers received a full day of initial training with a half-day follow-up 4 months later
Comparison program	Common school curriculum (no specific program)
Participants (n)	2106
Drop-outs (n)	441
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Psychological wellbeing, peers and social support, and school environment
	Child self-report version of the Kidscreen-27 (KS27; Ravens-Sieberer et al., 2007)
	End of intervention, mean (SD)
	End of intervention, mean (SD)

	Intervention group:
	Control group:
Comments	
Risk of bias	Moderate

Author	Seyhan
Year	2019
Country	Turkey
Ref#	[14]
Study design	Quasi-experimental study
Study protocol	No information
Setting	Preschool
Inclusion criteria	Parental consent
Follow up	End of intervention, 9 weeks
Population	Preschool children, aged 48–72 months
characteristics	
Cilaracteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 47
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 48
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Preschool Promoting Alternative Thinking Strategies (PATHS) Curriculum (Domitrovich,
program	Greenberg, Kusche, & Cortes, 1999)
Program extent	Number of sessions: 33
	Intensity: 15-20 min
	Duration: 9 weeks
	Attendance % (SD):
	Implementation % (SD):
Participants (n)	285
Drop-outs (n)	N/A
Program Deliverer	Classroom teachers
	Training: teachers had previously received training in Preschool PATHS, received retraining
	by the research team in the translated Turkish version of PATHS before program start. Weekly
	implementation support meetings.
Comparison program	Common school curriculum (no specific program)
Participants (n)	280
Drop-outs (n)	N/A
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social competence
	Head Start Competence Scale (HSCS) (Domitrovich et al., 2007)
	End of intervention, mean (SD)

	Intervention group:
	Control group:
Comments	Additional outcomes:
	Classroom atmosphere; Teaching Style Rating Scale (TSRS); (Domitrovich, Cortes, & Greenberg,
	2000); Classroom Atmosphere Rating Scale (CARS); (Conduct Problems Prevention Research
	Group, 1999)
	Relationships between children and teacher; Student–Teacher Relationship Scale (STRS); (Pianta,
	1996), Semi-Structured Play Interview (SSPI); (Pianta & Hamre, 2001)
Risk of bias	Moderate

Year 2020 Country UK Ref # [10]; associated with [9]; [8]; [11] Study design Randomized controlled trial Study protocol No information	
Ref # [10]; associated with [9]; [8]; [11] Study design Randomized controlled trial	
Study design Randomized controlled trial	
Study protocol No information	
Setting Regular classrooms in Primary Schools	
Inclusion criteria Parental consent	
Follow up 12- and 24-month follow-ups.	
Population School children, year 1–5	
characteristics Intervention group:	
Age; Mean (SD): Not stated	
Sex;(Percent girls): 49.9	
Socioeconomic/educations; Mean (SD):	
% of pupils eligible for free school meals: 32.4	
Control group:	
Age; Mean (SD): Not stated	
Sex (Percent girls): 53	
Socioeconomic/educations; Mean (SD):	
% of pupils eligible for free school meals: 28.5	
Intervention Promoting Alternative Thinking Strategies (PATHS) curriculum.	
program	
Program extent Number of sessions: 40 lessons	
Intensity: 30-40 min 2 times/week	
Duration: 2 schoolyears	
Attendance % (SD):	
Implementation % (SD):	
Participants (n) 2676	
Drop-outs (n) Not stated	
Program Deliverer Classroom teachers	
Training: Full day of initial group training prior to the schoolyear, with a half-day follow-	up 4
months later.	
Comparison program Common school curriculum (no specific program)	
Participants (n) 2542	
Drop-outs (n) Not stated	
Program Deliverer Not applicable	
Outcomes Outcome	
<u>Measurement:</u>	
Health-Related Quality of Life (HRQoL)	
Child Health Utility Nine-Dimension (CHU-9D)	

	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Intervention Costs
Risk of bias	Moderate

SEL-program (35 studier)

Author	Agley
Year	2021
Country	USA
Ref#	[15]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Public and charter schools
Inclusion criteria	Agreement from school and parents.
Follow up	14-27 days after intervention (planned
Population	School children, fourth, seventh, and tenth grades
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 47.1
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 48.2
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	ACT Out! Social Issue Theater
program	
Program extent	Number of sessions: 1
	Intensity: 1 session in total
	Duration: 1 hour
	Attendance % (SD): Not stated
	Implementation % (SD): 96.5
Participants (n)	39 Classrooms, 774 students
Drop-outs (n)	6 Classrooms, 177 students
Program Deliverer	Members of the CMP professional theatre company
	Training: No information
Comparison program	Common school curriculum (no specific program)
Participants (n)	37 classrooms, 763 students
Drop-outs (n)	5 classrooms, 124 students
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social-emotional competence:
	Delaware Social-Emotional Competency Scale (DSECS-S)
	Baseline, mean (SD)

Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Social-emotional competence subdomains (Social awareness, emotion regulation, relationship skills, and responsible decision-making) Washoe County School District Social-Emotional Competency Assessment (WCSD-SECA) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Comments Additional outcomes: Bullying behavior and experiences of being bullied (victimization): Bullying and Cyberbullying Scale for Adolescents (BCS-A) Receptiveness to the intervention and prespecified subanalyses of social-emotional competence: By questions to assess the degree to which they found the intervention to be enjoyable, interesting, a waste of time, boring, understandable, difficult to understand, believable, important, and helpful. Risk of bias Moderate

Author	Allen
Year	2020
Country	USA
Ref #	[16]
Study design	Randomized controlled trial
Study protocol	No information
Setting	High school
Inclusion criteria	Informed consent from parents and assent from students was obtained prior to randomization
Follow up	Prior to the beginning of the intervention, in the week immediately following completion (12
	weeks) of the intervention, and 4 months following completion of the intervention.
Population	High school children, year 10
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 50.3 %
	Socioeconomic/educations; Mean (SD):
	Parental education (1 = less than high school to 4 = college graduate or higher): 3.02 (1.02)
	(Free or reduced school lunch for total population: 67%, not specified on group level)
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 52.5
	Socioeconomic/educations; Mean (SD):
	 Parental education (1 = less than high school to 4 = college graduate or higher): 3.04 (1.02)
	(Free or reduced school lunch for total population: 67%, not specified on group level)
Intervention	The Connection Project
program	
Program extent	Number of sessions: 12
	Intensity: One 45-60 min sessions / week
	Duration: 12 weeks
	Attendance Mean (SD): 9.8 (2.7)
	Implementation:
Participants (n)	322
Drop-outs (n)	End of intervention: 54
· · · · · · · · · · · · · · · · ·	4 months follow up: 24
Program Deliverer	Classroom teachers
. rogram benverer	Training: 2-day workshop led by the authors. Weekly or biweekly supervision via video
	conference was then provided.
Comparison program	
Comparison program	Common school curriculum (no specific program)
Participants (n)	288
Drop-outs (n)	End of intervention: 38

	4 months follow up: 29
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Coping via social support
	Self-Report Coping Scale (Causey & Dubow, 1992
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Degree of their depressive symptoms; Child Depression Inventory (Kovacs & Beck, 1977)
	Comfort with classmates and Peer-rated approachability; rate each student in
	terms of how comfortable they felt around them, with ratings ranging from 1 = I always keep my
	guard up to 5 = I'm always ope.
	Classroom academic engagement; 10-item scale that tapped student effort, attention, and
	persistence while initiating and participating in learning activities (Skinner, Furrer, Marchand, &
	Kindermann, 2008; Skinner, Zimmer-Gembeck, & Connell, 1998)
Risk of bias	Moderate

Author	An
Year	2021
Country	China
Ref #	[17]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary public school
Inclusion criteria	Informed consent from parents/guardians
Follow up	Post intervention, 2 months
Population	School children, year 5
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age, years; Mean (SD): 11-12
	Sex; (Percent girls): 51.83%
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	SEL programs (Durlak et al., 2011)
program	
Participants (n)	Number of sessions: 8
	Intensity: 40 min session weekly
	Duration: 8 week
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	111
Drop-outs (n)	5
Program Deliverer	Classroom teachers
	Training: not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	53
Drop-outs (n)	7
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Emotional intelligence, ability to perceive, understand, and manage emotions

	The Emotional Intelligence Questionnaire (Liu & Zou, 2010)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	Additional outcomes:
	Class environment; The Class Environment Questionnaire, (Jiang, 2004)
	Students perception of the SEL intervention; The survey contained two open-ended questions: (1)
	How do you feel about this curriculum? and (2) What have you learned from the curriculum?
Risk of bias	Moderate

Author	Ashdown
Year	2012
Country	Australia
Ref#	[18]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Preparatory school,
Inclusion criteria	Not stated
Follow up	End of intervention, 10 weeks.
Population	Prep school and grade 1 classes. Preparatory classes were 5-year- olds
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	The participating school had been identified as being of 'low socioeconomic status' according to
	the Catholic Education Office (Melbourne)
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD):
	The participating school had been identified as being of 'low socioeconomic status' according to
	the Catholic Education Office (Melbourne)
	Total population
	Age; Mean (SD): Not stated
	Sex (Percent girls): 45%
Participants:	4 teachers, 100 students
Participants: Drop Out:	1 student
Intervention	You Can Do It! Early Childhood Education Program
program	Fou can bolt: Early Chilahood Education Frogram
Program extent	Number of sessions: 90
. rogram entent	Intensity: 20 min, 3 sessions per week
	Duration: 10 weeks per term for 3 terms, (1 school year is 4 terms)
	Attendance: Not stated
	Implementation: neither teacher closely followed the scripted lesson plans in the YCDI
	curriculum manual
Participants (n)	Not stated
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 2 hour development session

Comparison program	Common school curriculum (no specific program)
Participants (n)	Not stated
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social-emotional well-being
	ACER Well-being Survey (Teacher Form—Early Years) (Bernard et al. 2009), Part 1
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Outcome
	Measurement:
	Total social-emotional competence
	ACER Well-being Survey (Teacher Form—Early Years) (Bernard et al. 2009), Part 2
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Outcome
	<u>Measurement:</u>
	Total social skills
	Social Skills Rating System—Teacher Form (SSRS-T) (Gresham and Elliot 1990)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Problem Behaviors; Social Skills Rating System—Teacher Form (SSRS-T) (Gresham and Elliot
	1990)
	Independent Text Reading Level

	Risk of bias	Moderate	١
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Author	Brackett
Year	2012
Country	USA
Ref#	[19]
Study design	Randomized controlled trial. Quasi-experimental design, pilot effectiveness study.
Study protocol	No information
Setting	School
Inclusion criteria	parental permission
Follow up	Six weeks after the start of the academic year and six week prior to the end of the academic
Tollow up	year. (End of intervention)
Population	School children, year 5-6
characteristics	
Cital actel istics	Intervention group: Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated Socioeconomic/educations: Mean (SD): Not stated
	Socioeconomic/educations; Mean (SD): Not stated Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated Secioespappis (advisations: Magn (SD): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population
	Age; Mean (SD): 11 years (1)
	Sex (Percent girls): 55% Socioeconomic/educations; Mean (SD): ≤7%
	Socioeconomic, educations, inean (30). 27/8
Participants:	273 students from 15 classrooms
Drop Out:	Not stated
Intervention	RULER Feeling Words Curriculum
program	3
Program extent	Number of sessions: 72 lessons, 15 units
	Intensity:
	Duration:
	Attendance: Not stated
	Implementation: all teachers had completed at least 12 of 15 units
Participants (n)	155
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: three-hour overview of emotional literacy. Highly interactive training that lasted one
	and a half days (approximately 9 h).
Comparison program	Common school curriculum (no specific program)
Participants (n)	118
	I

Drop-outs (n)	Not stated
Program Deliverer	Training: three-hour overview of emotional literacy.
Outcomes	Outcome
	Measurement:
	Social and emotional competence
	Behavioral Assessment System for Children (BASC)
	Teacher evaluation
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Adaptability
	Teacher evaluation
	Behavioral Assessment System for Children (BASC), Subscale for adaptability
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Student grades, report cards
Risk of bias	Moderate

Author	Cefai
Year	2014
Country	Malta
Ref#	[20]
Study design	Semi- Randomized controlled trial, pilot study
Study protocol	No information
Setting	Primary school
Inclusion criteria	Parental consent was obtained for all the students who participated in the study.
Follow up	Post-intervention, 10 weeks
Population	School children, year 1–5
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 46%
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Circle time (CT)
program	
Program extent	Number of sessions: 10
	Intensity: One 30-45 min session per week
	Duration: 10 weeks
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	37
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: One session of training, offered mentoring during implementation process (no teacher
	made use of this service)
Comparison program	Common school curriculum (no specific program)
Participants (n)	38
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome

	Measurement:
	Prosocial behavior
	SDQ, Teacher evaluation
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
Risk of bias	Moderate - borderline high

Author	Cejudo
Year	2020
Country Ref #	Spain [21]
	Quasi-experimental design Randomized Controlled Trial
Study design	
Study protocol	No information
Setting Inclusion criteria	High school
	Participants' parents gave informed written consent and adolescents gave verbal assent.
Follow up	After intervention, end of school year
Population	Middle and high school students
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Intervention group:
	Age, years; Mean (SD): 13.82 (1.62)
	Sex; (Percent girls): 53
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Social and Emotional Learning (SEL) by "Aislados" Program (2016 by the Interdisciplinary
program	Service of Attention to Drug Dependencies (in Spanish, SIAD))
Participants (n)	Number of sessions: 28
	Intensity: 55 minutes weekly
	Duration: 1 school year
	Attendance: students not attending at least 75% of the intervention programme sessions were
	excluded
	Implementation: Not stated
Participants (n)	97
Drop-outs (n)	Not stated
Program Deliverer	Secondary teacher
	Training: 10-h workshop about the implementation of the program, weekly coordination
	meetings and explanations as requested.
Comparison program	Common school curriculum (no specific program)
Participants (n)	90
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome

Measurement:

Subjective Health-Related Quality of Life (HRQL) and well-being

Health-Related Quality of Life Questionnaire for Children and Young People (KIDSCREEN)

Kidscreen-10 Index

End of intervention, mean (SD)

Intervention group: x

Control group: x

Measurement:

Satisfaction with Life

Satisfaction with Life Scale (SWLS)

End of intervention, mean (SD)

Intervention group: x

Control group: x

Measurement:

Positive and Negative Emotions

Positive and Negative Affect Schedule (PANAS)

End of intervention, mean (SD)

Intervention group: \boldsymbol{x}

Control group: x

<u>Measurement:</u>

Emotional intelligence,

Trait Emotional Intelligence Questionnaire Adolescents Short Form (TEIQue-ASF)

End of intervention, mean (SD)

 ${\it Intervention\ group:}\ x$

Control group: x

Comments

Risk of bias

Moderate

Author	Coelho
Year	2015
Country	Portugal
Ref #	[22]associated with [23]
Study design	quasi-experimental, pre-test, post-test and follow-up design with a control group.
Study protocol	Not stated
Setting	Middle school
Inclusion criteria	All schools used passive informed consent,
Follow up	Pre-test, Post-test and follow up 6 months after program end
Population	School children, year 7–9
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 47%
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 44%
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 13.40 (1.32)
Intervention	Positive Attitude
program	
Program extent	Number of sessions: 12
	Intensity: One lessons per week, 60 min per session
	Duration: Not stated
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	855
Drop-outs (n)	418
Program Deliverer	Educational psychologists
	Training: At least three years of experience in the Project
Comparison program	Common school curriculum (no specific program)
Participants (n)	236
Drop-outs (n)	114
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Socio-emotional competence, Teacher evaluated

Competences Evaluation Questionnaire e Teacher's version (QACSE-P; Coelho, Sousa, &

Marchante, 2014)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Measurement:

Socio-emotional competence, pupils' own assessment

Portuguese version (Ferreira & Rocha, 2004) of the Batería de Socializaciaon 3 (BAS-3, Silva &

Martorell, 1989)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Measurement:

Self-esteem, pupils' own assessment

Global Self-Esteem scale (Portuguese version; Fontaine, 1991) of the Self-Description

Questionnaire II (Marsh, Relich, & Smith, 1983).

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

<u>Measurement:</u>

Self-esteem, teacher ds assessment

Social and Emotional Competences Evaluation Questionnaire e Teacher's version (QACSE-P;

Coelho, Sousa, & Marchante,

2014)<u>Baseline, mean (SD)</u>

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Comments Additional outcomes:

Risk of bias Moderate

Author	Coelho
Year	2016
Country	Portugal
Ref#	[24]
Study design	Quasi-experimental design
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Only one school grouping utilized active parental informed consent, while the other five school
	groupings used passive informed consent since the program was conducted within the school
	schedule.
Follow up	Pre intervention and at end of intervention, three months
Population	School children, 4 th grade
characteristics	Intervention group:
	Age; Mean (SD):
	Sex;(Percent girls): 47.8%
	Socioeconomic/educations; Mean (SD):
	Class level
	50% or more F/R lunch: 24 (29.2%)
	25–50% F/R lunch: 29 (35.4%)
	Less than 25% F/R lunch: 29 (35.4%)
	Control group:
	Age; Mean (SD):
	Sex (Percent girls): 43.0%
	Socioeconomic/educations; Mean (SD):
	Class level
	50% or more F/R lunch: 5 (23.8%)
	25–50% F/R lunch: 8 (38.1%)
	Less than 25% F/R lunch: 8 (38.1%)
	Total population:
	Age; Mean (SD): 9.2 years
Intervention	Program Positive Attitude
program	
Program extent	Number of sessions: 13
	Intensity: One session per week, 60 min per session
	Duration: 1 year
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	970
Drop-outs (n)	Not stated

Program Deliverer	Educational psychologists
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	267
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Social and Emotional Competencies, self-assessment
	Bateria de Socializacao-3 (BAS-3; Silva & Martorell, 1993; adapted by Ferreira & Rocha, 2004)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Social and Emotional Competencies, teacher-assessment
	Social and Emotional Competencies Evaluation Questionnaire— Teachers Version (QACSE-P;
	Coelho, Sousa, & Marchante, 2014)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Self-esteem, self-assessment
	General Self scale from the Self-Description Questionnaire I (SDQ I; Marsh, Parker & Smith,
	1983; Portuguese adaptation by Faria & Fontaine, 1990)
	<u>Baseline, mean (SD)</u>
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
Risk of bias	Moderate

Author	Coelho
Year	2017
Country	Portugal
Ref #	[23]associated with [22]
Study design	Quasi-experimental design pre-post study
Study protocol	No information
Setting	Middle school
Inclusion criteria	Not stated
Follow up	Pre-test, Post-test and follow up 6 months after program end
Population	School children, 11 to 17 years old
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 13.54 (1.36)
	Sex (Percent girls): 50.6
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Program Positive Attitude
program	
Program extent	Number of sessions: 13
	Intensity: 1 per week 45 min session
	Duration: 1 school year
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	472
Drop-outs (n)	11
Program Deliverer	Trained psychologists
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	156
Drop-outs (n)	2
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Socio-emotional competence

	Bateria de Socialização-3 (BAS 3; Silva and Martorell, 1989; Portuguese adaptation by Ferreira
	and Rocha, 2004)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
Risk of bias	Moderate

Author	Coelho
Year	2018
Country	Portugal
Ref#	[25]
Study design	Quasi-experimental design
Study protocol	No information
Setting	Upper middle school children
Inclusion criteria	School not participation in other SEL program
Follow up	Post-test and 7 months after end of intervention
Population	Upper middle school children, year 1–5
characteristics	Intervention group 1:
	Age; Mean (SD):
	Sex;(Percent girls): 47.2
	Socioeconomic/educations; Mean (SD):
	Intervention group 2:
	Age; Mean (SD):
	Sex;(Percent girls): 49.0
	Socioeconomic/educations; Mean (SD):
	Control group:
	Age; Mean (SD):
	Sex (Percent girls): 44.7
	Socioeconomic/educations; Mean (SD):
	Total population:
	Age; Mean (SD): 12.70 (0.98)
	Sex (Percent girls): 47.2
	Socioeconomic/educations; Mean (SD):
Intervention	Positive attitude
program 1	Within school hours
Program extent	Number of sessions: 13
	Intensity: Not stated
	Duration: Not stated
	Attendance: Not stated
	Implementation: 96%
Participants (n)	269
Drop-outs (n)	
Program Deliverer	Educational psychologists
	Training: Not stated
Intervention	Positive attitude
program 2	After school hours
Program extent	Number of sessions: 18

	Intensity: Not stated
	Duration: Not stated
	Attendance: Not stated
	Implementation: 91%
Participants (n)	314
Drop-outs (n)	33
Program Deliverer	Educational psychologists
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	244
Drop-outs (n)	21
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Self-control
	Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho et al. 2015)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	<u>Measurement:</u>
	Social awareness
	Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho et al. 2015)
	<u>Baseline, mean (SD)</u>
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Relationship skills
	Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho et al. 2015)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)

Intervention group: Control group: Measurement: Responsible decision making Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho et al. 2015) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Self-esteem Global Self-Esteem scale of the Self- Description Questionnaire II (SDQ II, Marsh et al. 1983; Portuguese version; Fontaine 1991). Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Comments Risk of bias Moderate

Author	Coehlo
Year	2021
Country	Portugal
Ref #	[26]
Study design	Randomized Controlled Trial
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Parental consent
Follow up	Post intervention and 10 months post intervention
Population	Elementary school children, grade 4
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): 48.6
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): 49.3
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age, years; Mean (SD): 9.14 (0.64)
	Sex;(Percent girls): 48.8
	Socioeconomic/educations; Mean (SD): it ranged from 34.7% to 39.8% of students per class
	eligible for free or reduced lunches
Intervention	Social and Emotional Learning (SEL)
program	
Participants (n)	Number of sessions: 13
	Intensity: 60 min session weekly
	Duration: 4 months
	Attendance: Not stated
	Implementation: implementation fidelity varied between 93.7% and 100%
Participants (n)	702
Drop-outs (n)	Not stated on group level. Attrition was due to students who left school during fourth-grade
	(four students, 0.4%) and, (19 students, 1.8%) were also unavailable for the third measurement.
Program Deliverer	Trained educational psychologists in the teacher's presence
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	361

Drop-outs (n)	Not stated on group level. Attrition was due to students who left school during fourth-grade
	(four students, 0.4%) and, (19 students, 1.8%) were also unavailable for the third measurement.
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Social awareness and self-control
	Bateria de Socialização-3 (BAS-3 Portuguese adaptation by Ferreira & Rocha, 2004)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Self-esteem
	General Self scale from the Self-Description Questionnaire I (SDQ I; Marsh, 1988; Portuguese
	adaptation by Faria & Fontaine, 1990)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	<u>Measurement:</u>
	Student–Student Relationships and Teacher–Student Relationships
	Portuguese version of the Delaware School Climate Survey-Students (Coelho, Romão, et al.,
	2020)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	
Risk of bias	Moderate

Author	Coelho
Year	2017
Country	Portugal
Ref#	[27]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Public middle schools
Inclusion criteria	Not stated
Follow up	Four months, eight months and one year after start of intervention.
Population	School children, 4-5 grade
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): 46.5
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): 43.5
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age, years; Mean (SD): 9.62 (0.30)
	Sex;(Percent girls): 45.7
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	SEL Positive Transition Program
program	
Participants (n)	Number of sessions: 20 (15 session in grade 4 + five sessions in grade 5.
	Intensity: 50 min sessions weekly
	Duration: 2 school years
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	825
Drop-outs (n)	Only stated on total population: 97 $\%$ of students completed the first measurement, 86 $\%$ the
	second measurement, 73 % the third measurement and 74 % the last assessment
Program Deliverer	Educational psychologist.
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	322
Drop-outs (n)	Only stated on total population: 97 $\%$ of students completed the first measurement, 86 $\%$ the
	second measurement, 73 % the third measurement and 74 % the last assessment
Program Deliverer	Not applicable
Outcomes	Outcome

	<u>Measurement:</u>
	Self-Esteem
	General Self scale from the Self-Description Questionnaire I—(SDQ I; Marsh 1989; Portuguese
	adaptation by Faria and Fontaine 1990)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Self-Concept
	Five-Factor Self-Concept Questionnaire (AF-5; Garcı´a and Musitu 2001; Portuguese adaptation
	for children and adolescents; Coelho et al. 2015)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	
Risk of bias	Moderate

Author	Correia
Year	2016
Country	Portugal
Ref #	[28]
Study design	Quasi-experimental
Study protocol	No information
Setting	First cycle schools
Inclusion criteria	Authorization to conduct the study was requested from the school administrations involved and
	the principals of the first-cycle schools. Written informed consent was obtained from the
	teachers and parents along with the verbal consent of the children involved in the study.
Follow up	Before and after intervention.
Population	School children, first year
characteristics	Intervention group 1:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations:
	Up to second cycle [fifth to sixth grade]: 29
	3 rd cycle: 11
	secondary [tenth to twelfth grade]: 15
	higher education levels: 14
	Intervention group 2:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations:
	Up to second cycle [fifth to sixth grade]: 16
	3 rd cycle: 16
	secondary [tenth to twelfth grade]: 20
	higher education levels: 8
	Control group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations:
	Up to second cycle [fifth to sixth grade]: 7
	3 rd cycle: 7
	secondary [tenth to twelfth grade]: 18
	higher education levels: 31

	Population total:
	Age; Mean (SD): 5.95 (0.3) years
	Sex (Percent girls):
	Socioeconomic/educations: Not stated
Intervention	Giant leap
program 1	
Program extent	Number of sessions: 18
	Intensity: 60 minutes once per week
	Duration: Not stated
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	79
Drop-outs (n)	10
Program Deliverer	Psychologist
	Training: Not stated
Intervention	Giant leap
program 2	
Program extent	Number of sessions: 18
	Intensity: 60 minutes once per week
	Duration: Not stated
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	65
Drop-outs (n)	5
Program Deliverer	Psychologist
	Training: Not stated
Comparison program	A fine arts activity program with an identical duration and extent
Participants (n)	84
Drop-outs (n)	21
Program Deliverer	Psychologist
	Training: Not stated
Outcomes	Outcome
	Measurement:
	Emotional knowledge
	Assessment of Children's Emotions Scale (ACES) (Schultz, Izard, & Bear, 2004; Portuguese version
	by Alves, Cruz, Duarte, &Martins, 2008)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)

	Intervention group:
	Control group:
	<u>Measurement:</u>
	Social competence
	Social Competence Scale of the School Social Behavior Scales (SSBS-2) (SSBS-2; Merrell, 2002;
	Portuguese version by Raimundo et al., 2012)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Children-s strengths; Behavioral and Emotional Rating Scale — 2 (BERS-2) (Epstein, 2004;
	Portuguese version by Correia & Marques- Pinto, 2015c)
	School adaptation The School adaptation questionnaire for teachers (Correia & Marques- Pinto,
	2015d)
	Social support: Two perceived social support indicators were used: the number of support
	providers identified by the children and their degree of satisfaction with this support network
	School learning skills; The Battery of Skills for School Learning (Cruz, 1996)
Risk of bias	Moderate

Author	DiPerna
	2015
Year	
Country	USA
Ref #	[29]
Study design	Multisite cluster randomized controlled trial
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Parental consent
Follow up	Post intervention,
Population	School children, Second grade
characteristics	Intervention group:
	Age; Mean (SD): 7.37 (0.38)
	Sex;(Percent girls): 53.51
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): 7.34 (0.38)
	Sex (Percent girls): 55.39
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Social Skills Improvement System Classwide Intervention Program (SSIS-CIP; Elliott & Gresham,
program	2007)
Program extent	Number of sessions: 30
	Intensity: 20-25 min 3 times per week
	Duration: 10 weeks
	Attendance: Not stated
	Implementation: implementing classrooms based on summative ratings by teachers (98%) and
	independent observers (97%)
Participants (n)	268
Drop-outs (n)	7
Program Deliverer	Classroom teachers
	Training: 1 day workshop
Comparison program	Common school curriculum (no specific program)
Participants (n)	226
Drop-outs (n)	3
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social skills and problem behavior
	Social Skills Improvement System Rating Scale (SSIS-RST, Gresham & Elliott, 2008
	Baseline, mean (SD)
	Interventions group:
	- J r

	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Social skills and problem behavior
	Cooperative Learning Observation Code for Kids (CLOCK; Volpe & DiPerna, 2010).
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Classroom instructional environment; The CLASS K-3 (Pianta et al., 2008)
Risk of bias	Moderate

Author	DiPerna
	2018
Year	
Country	USA
Ref #	[30]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Teacher and Parental consent
Follow up	After implementation (4 months)
Population	School children, year 1
characteristics	Intervention group:
	Age; Mean (SD): 6.29 (0.42)
	Sex;(Percent girls): 48.39
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): 6.30 (0.43)
	Sex (Percent girls): 45.07
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Social Skills Improvement System Classwide Intervention Program (SSIS-CIP; Elliott & Gresham,
program	2007)
Program extent	Number of sessions: 30
	Intensity: 20-25 min lessons, 3 times per week
	Duration: 12 weeks
	Attendance: Not stated
	Implementation: the SSIS-CIP program was fully implemented across all classrooms; summative
	ratings by teachers (M: 3.92, SD: 0.16) and independent observers (M: 3.97,SD: 0.08).
	(Five core lesson components (introduce, define, discuss, identify steps and practice, and
	model/role-play); 4-point scale ranging from not implemented (1) to full implementation (4).)
Participants (n)	373
Drop-outs (n)	17
Program Deliverer	Classroom teachers
	Training: 1 day workshop
Comparison program	Common school curriculum (no specific program)
Participants (n)	393
Drop-outs (n)	13
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social skills and problem behavior
	Social Skills Improvement System Rating Scale (SSIS-RST, Gresham & Elliott, 2008

	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Social skills and problem behavior
	Cooperative Learning Observation Code for Kids (CLOCK; Volpe & DiPerna, 2010).
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Approaches to learning; teacher perspectives regarding their students' approaches to learning;
	ACES (DiPerna & Elliott, 2000)
	Academic skills. The STAR Math (Renaissance Learning, 2009) and Reading (Renaissance
	Learning, 2010)
	Classroom instructional environment; The CLASS K-3 (Pianta et al., 2008)
Risk of bias	Moderate

Author	Dowling
Year	2019
Country	Ireland
Ref#	[31]
Study design	Cluster Randomized controlled trial on school level
Study protocol	No information
Setting	Disadvantaged schools
Inclusion criteria	(i) holding the designated disadvantage status (DEIS) by the Department of Education & Skills (ii)
inclusion criteria	
	providing education at a post-primary level; and (iii) English speaking (i.e., not Irish only
	speaking schools "Gael Scoileanna"); Parents were also given an opt-out consent form which
	they were asked to return to the school if they did not want their son or daughter to participate
Fallanian	in this study
Follow up	At end of intervention, 13 weeks
Population	School children, older adolescents 15-18 years
characteristics	Intervention group:
	Age; Mean (SD): 15.99
	Sex;(Percent girls): 46.7
	Socioeconomic/educations; Mean (SD):
	Control group:
	Age; Mean (SD): 15.75
	Sex (Percent girls): 53.3
	Socioeconomic/educations; Mean (SD):
Intervention	MindOut Program
program	
Program extent	Number of sessions: 13
	Intensity: weekly
	Duration: 13
	Attendance:
	Implementation:
Participants (n)	330
Drop-outs (n)	84
Program Deliverer	Classroom teachers
	Training: Teacher's manual, a one-day comprehensive training session, a one-day
	comprehensive training session, delivered by a Health Promotion Officer (HPO)
Comparison program	Common school curriculum (no specific program)
Participants (n)	345
Drop-outs (n)	94
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>

Self-esteem Rosenberg Self-esteem Scale (Rosenberg 1965) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: **Emotional regulation** Emotional Regulation Questionnaire (Gross and John 2003) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: <u>Measurement:</u> Emotional intelligence Trait Meta-Mood Scale (TMMS), which was originally developed by Salovey et al. (1995) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Coping skills Coping Strategy Indicator (CSI-15; Ellis 2004) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement:

Social self-efficacy The Self-Efficacy Questionnaire (SEQC; Muris 2001) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Asserting influence and conflict resolution Adolescent Interpersonal Competence Questionnaire (AICQ; Buhrmester 1990) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Decision making Making Decisions in Everyday Life Scale (Mincemoyer and Perkins 2003) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Mental health The Depression Anxiety Stress Scale (DASS-21; Lovibond and Lovibond 1995) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement:

	Mental wellbeing
	14-item Warwick Edinburgh Mental Wellbeing Scale (WEMWBS; Tennant et al. 2007)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Attitudes toward school The Attitudes Towards School scale (Anderson 1999) was used to
	measure students' (12-17 years)
	School achievement motivation The School Achievement Motivation Rating Scale (SAMRS; Chiu
	1997)
Risk of bias	Moderate

Author	Dvořáková
Year	2017
Country	USA
Ref#	[32]
Study design	Pilot randomized controlled trial,
Study protocol	No information
Setting	Public university
Inclusion criteria	First-year students residing in on-campus residence halls, and at least 18 years of age.
Follow up	2 months after baseline (
Population	First-year undergraduate students
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 64%
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 69%
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 18.2 (0.4)
	Sex (Percent girls): 66%
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Learn to breathe (L2B)
program	
Program extent	Number of sessions: 8
	Intensity: Two 80 min sessions first 2 weeks, then one 80 min session per week for 6 weeks
	Duration: 6 weeks
	Attendance: Not stated
	Implementation: 99%
Participants (n)	55
Drop-outs (n)	3
Program Deliverer	Trained facilitators
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	54
Drop-outs (n)	1
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	<u>I</u>

Satisfaction with life Satisfaction with life scale (SWL) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Self-compassion Self-Compassion Scale (SCS) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Social connectedness Social Connectedness Scale (SCC-R) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Compassion Compassion Scale (CS) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: **Comments** Additional outcomes: Depression; The Primary Health Questionnaire (PHQ) Anxiety; The 7-item Generalized Anxiety Disorder Scale (GAD)

Mindfulness; The mindfulness attention awareness scale (MAAS)

Sleep; Subjective sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI)

Alcohol use; To obtain an assessment of peak drinking, participants reported the number of drinks they consumed during an occasion on which they drank the most during the past 30 days.

Alcohol consequences; Alcohol-related consequences were obtained using the Young Adult Alcohol Problems Screening Test (YAAPST)

The L2B acceptability questionnaire (LAQ); To evaluate acceptability of the program, students in the intervention group answered 10 questions

Moderate

Author	Frank
Year	2021
Country	USA
Ref#	[33]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Urban school district
Inclusion criteria	Informed consent was obtained from all participants.
Follow up	1 week after program end
Population	High-School children,
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 16
	Sex (Percent girls): 43%
	Socioeconomic/educations; Mean (SD):
	Free lunch: 23%
Intervention	Learn to breathe (L2B)
program	
Program extent	Number of sessions: 12
	Intensity: Not stated
	Duration: 6 weeks
	Attendance: Not stated
	Implementation: 78.6%
Participants (n)	122
Drop-outs (n)	2
Program Deliverer	Classroom teachers
	Training: four weekly individual training sessions (6 h total), followed by 2-day training (14 h
	total), led by the program developer, five weekly coaching calls (60 min)
Comparison program	Common school curriculum (no specific program)
Participants (n)	112
Drop-outs (n)	
Program Deliverer	Not applicable
Outcomes	Outcome

Measurement:

Self-Compassion

Self-Compassion Scale - Short Form (SCS-SF; Raes et al. 2011)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Measurement:

Emotion Regulation

Difficulties in Emotion Regulation Scale (DERS; Gratz and Roemer 2004).

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

<u>Measurement:</u>

Social Connectedness

Social Connectedness Scale- Revised (SCC-R; Lee et al. 2001)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Comments

Additional outcomes:

Mindfulness; Child and Adolescent Mindfulness Measure (CAMM; Greco et al. 2011)

Self-compassion; Self-Compassion Scale - Short Form (SCS-SF; Raes et al. 2011)

Depression; Patient Health Questionnaire (PHQ-8; Kroenke et al. 2009).

Anxiety; Generalized Anxiety Disorder Scale (GAD-7; Spitzer et al. 2006).

 $Rumination; Rumination \ and \ Reflection \ Question naire (RRQ; \ Trapnell \ and \ Campbell \ 1999).$

Stress; Adolescent Stress Questionnaire (ASQ; Caballero et al. 2016)

Somatization; Children's Somatization Inventory (CSI; Walker et al.2008)

Sleep; The Adolescent Sleep-Wake Scale (ASWS; LeBourgeois et al. 2005)

Mind Wandering; The Mind Wandering Questionnaire (MWQ; Mrazek et al. 2013)

Growth Mindset; Implicit Theories of Intelligence Scale for Children (IT; Dweck 1999).

Substance Use; Substance Initiation Index (Spoth et al. 2007).

Negative Substance Use Consequences; Young Adult Alcohol Problems Screening Test (YAAPST; Hurlbut and Sher 1992)

Inhibitory Control and Attention A modified, computerized version of the Stroop Task (Siegrist 1995; MacLeod 1991)

Risk Taking; Balloon Analogue Risk Task (BART; Lejuez et al. 2002)

Working Memory, Attention, and Emotion Regulation; Emotional Faces N-back Task (EFN-back), (Ladouceur et al. 2005)

Engagement in Practice At post-test, students in the L2B condition were asked how often they practiced each of the seven program components since the beginning of the L2B program

Moderate - borderline high

Author	Gol-Guven
	2017
Year	
Country	Turkey
Ref#	[34]
Study design	quasi-experimental design with a control group
Study protocol	No information
Setting	Primary school
Inclusion criteria	Written consent was collected
	from the parents. Oral consent was taken from the children, and the children who expressed
	unwillingness to participate or who seemed hesitant were excused.
Follow up	8 months after start of intervention
Population	School children, year 1–4
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (Range): 7 years and 7 months (5 years 6 months to 9 years 7 months)
	Sex (Percent girls): 50%
	Socioeconomic/educations; Mean (SD): Not stated
Participants:	4 schools, 16 classrooms, 497 students from which 40 students were randomly selected for study
Drop Out:	Not stated
Intervention	Lions Quest Program: Skills for Growing
program	
Program extent	Number of sessions: Not stated
	Intensity: Not stated
	Duration: 8 months
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	2 Schools, number of classrooms or students Not stated
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: 2 whole day training seminars
Comparison program	Common school curriculum (no specific program)
1 1 1 1 1 2	

Participants (n)	2 Schools, number of classrooms or students Not stated
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Students' conflict resolution skills
	Assessment instrument, developed for the Child Development Project by the Developmental
	Studies Center, ('Child Development Project' 1988–2005)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Students' perception of school; To measure students' perceptions of school, an instrument
	developed for the Child Development Project by the Developmental Studies Center was used
	('Child Development Project' 1988–2005)
	Student behavior; Observational Checklists for Prosocial Behaviors of Elementary School
	Children ('Observational Checklists' n. d.)
	School climate; Indicators of Orderly Classroom, developed by Golly and Snead (2004),
Risk of bias	Moderate

Author	Green
Year	2021
Country	
Ref#	[35]
Study design	SAMMA SOM NEDAN?
Study protocol	
Setting	
Inclusion criteria	
Follow up	
Population	Intervention group:
characteristics	Age, years; Mean (SD):
	Sex; (Percent girls):
	Socioeconomic/educations; Mean (SD):
	Control group:
	Age, years; Mean (SD):
	Sex;(Percent girls):
	Socioeconomic/educations; Mean (SD):
Intervention	
program	
Participants (n)	Number of sessions:
	Intensity:
	Duration:
	Attendance:
	Implementation:
Participants (n)	
Drop-outs (n)	
Program Deliverer	Classroom teachers
	Training
Comparison program	Common school curriculum (no specific program)
Participants (n)	
Drop-outs (n)	
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	Additional outcomes:
	'

Risk of bias Moderate

Author	Green
Year	2021
Country Ref #	USA
	[36]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Middle school
Inclusion criteria	Written informed consent for participation was obtained from parents
Follow up	End of intervention, 13 weeks after start
Population	School children
characteristics	Intervention group:
	Age; Mean (SD): 12.3
	Sex;(Percent girls): 32.8
	Socioeconomic/educations; Mean (SD): 49.2 % free/reduced lunch
	Control group:
	Age; Mean (SD): 12.4
	Sex (Percent girls): 35.8
	Socioeconomic/educations; Mean (SD): 54.6% free/reduced lunch
Intervention	SPARK Speaking to the Potential, Ability, and Resilience Inside Every Kid (SPARK) Pre - Teen
program	Mentoring Curriculum
Program extent	Number of sessions: 12
	Intensity: 1 hour sessions
	Duration: 12-13 weeks
	Attendance; Mean: 92%, 11.04 of 12 sessions
	Implementation: 3.98 out of 4 (1=not met, 4= met)
Participants (n)	188
Drop-outs (n)	5
Program Deliverer	Certified SPARK facilitators
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	177
Drop-outs (n)	3
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Resilience
	Resiliency Scales for Children and Adolescents (RSCA; Prince - Embury, 2007)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	- '

	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Communication, Decision - Making and Problem - Solving
	The Communication, Decision - Making and Problem - Solving (CDP) scale
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Difficulties in emotional regulation; Impulse and Clarity subscales, Difficulties in Emotional
	Regulation Scale (DERS - SF; Kaufman et al., 2016)
	Level of knowledge of the curriculum; six items from the Three Principles Inventory (3PI; Kelley,
	2011).
Risk of bias	Moderate

Author	Harlacher
Year	2010
Country	USA
Ref#	[37]
Study design	Quasi-experimental design
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Not stated
Follow up	Post test (12 weeks) and 2 months after end of intervention (after booster session)
Population	School children, year 3–4
characteristics	Intervention group:
	Age; Mean (SD): 27 third grade and 27 fourth grade students
	Sex;(Percent girls): 55
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): 39 third year, and 13 fourth year students
	Sex (Percent girls): 52
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 8 years 5 months for third grade students and 9 years 5 months for fourth
	grade students
	Sex (Percent girls): 52
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	SEL Curriculum: Strong Kids
program	(SK; Merrell, Carrizales, Feuerborn, Gueldner, & Tran, 2007)
Program extent	Number of sessions: 12 + 1 booster session 2 months after end of intervention
	Intensity: 1 per week, 45 minutes each
	Duration: 12 weeks
	Attendance: Not stated
	Implementation: 85%
Participants (n)	54
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training:1-hr training, the treatment group teachers implemented the SK curriculum
	once per week for 12 weeks
Comparison program	Common school curriculum (no specific program)
Participants (n)	52
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome

	Measurement:
	Use of SEL skills, student evanluation
	Coping Scale (Causey & Dubow, 1992) and The Social-Emotional Assets and Resiliency Scales-
	Child Self-Report Version (SEARS-C; Merrell, 2008)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Social functioning/coping skills, teacher evaluation
	School Social Behavior Scales (SSBS-2; Merrell, 2002)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	SEL knowledge; SK Knowledge Test (Merrell et al., 2007)
Risk of bias	Moderate

Author	Jackman
Year	2019
Country	USA
Ref#	[38]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Preschool
Inclusion criteria	Permission and ethical approval were obtained to include all classrooms
Follow up	End of pre-school year
Population	3-5 year old children
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 3 years 8 months (6 months)
	Sex (Percent girls): 52
	Socioeconomic/educations; Mean (SD): Not stated
Participants:	283
Drop Out:	21
Intervention	OpenMind (OM; Jackman 2016a)
program	
Program extent	Number of sessions:
	Intensity: 7 daily practices
	Duration: 1 school year
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	143
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training:5 day mindfulness training course, and 20 min per day meditation per schoolday.
Comparison program	High Scope curriculum, with aspects of Trust-Based Relational Intervention and social emotional
	learning interventions administered by mental health professionals
Participants (n)	119
Drop-outs (n)	Not stated
	•

	Training: 5-day course of relationship building, and 20 min of teacher-child bonding activities
	Training. 5 day course of relationship banding, and 20 min of teacher child bonding activities
	during each school day.
Outcomes	Outcome
	Measurement:
	Executive functioning
	Behavior rating inventory of executive function—preschool version (BRIEF-P) (Gioia et al. 2003)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Inhibitory control
	Go/No-Go (GNG) (Dowsett and Livesey 2000; Müller et al. 2012; Wiebe et al. 2012)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Inhibitory control, working memory, and attention focusing
	Head toes knees shoulders (HTKS) (Ponitz et al. 2008)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Perceived stress scale-10 (PSS-10) (Cohen et al. 1983)
	Five facet mindfulness questionnaires (FFMQ) (Baer et al. 2006)
	Psychological well-being scale (Ryff 1989)
Risk of bias	Moderate

Author	Kimber
Year	2008
Country	Sweden
Ref#	[39]; associated with[40]; [41]
Study design	Mixed design, in which there is 'a mixture of between-group and repeated-measures variables'
Study protocol	No information
Setting	Public school
Inclusion criteria	Parents consent.
Follow up	Once per schoolyear, end of schoolyear, up to five years.
Population	School children, grade 4–9
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	SET programme (Social and emotional training) (Kimber, 2001a, b).
program	
Program extent	Grade 4-5
	Number of sessions: Not stated
	Intensity: 45 min twice per week
	Duration: 1-2 years (up to 5 years total)
	Attendance: Not stated
	Implementation: Not stated
	Grade 6-9
	Number of sessions: Not stated
	Intensity: 45 min once per week
	Duration: 1-3 years (up to 5 years total)
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	
Drop-outs (n)	
Program Deliverer	Classroom teachers
	Training: Prior to intervention, teachers were trained in SET during one schoolyear. Opportunity
	to try relevant exercises, discuss issues and with supervision.
Comparison program	Common school curriculum (no specific program)

Participants (n)	
Drop-outs (n)	
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Mental health
	'Youth self-report (YSR)' (Achenbach T, Edelbrock C. 1987)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Wellbeing
	'I think I am' (Ouvinen-Birgerstam P. 1985)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Self-efficacy
	'The Social Skills Rating System (SSRS)' (Gresham S, Elliott S. 1990)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Feelings of self-efficacy or hopelessness; Mastery (Pearlin L, Liebman M, Menaghan E 1981)
	School satisfaction, Contentment in school and Bullying from subscales of Swedish Council for
	Information on Alcohol and Other Drugs. (Hibell B, Anderson B, Bjarnason T, 1990)
Risk of bias	Moderate -borderline high

Year 2008 Country Sweden Ref # [41]; associated with [40]; [39] Study design Quasi-experimental longitudinal design. Study protocol No information Setting Public school Inclusion criteria Not stated Follow up Once per schoolyear, end of schoolyear, three years. Population School children, grade 1–7 at beginning of intervention characteristics Intervention group: Age; Mean (SD): Not stated Sex;(Percent girls): Not stated	
Ref # [41]; associated with [40]; [39] Study design Quasi-experimental longitudinal design. Study protocol No information Setting Public school Inclusion criteria Not stated Follow up Once per schoolyear, end of schoolyear, three years. Population School children, grade 1–7 at beginning of intervention characteristics Intervention group: Age; Mean (SD): Not stated	
Ref # [41]; associated with [40]; [39] Study design Quasi-experimental longitudinal design. Study protocol No information Public school Inclusion criteria Not stated Follow up Once per schoolyear, end of schoolyear, three years. Population School children, grade 1–7 at beginning of intervention characteristics Intervention group: Age; Mean (SD): Not stated	
Study design Quasi-experimental longitudinal design. Study protocol No information Setting Public school Inclusion criteria Not stated Follow up Once per schoolyear, end of schoolyear, three years. Population School children, grade 1–7 at beginning of intervention characteristics Intervention group: Age; Mean (SD): Not stated	
Study protocol Setting Public school Inclusion criteria Follow up Once per schoolyear, end of schoolyear, three years. Population Characteristics No information Public school Not stated Not stated School children, grade 1–7 at beginning of intervention Intervention group: Age; Mean (SD): Not stated	
Setting Inclusion criteria Follow up Population Characteristics Public school Not stated Once per schoolyear, end of schoolyear, three years. School children, grade 1–7 at beginning of intervention Intervention group: Age; Mean (SD): Not stated	
Inclusion criteria Follow up Once per schoolyear, end of schoolyear, three years. School children, grade 1–7 at beginning of intervention Characteristics Intervention group: Age; Mean (SD): Not stated	
Follow up Once per schoolyear, end of schoolyear, three years. School children, grade 1–7 at beginning of intervention characteristics Intervention group: Age; Mean (SD): Not stated	
Population Characteristics School children, grade 1–7 at beginning of intervention Intervention group: Age; Mean (SD): Not stated	
characteristics Intervention group: Age; Mean (SD): Not stated	
Age; Mean (SD): Not stated	
1 1 1 1 1 3 1, 1 1 1 1 1 1 1 1 1 1 1 1 1	
Socioeconomic/educations; Mean (SD): Not stated	
Control group:	
Age; Mean (SD): Not stated	
Sex (Percent girls): Not stated	
Socioeconomic/educations; Mean (SD): Not stated	
Intervention SET programme (Social and emotional training) (Kimber, 2001a, b).	
program	
Program extent Grade 1-5	
Number of sessions: Not stated	
Intensity: 45 min twice per week	
Duration: 3 consecutive years (total of 5 years)	
Attendance: Not stated	
Implementation: Not stated	
Grade 6-9	
Number of sessions: Not stated	
Intensity: 45 min once per week	
Duration: 3 consecutive years (total of 5 years)	
Attendance: Not stated	
Implementation: Not stated	
Participants (n) 42 classes	
Drop-outs (n) 1 class	
Program Deliverer Classroom teachers	
Training: Prior to intervention, teachers were trained in SET during one schoolyear. Opp	ortunity
to try relevant exercises, discuss issues and with supervision.	
Comparison program Common school curriculum (no specific program)	

Participants (n)	14 classes
Drop-outs (n)	None
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Mental health
	'Youth self-report (YSR)' (Achenbach T, Edelbrock C. 1987)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	<u>Measurement:</u>
	Wellbeing
	'I think I am' (Ouvinen-Birgerstam P. 1985)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Self-efficacy
	'The Social Skills Rating System (SSRS)' (Gresham S, Elliott S. 1990)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Feelings of self-efficacy or hopelessness; Mastery (Pearlin L, Liebman M, Menaghan E 1981)
	School satisfaction, Contentment in school and Bullying from subscales of Swedish Council for
	Information on Alcohol and Other Drugs. (Hibell B, Anderson B, Bjarnason T, 1990)
Risk of bias	Moderate -borderline high

Author	Kiviruusu
Year	2016
Country	Finland
Ref #	[42]
Study design	Randomized controlled trial
Study protocol	No information
Setting Inclusion criteria	Primary schools Togshor, principals and parantal consent
	Teacher, principals and parental consent
Follow up	6 months after baseline
Population	School children, 2 nd and 3 rd grade
characteristics	Intervention group:
	Age, years; Mean (SD): Not stated
	Sex; (Percent girls): 50.1
	Socioeconomic/educations; Mean (SD):
	University of applied sciences or higher: 60.7 %
	Less: 49.3 %
	Control group:
	Age, years; Mean (SD): Not stated
	Sex;(Percent girls): 53.0
	Socioeconomic/educations; Mean (SD):
	University of applied sciences or higher: 59.2 %
	Less: 40.8 %
	Total population:
	Age, years; Mean (SD): 8.1
	Sex;(Percent girls): 41.4
	Socioeconomic/educations; Mean (SD):
	University of applied sciences or higher: 60.1 %
	Less: 39.9 %
Intervention	SEL "Together at School"
program	
Participants (n)	Number of sessions:
	Intensity:
	Duration:
	Attendance: The dosage groups were named as "intervention below the intended intensity" (0–
	12.0 points; 78 %) and "intervention as intended" (12.1–15 points; 22 %).
	Implementation: Not stated
Participants (n)	2090
Drop-outs (n)	54

Program Deliverer	Classroom teachers
	Training
Comparison program	Common school curriculum (no specific program)
Participants (n)	1754
Drop-outs (n)	86
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Prosocial behaviour and Phychological problems
	The Strengths and Difficulties Questionnaire (SDQ)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
	Measurement:
	Cooperation and Empathy
	Multisource Assessment of Social Competence Scale (MASCS)
	End of intervention, mean (SD)
	Intervention group: x
	Control group: x
Comments	
Risk of bias	Moderate

Author	Lam
Year	2020
Country	Hong Kong
Ref#	[43]
Study design	Randomized controlled trial, quasi-experimental control group
Study protocol	No information
Setting	Secondary school
Inclusion criteria	Active parent/guardian consent for all participants.
Follow up	Post-test, (5 months start of intervention)
Population	School children, Grade 7
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 34
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 36.5
	Socioeconomic/educations; Mean (SD): Not stated
	Total Population:
	Age; Mean (SD): 12.4
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): low to middle SES neighborhood.
Participants:	115
Drop Out:	19
Intervention	Learning to BREATHE (L2B; Broderick and Metz 2009)
program	
Program extent	Number of sessions: 6
	Intensity: 70 min once a month
	Duration: 5 months
	Attendance: No more then two missed sessions per participant
	Implementation: Not stated
Participants (n)	53
Drop-outs (n)	Not stated
Program Deliverer	Clinical and school psychologist
	Training: Diplomate of the Academy of Cognitive Therapy (ACT) with training in MBSR and
	МВСТ.
Comparison program	Common school curriculum (no specific program)
Participants (n)	62
Drop-outs (n)	Not stated
	1

Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Emotion Regulation
	The Difficulties in Emotion Regulation Scale (DERS; Gratz and Roemer 2004)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Perceived Stress; A single-item measure of perceived stress level developed by the program
	developer (Dr. Broderick) was back-translated to evaluate effectiveness of the L2B program
	(Metz et al. 2013).
	Internalizing and Attention Problems; The Youth Self-Report (YSR; Achenbach and Rescorla
	2001)
	Executive Functions; The Behavior Rating Inventory of Executive Function - Self-Report version
	(BRIEF-SR; Guy et al. 2004)
	Rumination; The Ruminative Responses Scale (RRS; Nolen-Hoeksema and Morrow 1991)
	Process Evaluation of Acceptability, Benefits and Utility; survey developed by the program
	developer (Dr. Broderick) to evaluate L2B's acceptability and perceived social validity (Metz et
	al. 2013) + adapted from mindfulness research with children (Semple and Lee 2011)
Risk of bias	Moderate

Year 2015 Country USA Ref # [44] Study design Randomized controlled trial Study protocol No information Setting State schools Inclusion criteria Parental, teachers' passive consent Follow up End of intervention, 1 school term Population Pre-school and school children, kindergarten to 2nd grade Intervention group: Age; Mean (SD): Not stated Sex;(Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Sex (Percent girls): Not st	Author	Low
Country Ref # [44] Study design		
Ref # [44]		
Study design Study protocol Setting Inclusion criteria Follow up Population Characteristics Intervention Sex: (Percent girls): Not stated Sex (Percent girls): Not stated Intervention Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
Study protocol Setting State schools Inclusion criteria Parental, teachers' passive consent Follow up Population Characteristics Intervention group: Age; Mean (SD): Not stated Sex;(Percent girls): Not stated Sex; (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
Setting State schools Parental, teachers' passive consent		
Inclusion criteria Parental, teachers' passive consent End of intervention, 1 school term Pre-school and school children, kindergarten to 2nd grade Intervention group: Age; Mean (SD): Not stated Socioeconomic/educations; Mean (SD): Not stated Control group: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
Follow up Population Characteristics Intervention group: Age; Mean (SD): Not stated Socioeconomic/educations; Mean (SD): Not stated Control group: Age; Mean (SD): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Sow and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
Pre-school and school children, kindergarten to 2nd grade Intervention group: Age; Mean (SD): Not stated Sex;(Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Control group: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
theracteristics Intervention group: Age; Mean (SD): Not stated Sex;(Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Control group: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		
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Sex;(Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Control group: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.	characteristics	Intervention group:
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Control group: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Sex;(Percent girls): Not stated
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Socioeconomic/educations; Mean (SD): Not stated Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Age; Mean (SD): Not stated
Total Population: Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Sex (Percent girls): Not stated
Age; Mean (SD): Not stated Sex (Percent girls): Not stated Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Intervention Program Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Socioeconomic/educations; Mean (SD): Not stated
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Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington and Arizona, respectively, received free and reduced lunch. Second Step® program, Committee for Children (CfC), Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Age; Mean (SD): Not stated
and Arizona, respectively, received free and reduced lunch. Second Step® program, Committee for Children (CfC), Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Sex (Percent girls): Not stated
Intervention Program Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Socioeconomic/educations; Mean (SD): 50% and 78% of participating students in Washington
Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		and Arizona, respectively, received free and reduced lunch.
Program extent Number of sessions: 22 Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.	Intervention	Second Step® program, Committee for Children (CfC),
Intensity: 25-40 min once per week Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.	program	
Duration: 1 school term Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.	Program extent	Number of sessions: 22
Attendance: Not stated Implementation: Average number of lessons completed 17.42 SD: 3.72.		Intensity: 25-40 min once per week
Implementation: Average number of lessons completed 17.42 SD: 3.72.		Duration: 1 school term
		Attendance: Not stated
85% of lesson components were reportedly delivered		Implementation: Average number of lessons completed 17.42 SD: 3.72.
		85% of lesson components were reportedly delivered
Participants (n) 3274	Participants (n)	3274
Drop-outs (n) 309	Drop-outs (n)	309
Program Deliverer Classroom teachers	Program Deliverer	Classroom teachers
Training: 1 h + 3 h trainings sessions.		Training: 1 h + 3 h trainings sessions.
Comparison program Common school curriculum (no specific program)	Comparison program	Common school curriculum (no specific program)
Participants (n) 3187	Participants (n)	3187
Drop-outs (n) 309		309
Program Deliverer Not applicable	Program Deliverer	Not applicable
Outcomes Outcome	Outcomes	Outcome

	Management
	<u>Measurement:</u>
	Social emotional competence
	Devereux Student Strengths Assessment—Second Step® Edition (DESSA-SSE; Devereux Center for
	Resilient Children, 2012)
	Strengths Difficulties Questionnaire (SDQ; Goodman, 1997)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Class-wide and individual student behavior; Behavioral Observation of Students in Schools
	(BOSS; Shapiro & Kratochwill, 2000)
	Proactive classroom management; Proactive Classroom Management Rating Form (PCM-RF
	Cook, 2009)
Risk of bias	Moderate

Author	Malhotra
Year	2021
Country	Uganda
Ref #	[45]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Primary school, after school sessions
Inclusion criteria	Girl, parental/guardian consent and written assents from participating students.
Follow up	End of intervention, 1 school year
Population	Grades 1 through 7, 12-17 years old
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 100%
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 100%
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Eminyeeto Social Emotional Learning (SEL) curriculum
program	
Program extent	Number of sessions: Not stated
	Intensity: 60 min + 25-30 min once per week
	Duration: 1 school year
	Attendance:
	Implementation:
Participants (n)	214
Drop-outs (n)	No information (11 total drop-outs in both intervention and control group)
Program Deliverer	Classroom teachers
	Training: Not specified
Comparison program	Common school curriculum (no specific program)
Participants (n)	66
Drop-outs (n)	No information (11 total drop-outs in both intervention and control group)
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Self-esteem
	Rosenberg Self-Esteem scale
	Baseline, mean (SD)
	Interventions group:

	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Self-efficiacy
	The General Self-Efficacy scale
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Rights and Privileges of Men and Equity for Girls; The Gender Norm Attitudes scale from the
	Compendium of Gender scales
	Depressive symptoms; Patient Health Questionnaire
	Socio-emotional outcomes; Group and individual questionnaire
Risk of bias	Moderate

Author	Mogro-Wilson
Year	2020
Country	USA
Ref#	[46]
Study design	Quasi-experimental design.
Study protocol	No information
Setting	High school
Inclusion criteria	Passive informed consent.
Follow up	End of intervention, 1 school year
Population	Freshmen high school students
characteristics	Intervention group:
	Age; Mean (SD): 14.11 (0.68)
	Sex;(Percent girls): 42
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): 14.03 (0.57)
	Sex (Percent girls): 58
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	Connect with Kids, Social and emotional learning (SEL)
program	
Program extent	Number of sessions: 7
	Intensity: Not stated
	Duration: Not stated
	Attendance: Not stated
	Implementation: 85%
Participants (n)	143
Drop-outs (n)	10
Program Deliverer	Classroom teachers
	Training: four intensive two-hour trainings before implementing
Comparison program	Common school curriculum (no specific program)
Participants (n)	161
Drop-outs (n)	5
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social awareness and empathy
	Interpersonal Reactivity Index, (Davis, 1983)
	Baseline, mean (SD)
	Interventions group:

	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	
Risk of bias	Moderate

Author	Raimundo
Year	2013
Country	Portugal
Ref#	[47]
Study design	Quasi-experimental exploratory study
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Informed or passive informed consent from parents, verbal assent from children.
Follow up	Post-test (8 monts after start) and 1 year
Population	School children, Fourth grade
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total polpulation:
	Age; Mean (SD): 9.31 (0.56)
	Sex (Percent girls): 45%
	Socioeconomic/educations; Mean (SD): Somewhat heterogeneous, but predominantly middle
	class.
Intervention	SEL "Slowly but Steadily" (Durlak et al., 2011)
program	
Program extent	Number of sessions: 21
	Intensity: 45-60 min sessions, delivered weekly
	Duration: 1 school year
	Attendance: Not stated
	Implementation: High degree of fidelity, very high degree of dosage
Participants (n)	213
Drop-outs (n)	Not stated
Program Deliverer	Psychologist with help from Classroom teachers
	Training: practice in group intervention with fourth-grade children
Comparison program	Origami program
Participants (n)	105
Drop-outs (n)	Not stated
Program Deliverer	Psychologist
Outcomes	Outcome
	Measurement:

	Emotional Knowledge Assessment of Children's Emotions Scales (ACES; Schultz, Izard, & Bear,
	2004; Portuguese adaptation by Alves, Cruz, Duarte, & Martins, 2008)
	<u>Baseline, mean (SD)</u>
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Social competence
	scale A of the School Social Behavior Scales (SSBS-2; Merrell, 2002; Portuguese adaptation by
	Raimundo et al., 2012)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Anxiety. The State-Trait Anxiety Inventory for Children (STAI-C; Spielberger, Edwards, Lushene,
	Montuori, & Platzek, 1973; Portuguese adaptation by Matias et al., 2006)
	Aggressiveness, Aggressive Behaviors Questionnaire, (Raimundo & Marques-Pinto, 2007),
	Social Problems: Teachers Report Form (TRF; Achenbach, 1991; Portuguese adaptation by
	Fonseca, Sim~oes, Rebelo, Ferreira, & Cardoso, 1995)
	Program Satisfaction: self-report questionnaire
Risk of bias	Moderate

Author	Richard
Year	2021
Country	Switzerland
Ref#	[48]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Public kindergarten
Inclusion criteria	Parental consent
Follow up	Four months after start of intervention
Population	School children, 5-6 years old
characteristics	Intervention group:
	Age, years; Mean (SD): 6.02 (0.25)
	Sex; (Percent girls): 51.28
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age, years; Mean (SD): 5.9 (0.29)
	Sex;(Percent girls): 40
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	The pretend play-based training
program	
Participants (n)	Number of sessions: 11
	Intensity: 1-hour weekly sessions
	Duration: Four months
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	39
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: twenty hours of specific training by the principal researcher before and during
	program.
Comparison program	Common school curriculum (no specific program)
Participants (n)	40
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	'The emotional label comprehension task'. In this Richard, Gay, et al. (2019) task adapted
	from Theurel and Gentaz (2015),
	Emotion comprehension

	'Test of Emotion Recognition'.
	'Contextual Task'. This task from NEPSY-II developed by Korkman, Kirk, and Kemp (2012)
	End of intervention, mean (SD)
	Intervention group: 76.07 (18.26)
	Control group: 79.16 (17.60)
Comments	Additional outcomes:
Risk of bias	Moderate

Author	Sandell
Year	2013
Country	Sweden
Ref#	[40], associated with [41]and [39]
Study design	Mixed longitudinal and cross-sectional design
Study protocol	No information
Setting	Public school
Inclusion criteria	
Follow up	One time per year, after each schoolyear, for five years. Intervention time varied between 1-5
·	years.
Population	School children, year 4–9
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Soeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	SET program Kimber (2001a, b),
program	
Program extent	Number of sessions: Not specified
	Intensity: Grade 5: 45 min 2 times per week, Grade 6-9: 45 min 1 time per week
	Duration: 1-5 school year
	Attendance: Not specified
	Implementation: Not specified
Participants (n)	755
Drop-outs (n)	53
Program Deliverer	Classroom teachers
	Training: Trained by author
Comparison program	Common school curriculum (no specific program)
Participants (n)	226
Drop-outs (n)	22
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Mental Health
	Youth Self-Report (YSR; Achenbach and Edelbrock, 1987), in an abbreviated Swedish self-rating
	version (Lindberg et al., 1999)

	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Well-being
	"I Think I Am" (ITIA; Ouvinen-Birgerstam, 1985)
	<u>Baseline, mean (SD)</u>
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
Risk of bias	Moderate -borderline high

Author	Schonert-Reichl
Year	2015
Country	Canada
Ref #	[49]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Public elementary school
Inclusion criteria	Principals, teachers and parental consent and children assent.
Follow up	Not stated
Population	School children, year 4–5
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): 10.24 (0.53)
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): approximated the median annual income for Canada
Intervention	Social Emotional Learning (SEL) incorporating mindfulness (MindUP; Hawn Foundation, 2008)
program	
Program extent	Number of sessions: 12
	Intensity: 40-50 min once per week + mindfulness 3 min 3 times/day
	Duration: Not stated
	Attendance: Not stated
	Implementation: 100 %
Participants (n)	2 classes (99 children in total population)
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: Not stated
Comparison program	Regular social responsibility program, social responsibility program
Participants (n)	2 classes (99 children in total population)
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:

Optimism

Resiliency Inventory (RI), created by Noam and Goldstein (1998), modified by Song (2003)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Measurement:

Emotional control

Resiliency Inventory (RI), created by Noam and Goldstein (1998), modified by Song (2003)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

Measurement:

Mindfulness

The Mindful Attention Awareness Scale adapted for children (MAAS-C; Lawlor, Schonert-Reichl,

Gader-mann, & Zumbo, 2014))

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

<u>Measurement:</u>

 $Students' self-rated\ abilities,\ enjoyment,\ and\ interest\ in\ school\ subjects.$

Marsh's Self-Description Questionnaire (SDQ; Marsh, Barnes, Cairns, & Tidman, 1984)

Baseline, mean (SD)

Interventions group:

Control group:

End of intervention, mean (SD)

Intervention group:

Control group:

	Measurement:
	Empathy and perspective-taking
	Interpersonal Reactivity Index (IRI; Davis, 1983)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Depressive symptoms, Seattle Personality Questionnaire for Children (SPQC; Kusché, Greenberg,
	& Beilke, 1988).
	Executive functions: flanker task and the hearts and flowers version of the dots task were
	administered (M. C. Davidson et al., 2006; Diamond, Barnett, Thomas, & Munro, 2007)
	Salivary cortisol; free cortisol in saliva three times within 1 day, Murray-Close, Han, Cicchetti,
	Crick, and Rogosch (2008)
	Child self-report measures
	Social responsibility: Social Goals Questionnaire (Wentzel, 1993)
	Peer-reported measures:
	Peer nominations of prosociality— Parkhurst and Asher (1992)
	Peer nominations of peer acceptance: (e.g., Oberle, Schonert-Reichl, & Thomson, 2010).
	Achievement measure: students' end-of-the-school-year math grades
Risk of bias	Moderate

Author	Upshur
Year	2013
Country	USA
Ref#	[50]
Study design	Cluster randomized pilot study
Study protocol	No information
Setting	Community precshool
Inclusion criteria	If siblings, one was excluded. Informed consent process with families.
Follow up	Twice per year, fall and spring, for one school year.
Population	Preschool children aged 2 years 9 months through 5 years
characteristics	Intervention group:
	Age; Mean (SD):
	Year 1: 46.78 (8.26) months
	Year 2: 50.72 (8.81) months
	Sex;(Percent girls):
	Year 1: 41.9
	Year 2: 54.0
	Socioeconomic/educations; Mean (SD): Annual family income < 20 000 dollars (Percent)
	Year 1: 45.6
	Year 2: 43.8
	Control group:
	Age; Mean (SD):
	Year 1: 44.65
	Year 2: 48.34
	Sex (Percent girls):
	Year 1: 35.1
	Year 2: 50.8
	Socioeconomic/educations; Mean (SD):
	Year 1: 46.7
	Year 2: 56.1
Intervention	Social Emotional Learning - The Second Step Preschool/Kindergarten Kit (Committee for
program	Children, 2002)
Program extent	Number of sessions: 89
	Intensity: 15 min per session 4 times per week
	Duration: 1 school years program, study over 2 school years.
	Attendance:
	Implementation:
	Year 1: 87% (74-99%)
	Year 2: 86% (49-99%)

Participants (n)	Year 1: 96
	Year 2: 88
Drop-outs (n)	Year 1: 79
	Year 2:64
Program Deliverer	Classroom teachers
	Training: 2-day train-the-trainer workshop. Seven monthly 2-h evening training sessions to
	Intervention teachers during Year 1, and five bi-monthly sessions in Year 2.
Comparison program	Control classrooms used the Creative Curriculum (Dodge, Colker, & Heroman, 2002).
Participants (n)	Year 1: 71
	Year 2: 60
Drop-outs (n)	Year 1: 58
	Year 2: 53
Program Deliverer	Classroom teachers
	Training: Not stated
Outcomes	Outcome
	Measurement:
	Prosocial Skills
	Adaptive Social Behavior Inventory (ASBI, Hogan, Scott, & Bauer, 1992)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Teacher Burnout; The Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996)
	Classroom Quality; Early Childhood Environmental Rating Scale-Revised (ECERS-R, Harms,
	Clifford, & Cryer, 1998)
	Classroom Climate; Interaction scale of the ECERS-R (ECERS-R, Harms et al., 1998), disruptive
	behavior counts, disruptiveness rating
	Teacher Interaction Skills, The Caregiver Interaction Scale (CIS, Arnett, 1989)
	Teacher-Rated Behavior Problems; Sutter-Eyberg Student Behavior Inventory-Revised (Eyberg &
	Pincus, 1999)
	Teacher Satisfaction with Second Step
	Parent Engagement with the Curriculum
Risk of bias	Moderate

Author	Upshur
Year	2019
Country	USA
Ref #	[51]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Community preschools
Inclusion criteria	Parental consent.
Follow up	End of intervention, spring term.
Population	Preschool children, 4 years old
characteristics	Intervention group:
	Age; Mean (SD): 53.2 (3.91)
	Sex;(Percent girls): 49.2
	Socioeconomic/educations; Mean (SD):
	Family income (%)
	<\$10,000: 27.0
	\$10,000-\$19,999: 26.5
	\$20,000-\$29,999: 23.4
	\$30,000–\$39,999: 9.7
	\$40,000–\$49,999: 5.1
	\$50,000+: 8.4
	Control group:
	Age; Mean (SD): 52.7 (4.03)
	Sex (Percent girls): 41.1
	Socioeconomic/educations; Mean (SD):
	Family income (%)
	<\$10,000: 26.2
	\$10,000-\$19,999: 27.9
	\$20,000-\$29,999: 24.7
	\$30,000-\$39,999: 10.6
	\$40,000-\$49,999: 5.0
	\$50,000+: 5.6
Intervention	Second Step Early Learning Curriculum, or SSEL, Committee for Children, 2011a
program	Some of the classrooms also followed Head start program
Program extent	Number of sessions: 25
	Intensity: weekly
	Duration: 2 School years
	Attendance: Not stated
	Implementation: 90% of curriculum activities each week

Participants (n)	393
Drop-outs (n)	Not stated
Program Deliverer	Classroom teachers
	Training: curriculum kits and a group training to use the curriculum. Information meeting before
	start of intervention, then 12 2-hour meetings for two years
Comparison program	Common school curriculum (no specific program) or Head start programs
Participants (n)	377
Drop-outs (n)	Not stated
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Social problem-solving skills
	Emotion Matching Task (EMT)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	<u>Measurement:</u>
	Emotion knowledge
	Challenging Situations Task (CST)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Cognitive ability; Peabody Picture Vocabulary Test, 4th edition, (PPVT-4, Dunn & Dunn, 2007)
	Head-Toes-Knees-Shoulders (HTKS); HTKS task (McClelland et al., 2007)
	Backward Digit Span; working memory (Davis & Pratt, 1996)
	Measures of preacademic skills; Woodcock-Johnson Tests of Achievement III (WJ III, Woodcock,
	McGrew, & Mather, 2001/2007)
Risk of bias	Low

Author	Vassilopoulos
Year	2018
Country	Greece
Ref#	[52]
Study design	Non-randomized controlled trial
Study protocol	No information
Setting	Elementary schools
Inclusion criteria	Parental consent
Follow up	End of intervention
Population	First grade students
characteristics	Intervention group:
	Age, months; Mean (SD): 77.66 (3.33)
	Sex; (Percent girls): 45,5
	Socioeconomic/educations; Mean (SD): mainly attended by children from middle socioeconomic
	background
	Control group:
	Age, months; Mean (SD): 76.83 (3.31)
	Sex (Percent girls): 36.2
	Socioeconomic/educations; Mean (SD): mainly attended by children from middle socioeconomic
	background
Intervention	Preschool/Kindergarten version of the PATHS curriculum was used as the primary intervention
program	(Domitrovich, Greenberg, Cortes, & Kusché, 2004)
Participants (n)	Number of sessions: 7
	Intensity: 45 min sessions weekly
	Duration: 7 weeks
	Attendance:
	Implementation:
Participants (n)	56
Drop-outs (n)	1
Program Deliverer	Classroom teachers and group co-leaders
	Training: Not stated
Comparison program	Common school curriculum (no specific program)
Participants (n)	58
Drop-outs (n)	0
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement: Teacher Assessment of Social Behavior Questionnnaire
	End of intervention, mean (SD)
	Intervention group: not reported
	Control group: not reported

Comments	Additional outcomes:
Risk of bias	Moderate

Author	Wigelsworth
Year	2012
Country	UK
Ref#	[53]
Study design	Quantitative, quasi-experimental pre-test–post-test control group design
Study protocol	No information
Setting	Secondary schools
Inclusion criteria	
Follow up	Post-test, 2 years after start of study.
Population	School children, year 7 age 11-12
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): 52
	Socioeconomic/educations; Mean (SD):
	Free School Meal: 14.5%
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls):52
	Socioeconomic/educations; Mean (SD):
	Free School Meal: 11.6%
Intervention	The social and emotional aspects of learning (SEAL) programme (DCSF, 2007)
program	
Program extent	Number of sessions: Not applicable
	Intensity: Not applicable
	Duration: 1 year
	Attendance: Not stated
	Implementation: Not stated
Participants (n)	26 schools, average 1079 students
Drop-outs (n)	4 Schools
Program Deliverer	Classroom teachers
	Training: basic training about the secondary SEAL programme, a variety of additional
	opportunities for professional development that school staff might undertake
Comparison program	Common school curriculum (no specific program)
Participants (n)	23 Schools, average 1043 students
Drop-outs (n)	4 Schools
Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Social and emotional skills

The Emotional Literacy Assessment and Intervention (ELAI) battery (Southampton Psychology Service, 2003) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Measurement: Prosocial behavior The strength and difficulties questionnaire (SDQ) (Goodman, 1997) Baseline, mean (SD) Interventions group: Control group: End of intervention, mean (SD) Intervention group: Control group: Comments Additional outcomes: Risk of bias Moderate

SWPBIS/SWPBS/PBIS-program (2 studier)

Author	Bradshaw
Year	2012
Country	USA
Ref#	[54]
Study design	Randomized controlled trial
Study protocol	No information
Setting	Elementary school
Inclusion criteria	Only public elementary schools were eligible for inclusion, and all schools approached about
	participation agreed to enroll.
Follow up	Fall and spring year 1, spring years 2-4, total of 4 school years.
Population	School children, year 1–5
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 47.1
	Socioeconomic/educations; Mean (SD):49.4
Intervention	School-Wide Positive Behavioral Interventions and Supports (SWPBIS)
program	
Program extent	Number of sessions: Not applicable
	Intensity: Not applicable
	Duration: 1-4 years
	Attendance:
	Implementation: 80% (within first year)
Participants (n)	21 Schools, 7241 participants
Drop-outs (n)	0 Schools, 230 participants
Program Deliverer	Classroom teachers, administrators
	Training: initial 2-day summer training, annual 2-day booster training events, monthly on-site
	support
Comparison program	Common school curriculum (no specific program)
Participants (n)	16 Schools, 5594 participants
Drop-outs (n)	0 Schools, 174 Participants

Program Deliverer	Not applicable
Outcomes	Outcome
	<u>Measurement:</u>
	Pro-social behavior
	Teacher Observation of Classroom Adaptation—Checklist (TOCA-C)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
	Measurement:
	Emotion regulation
	Teacher Observation of Classroom Adaptation—Checklist (TOCA-C)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Concentration problems, Aggressive and disruptive behaviors; Teacher Observation of
	Classroom Adaptation—Checklist (TOCA-C)
Risk of bias	Moderate

Author	Sørlie
Year	2007
Country	Norway
Ref #	[55]
Study design	Quasiexperimental design
Study protocol	No information
Setting	Elementary school
Inclusion criteria	a) an explicit goal to reduce problem behavior and to promote positive behavior and a
	supportive learning environment; (b) agreement to participate in the programme activities by at
	least 80% of the staff; (c) the school leader was willing to take part in programme
	implementation; (d) explicit support and involvement from parents, school administration, and
	the school psychological services; (e) willingness to use necessary time, reallocate resources, and
	prioritize 474 M-A. Sørlie and T. Ogden PALS for at least three years; and (f) willingness to
	participate in the outcome evaluation study.
Follow up	Two years after implementation
Population	School children, year 1–7
characteristics	Intervention group:
	Age; Mean (SD): Not stated
	Sex;(Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Control group:
	Age; Mean (SD): Not stated
	Sex (Percent girls): Not stated
	Socioeconomic/educations; Mean (SD): Not stated
	Total population:
	Age; Mean (SD): Not stated
	Sex (Percent girls): 53.5
	Socioeconomic/educations; Mean (SD): Not stated
Intervention	"Positive behavior, interactions and learning environment in school" (PALS).
program	
Program extent	Number of sessions:
	Intensity:
	Duration: Attendance: Implementation:
Participants (n)	4 Schools, 363 students
Drop-outs (n)	In total 94% among students (735 post-data of 780 pre-data)
Program Deliverer	Classroom teachers
	Training: seminars on the theoretical and empirical basis of PALS, monthly training and
	supervision sessions

Comparison program	The C-schools had initiated alternative projects to promote positive student behavior and/or
	improve learning conditions. Two schools implemented parts of the Second Step Programme
	(Committee of Children, 1997); a third school ran a combined organisational and teaching
	restructuring project, while the last school continued an ongoing school-wide socio-cultural
	learning project.
Participants (n)	4 Schools, 372 students
Drop-outs (n)	In total 94% among students (735 post-data of 780 pre-data)
Program Deliverer	Not applicable
Outcomes	Outcome
	Measurement:
	Social competence
	Social Skills Rating System (SSRS), which is a well-validated assessment tool (Elliott, Gresham,
	Freeman, & McCloskey, 1989)
	Baseline, mean (SD)
	Interventions group:
	Control group:
	End of intervention, mean (SD)
	Intervention group:
	Control group:
Comments	Additional outcomes:
	Behavior problems. "Problem behavior in the school environment last week" , "Problem
	behavior in the classroom last week'', Grey and Sime (1989)
	Teacher collective efficacy. Collective Efficacy Scale (CES), developed by
	Goddard and colleagues (2000)
	Learning environment. Classroom Climate Scale (Sørlie & Nordahl, 1998).
	Programme implementation quality. Total Implementation Quality Scale (TIQS)
	Teacher collective efficacy. The Collective Efficacy Scale (CES), developed by Goddard and
	colleagues (2000).
Risk of bias	Moderate

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